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Analyzing the Effects of Management Accounting Practices on Financial Performance of Manufacturing Companies in Ghana, Using Management Accounting Practices

William Bransah

Abstract

Management accounting offers a good best opportunity for firms to compete in the market in order to offer best quality products and services at affordable prices to consumers. The general objective of this study was to investigate the effects of management accounting practices on financial performance of manufacturing companies in Ghana. This study adopted a descriptive survey design. The target population for this study was the 455 manufacturing companies in Ghana. Stratified random sampling method was applied to come up with the sample size, since the population in different manufacturing firms was considered heterogeneous, implying that a simple random sample is unrepresentative. The study therefore involved 46 manufacturing companies Nairobi. The study collected primary data from the respondents. The data collected was both quantitative and qualitative. Qualitative data is a categorical measurement expressed not in terms of numbers, but rather by means of a natural language description. Quantitative data is a numerical measurement expressed in terms of numbers. Analysis was done using Statistical Package for Social Sciences (SPSS), allowing the researcher to present the information in form of tables and figures. The study concludes that information for decision making practices is the most highly used management accounting practice amongst the manufacturing companies in Ghana followed by strategic analysis, budgeting, performance evaluation, costing, size and leverage respectively. The study further concludes that the most important elements of management accounting practices amongst the manufacturing companies in Ghana are; the management accounting function identifies key factors that influence performance and risky areas that require improvements and return on equity, ROE (Net income / Average Equity) has increased as a result of application of management accounting practices. This study recommends the creation and enhancement of awareness among firms of the importance of Information for decision making practices as this is the most highly used management accounting practice amongst the manufacturing companies in Ghana.

***Keywords:** Management Accounting Practices, Financial Performance*

1.0 INTRODUCTION

Companies use management accounting techniques to assess their operations. These include budgeting, variance analysis and breakeven analysis. These methods help organizations to plan, direct and control operating costs and to achieve profitability. It is recognized that management accounting practices are important to the success of the organization (Horngren, et al., 2009). Management accounting is the application of appropriate techniques and concepts in processing the historical and projected economic data of an entity to assist management in establishing a plan for reasonable economic objectives and in the making of rational decisions with a view towards achieving these objectives. Managerial accounting, or management accounting, is a set of practices and techniques aimed at providing managers with financial information to help them make decisions and maintain effective control over corporate resources. These include the methods and concepts necessary for effective planning, decision making (choosing among alternative business actions and controlling through the evaluation and interpretation of performance.

Management accounting practice helps an organization to survive in the competitive, ever-changing world, because it provides an important competitive advantage for an organization that guides managerial action, motivates

behaviors, supports and creates the cultural values necessary to achieve an organization's strategic objectives. Management accounting is concerned primarily with the internal needs of management. It is oriented toward evaluation of performance and development of estimates of the future as opposed to traditional financial accounting which emphasizes historical data related to such legal financial matters as ownership, investment, credit granting, taxation, regulation, and the building of foundations for consistent and conservative external reporting, "in accordance with generally accepted accounting principles." Flexibility is an essential characteristic of management accounting since it presupposes that careful attention has been given to determine the important needs of management, many of which cannot be precisely identified in advance (Parker, 2002). The Institute of Management Accountants (IMA), the professional association of practicing and academic management accountants, defines management accounting as "The process of identification, measurement, accumulation, analysis, preparation, interpretation, and communication of financial information used by management to plan, evaluate, and control within an organization and to assure appropriate use of and accountability for its resources. Management accounting also comprises the preparation of financial reports for non-management groups such as shareholders, creditors, regulatory agencies, and tax authorities" (Smith, 2009).

Management accounting provides information from its environment to management to facilitate decision-making. Good management accounting information has three attributes: Technical-it enhances the understanding of the phenomena measured and provides relevant information for strategic decisions, Behavioral-it encourages actions that are consistent with an organization's strategic objectives, and Cultural-it supports and/or creates a set of shared cultural values, beliefs, and mindsets in an organization and society (Ashton et al., 1991). The development of management accounting is responsive to the demands of management and the environment. Management accounting adapts to organizational change and three major forces cause organizations to evolve: technological change, globalization, and customer needs (McWatters, 2001). In order to remain competitive in today's global market, business must continually improve. Good management accounting practices help the organization to improve continually. Due to these all over the world there are so many management accounting tools & techniques developed and practiced.

Financial performance can be defined as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues (Mills, 2008). This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. The performance measurement concept indicates that employees can increase the value of the firm by; increasing the size of a firm's future cash flows, by accelerating the receipt of those cash flows, or by making them more certain or less risky (Cadbury, 1992). There are many different ways to measure financial, but all measures should be taken in aggregation. Some of the indicators of financial performance are return on equity, liquidity ratios, asset management ratios, profitability ratios, leverage ratios and market value ratios.

Carreta and Farina (2010), argue that use of financial performance could still be justified on the grounds that it reflects what managers actually consider to be financial performance and, even if this is a mixture of various indicators like accounting profits, productivity, and cash flow. Financial performance is determined by the following indicators; profit or value added; sales, fees, budget; costs or expenditure and stock market indicators (e.g. share price) and autonomy. Proxies for the financial performance also include the accounting measure of performance; return on equity (ROE) and return on asset (ROA).

1.1 Background of Study

Ittner and Larcker (2002) defined management accounting practices as a variety of methods specially considered for manufacturing businesses so as to support the organization's infrastructure and management accounting processes. Management accounting practices can include budgeting, performance evaluation, and information for decision-making and strategic analyses, among many others. Ittner and Larcker (2001) argued that due to the development of these new methods, the basic principles of management accounting has changed to a more superior one that adds value to various practices. The literature has also indicated that some practices such as absorption costing and marginal costing have not been highly favoured by most businesses. For example, Dugdale and Jones (2002) stressed that there is a limitation within these costing systems, since they do not provide an accurate method of recording costs to be exact in order to make sound management decisions.

Management accounting practices enable management to obtain relevant information for meaningful decision making (Alleyne and Weekes-Marshall, 2011). Uyar (2010) noted that the perceived importance of cost accounting is driven by decreasing profitability, increasing costs and competition, and economic crises. The author also noted that while companies still perceive traditional management accounting tools as still important, new management accounting practices such as strategic planning, and transfer pricing are perceived less important than

traditional ones. The study also found that the most important three management accounting practices are budgeting, planning and control, and cost-volume-profit analysis.

A number of factors influence the changes in management accounting practices within some organisations. Otley and Berry (1980) made reference to some systems as open, that is, there is a continuous cycle of resources that are inputs which moves from the external environment. It is a common belief that such changes will have an influence on the selection of the appropriate management accounting practices within any organization. Some researchers have commented that such changes may originate due to different settings of both economic and cultural environments. Most of the research focused on changes in management accounting practices, primarily in countries such as South Africa and Canada (for example Luther and Longden, 2001). However, some researchers noted what is often taught in schools is far different in the world of work and therefore creates a breach in knowledge between the practice and the theory. Johnson and Kaplan (1987) argued that management accounting has not changed over the past years. However, Libby and Waterhouse (1996) were convinced that there were changes. Burns et al. (1999) further argued that there is evidence that management accounting practices have changed over the last decade in a developed country such as the UK.

Management accounting as a research paradigm has not been fully explored in Ghana. A few studies exist on the same mainly as theses and dissertations in various universities in Ghana (for instance Arithi, 2001; Waweru, 1999; and Mapetla, 1982) and around the world (for example Ndwiga, 2011), a few in local journals in the country (for example Waweru, Kamasara and Anyangu, 2003) and very few, if any, in international journals (for instance Abdel-Kader and Wadongo, 2011; and Mathenge, 2012). Therefore, it can be concluded that the effects of management accounting practices on financial performance in Ghana is not well documented just as much as in other developing countries as had noted Li and Yu (2002).

The manufacturing industry in Ghana is dominated by subsidiaries of multinationals. The players fall in the following categories as represented in the Ghana association of manufacture's listings; food and beverages processing, Paper and paper board, Wood products Pharmaceutical and medical equipment, Leather products, Chemical and allied, Textiles, Tobacco, Plastics and rubber (Association of Manufacturers, 2013). Manufacturing is a significant contributor to the economy as it contributes 10% of GDP, 12.5% of Exports and 13% of formal employment (CBK, 2013). Ghana is a favourite destination for investors willing to put their money in manufacturing. While the country is not endowed with the mineral wealth most of its neighbours flaunt, it more than makes up for it, thanks to the following: one of the best workforces in Africa, a productive agricultural sector and hence a dependable source of raw materials for agro-based manufacturing, a fairly versatile financial services sector, bankable telecommunications and proximity to port facilities. A wide range of opportunities for direct and joint venture investments exist in the manufacturing sector including processing, manufacture of garments, assembly of automotive components, electronics, plastics, chemicals, pharmaceuticals, metal engineering products for both domestic and export markets (Republic of Ghana 2003).

The manufacturing sector was initially developed under the import substitution policy. There has been a shift, however to export oriented manufacturing as the thrust of Ghana's industrial policy. The sector plays an important role in adding value to agricultural output and providing forward and backward linkages, hence accelerating overall growth. By the year 2003 the manufacturing sector comprised more than 700 established enterprises and directly employed over 218,000 persons as at the year 2000 (Ghana Association of Manufacturers, 2010). Ghana also has locational advantages as the gateway and a natural launch pad to the markets of the mostly Landlocked East and Central African countries like Uganda, Southern Sudan, Rwanda, Burundi, parts of northern Tanzania and Eastern Democratic Republic of the Congo (DRC). According to the Economic Recovery Strategy for Employment and Wealth Creation Report, the manufacturing sector in Ghana is a major source of growth, still with high potential for growth and investment. The role of the manufacturing sector in Vision 2030 is to create employment and wealth.

A set of key target areas have been identified and specific goals set to steer industrial growth. These include the development of Special Economic Zones (SEZs), Industrial Parks, Industrial Clusters, promotion of small and medium scale manufacturing firms, development of niche products, commercialization of research and development results, attraction of strategic investors in strategic sectors, i.e. iron and steel industries, manufacture of fertilizer, agro-processing, machine tools and machinery, motor vehicle assembly and manufacture of spare parts. According to the Major et al., (2005), the productivity growth in the Ghanaian manufacturing sector had been zero or negative since the early 1990s. Productivity declined by 0.5% per year between 1991 and 1998. Regression analysis of companies' data suggests that between 1999/2000 and 2002/03; almost no productivity improvement was visible in the average firms. There had been virtually no change in labour productivity. Capital increase was not statistically distinguishable from zero. Total factor productivity appeared to have increased by 7% between 1999 and 2002, but again this estimate was not statistically different from Zero.

To promote development in the target areas, projects are designed and implemented through a Public, Private, Partnership (PPP) framework. Some key Ghanaian manufacturing subsectors that have increased demand in the recent past include galvanized iron sheets, cement, cigarettes, beer and Wheat flour. All of these have increased production between 2003 and 2005, particularly cement which is a good indicator of economic activity. On the consumer goods side, goods manufactured locally include stationery and grooming products. Based on the Ghana Association of Manufacturers (2010), majority of the Ghanaian manufacturing firms are slowly adopting modern models of overhead allocation techniques as they have previously been using traditional allocation Methods. The majority are adopting the Activity based costing which they consider superior to other overhead allocation techniques. However, they lack expertise in implementing the modern overhead allocation techniques.

1.2 Problem Statement

As today's business environment becomes increasingly competitive, business organizations are becoming more aggressive and dynamic in identifying strategies that will ensure profitable existence. Competition may be attributed to business innovations, advancement in technology and the changing demand of customers. Competition amongst business organizations may compel the management to develop business techniques and strategies that would guide an organization towards the maximization of profits. This may be achieved through increased sales and reduced cost of production. The optimization of profits and minimization of costs may enable an organization to create a competitive advantage in its industry. Certain management accounting practices provide strategies that can influence a large number of customers to have a lasting preference for a company's products. Thompson, Strickland and Gamble (2009) are of the view that the adoption of management accounting techniques may provide an organization with a sustainable competitive advantage over its rivals.

Management accounting practices have moved from reporting historical information, especially on variance analysis, to taking part in the strategic planning process of an organization (Kiesler and Sproull, 1982). These authors contend that management accounting skills are actively applied in the business environment where both market intelligence is sought and evaluated, and strategic decisions are made and competitive strategies put in place. These are factors which Ittner and Larcker (1997) argue that they enable an organization to gain an advantage in the ever demanding competitive business environment where innovative management accounting practices need to be employed. The management accountants, especially those in the manufacturing sector, should therefore be at the forefront in the search and development of innovative competitive strategies that may enable an organization to remain profitable and competitive. These measures are particularly important in the manufacturing sector where efficiency and cost effectiveness may be used as a competitive tool for growth and profitability. Studies in other countries have shown that despite the developments in management accounting theory, the practice has not changed as companies still prefer the use of traditional management accounting tools (Uyar, 2010).

The accounting profession in Ghana has grown tremendously with the adoption of IFRS and IAS as accounting and auditing standards. Over the years, the challenge to keep costs down in order to keep better performance has been predominant in most companies and especially those listed on the NSE given the pressure from the shareholders for firms to post better performance. With the overall economic situation in Ghana, investors are looking for companies that can create wealth for them hence companies which perform poorly do not attract investors. Management accounting offers the best opportunity for firms to compete in the market in order to offer best quality products and services at affordable prices to consumers. Most of the existing research literature on accounting in Ghana manufacturing companies tends to be more biased toward the arm of financial accounting, information technology adoption as well as research in credit accessibility for manufacturing companies, more so only remote exists in regard to effects of management accounting practices on financial performance of manufacturing companies in Ghana (Wairegi, 2011),(Makau, Wawire, & Ofafa, 2013), (Waweru, 2012), (Mugambi, 2010), despite this previous research studies being vital, lack of management accounting practices for decision making and lack of technical skills are as much obstacles to developing manufacturing companies as is the inability to access credit (Mbogo, 2011). This study thus sought to establish the effects of management accounting practices on financial performance of manufacturing companies in Ghana

1.3 Primary Objective

The general objective of this study was to analysis the effects of management accounting practices on financial performance of manufacturing companies in Ghana.

1.4 Secondary Objectives
- To establish the management accounting practices undertaken by the manufacturing companies in Ghana.
- To establish the effects of management accounting practices on financial performance.

1.5 Limitations

      The study will only concentrate on the management accounting practices of manufacturing companies in Ghana and not all the companies in the economy. These results are therefore only limited to the manufacturing companies and may be of little or no use to the companies in other sectors in the country. Due to the self-report nature of data which entailed the use of questionnaires, responses on the survey will not accurately convey their real involvement in the management accounting practices. Some of the respondent did not return the questionnaires therefore, resulting to lesser the targeted sample thus, influencing the nature of statistical reporting. Further, some firms did not accurately disclose the ROA figures due to the nature of the sensitivity of financial information disclosure. Therefore, this affected proper statistical analysis of the data. Finally, due to limited time available to carry out the research, the above areas will not comprehensively have studied to provide a national wide picture. This will be an important area because policy makers and implementers argue that the effects of management accounting practices on financial performance of manufacturing companies in Ghana can only be resolved by providing them with research action points based on empirical data.

1.6 Design and Overview of Study
1.6.1 Scope of the Study

      This study adds onto the theory of management accounting in developing countries by focusing on the practice of manufacturing companies in Ghana. The study will show whether the manufacturing companies still prefer the traditional tools or if there have been developments in practice as has the theory. The study will also benefit various other companies in Ghana as they will understand the methods and tools available for them as far as controlling costs are concerned. The recommendations provided will help the firms improve their practice. The study will also benefit scholars and academicians interested in pursuing a study in accounting and especially management accounting as it will form a foundation for other studies.

1.6.2 Research Questions
1. Examine the role of management accounting practices
2. What are the importance of Management Accounting Practices?
3. What are direct link between role and importance of management accounting practices

1.6.3 Hypothesis
The following hypothesis have been formulated for testing
- Null Hypothesis (H_0): There is no a significant effects of management accounting practices on financial performance of manufacturing companies in Ghana at 95% confidence level.

- Alternative Hypothesis (H_1): There is a significant effects of management accounting practices on financial performance of manufacturing companies in Ghana at 95% confidence level

1.6.4 Organization of the Study

      This research work is divided into five main chapters. Chapter One which is the introductory part of the research work contains the background, statement of the problem, objectives, research question, scope, significance, limitation, and organisation of the study. Chapter Two discusses the concepts in procurement and also review opinions, findings from different authors of books, journals, publications, and others. Chapter Three also deals with the methodology used for the study. It presents the methodological procedures and approaches used in conducting the research. It comprises the research design, population, sampling method, and data collection methods. Chapter Four discusses the results. It involves the use of tables and figures to explain and understand the data collected (responses) from respondents. Chapter five deals with summary, conclusion and recommendations. This section summarizes the major findings and draws conclusion base on the results and finally recommends appropriate interventions where necessary.

1.7 Summary

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academicians interested in pursuing a study in accounting and especially management accounting as it will form a foundation for other studies.

2.0 LITERATUERE REVIEW

This chapter presents a review of literature on the concepts under study. The chapter begins with a theoretical review where theories of management accounting; determinants of financial performance of manufacturing firms; reviews empirical studies where a number of studies done on management accounting practices together with their findings and their contribution to the present study is made. This is followed by a conclusion of the literature review section.

2.0.1 Management Accounting Practices

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2.0.2 Financial Performance

Financial performance can be defined as a subjective measure of how well a firm can use assets from its primary mode of business and generate revenues (Mills, 2008). This term is also used as a general measure of a firm's overall financial health over a given period of time, and can be used to compare similar firms across the same industry or to compare industries or sectors in aggregation. The performance measurement concept indicates that employees can increase the value of the firm by; increasing the size of a firm's future cash flows, by accelerating the receipt of those cash flows, or by making them more certain or less risky (Cadbury, 1992).

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2.0.3 Management Accounting Practices and Financial Performance

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2.1 Development of the Study

Branch (2000) argue the opposite, that financial indicators based on accounting information are sufficient in order to determine the value for shareholders. A manufacturing firm financial performance is directly influenced by its market position. Profitability can be decomposed into its main components: net turnover and net profit margin. Ross et al. (1996) argues that both can influence the profitability of a company one time. If a high turnover means better use of assets owned by the company and therefore better efficiency, a higher profit margin means that the entity has substantial market power.

Risk and growth are two other important factors influencing manufacturing firm's financial performance. Since market value is conditioned by the company's results, the level of risk exposure can cause changes in its market value. Economic growth is another component that helps to achieve a better position on the financial markets, because market value also takes into consideration expected future profits. The size of the company can have a positive effect on financial performance because larger firms can use this advantage to get some financial benefits in business relations. Large companies have easier access to the most important factors of production, including human resources. Also, large organizations often get cheaper funding. In the classical theory, capital structure is irrelevant for measuring company performance, considering that in a perfectly competitive world performance is influenced only by real factors.

2.1.1 New Institutional Sociology

The foundations of New Institutional Sociology (NIS) were laid by Meyer and Rowan's (1977) seminal paper, which came after a series of puzzling observations made in the 1970s by a group of researchers studying the educational sector in the USA. Specifically, they had identified inconsistencies and observed the loose coupling (March and Olsen, 1976; Weick, 1976) of formal structures/procedures and actual work practices, which existing organizational theory could not explain (Meyer and Scott, 1992). The key contention of NIS is that some organisations exist in highly institutionalized environments. In this sense, "environment" is not merely conceptualized as a source of task constraints or a relational network (of customers, suppliers and other near constituencies) that poses demands for operational coordination and control on an organization. Rather, it includes the cultural rules and social norms that are reflected in specific formal structures and procedures of the organization. That is, institutionalized organisations

tend to adopt structures and procedures that are valued in their social and cultural environment. They do this in order to achieve legitimacy and to secure the resources that are essential for their survival.

This search for legitimacy and resources explains why specific organizational forms and procedures are diffused across organisations operating in similar settings –, e.g. similar environments (Scott, 1992), societal sectors (Scott and Meyer, 1992), or organizational fields (DiMaggio and Powell, 1983). Developing this insight, DiMaggio and Powell (1983) suggested that this process of diffusion can create pressures that lead organisations to become isomorphic with other organisations in their institutional setting. Competitive isomorphism (Hannan and Freeman, 1977), such as market forces, is not dismissed, but the emphasis is placed instead on three types of institutional isomorphism – coercive, normative and mimetic isomorphism – that highlight the social and political dimensions of the environment in which organisations are located. An important aspect that runs through Meyer and Rowan's (1977) paper is that the formal structures and procedures of institutionalized organisations may become decoupled from actual work practices. Formal structures and procedures are adopted in order to acquire legitimacy and guarantee the resources required for the survival of the organization, but they are detached from the everyday organizational practices so as not to disturb the normal processes of daily operations.

Some argue that organisations are strategic in their response to the institutional pressures imposed on them (Oliver, 1991). They may purposefully comply with regulations or adopt specific formal structures and procedures, but do so in a manipulative fashion, in order to gain legitimacy and thereby secure resources, grants, etc. on which they depend (Edelman, 1992). However, this idea of "window-dressing" and decoupling from actual operations has been critiqued in another stream of NIS theorizing (Zucker, 1977). Specifically, the observation that institutionalized structures are decoupled from actual practices conflicts with Berger and Luckman's (1966) definition of institution: a reciprocal typification of habitualized action by types of actors. As Meyer and Rowan draw on this principle early in their 1977 paper, Tolbert and Zucker (1996) claim there is: an inherent ambiguity in their underlying phenomenological argument, because the definition of "institutionalized" itself contradicts the claim that institutional structures are apt to be decoupled from behaviour. To be institutional, structure must generate action. As Giddens (1979) argues, structure that is not translated into action is in some fundamental sense not social structure.

2.1.2 Determinants of Financial Performance in Manufacturing Firms

Analysis of the determinants of corporate financial performance is essential for all the stakeholders, but especially for investors. The value of shareholders, defined as market value of a company is dependent on several factors: the current profitability of the company, its risks, and its economic growth essential for future company earnings. All of these are major factors influencing the market value of manufacturing firms. Branch (2000) argue the opposite, that financial indicators based on accounting information are sufficient in order to determine the value for shareholders. A manufacturing firm financial performance is directly influenced by its market position. Profitability can be decomposed into its main components: net turnover and net profit margin. Ross et al. (1996) argues that both can influence the profitability of a company one time. If a high turnover means better use of assets owned by the company and therefore better efficiency, a higher profit margin means that the entity has substantial market power.

Risk and growth are two other important factors influencing manufacturing firm's financial performance. Since market value is conditioned by the company's results, the level of risk exposure can cause changes in its market value. Economic growth is another component that helps to achieve a better position on the financial markets, because market value also takes into consideration expected future profits. The size of the company can have a positive effect on financial performance because larger firms can use this advantage to get some financial benefits in business relations. Large companies have easier access to the most important factors of production, including human resources. Also, large organizations often get cheaper funding. In the classical theory, capital structure is irrelevant for measuring company performance, considering that in a perfectly competitive world performance is influenced only by real factors.

Recent studies contradict this theory, arguing that capital structure play an important role in determining corporate performance. Barton & Gordon (2008) suggest that entities with higher profit rates will remain low leveraged because of their ability to finance their own sources. On the other hand, a high degree of leverage increases the risk of bankruptcy of companies. Total assets are considered to positively influence the company's financial performance, assets greater meaning less risk. A large volume of sales (turnover) is not necessarily correlated with improved performance. Studies that have examined the relationship between turnover and corporate performance were inconclusive. The main objective of the company has evolved over time; the need for short term profit is replaced by the need for long-term growth of the company (sustainable growth). Therefore, sustainable growth rate higher than 1 would have a positive impact on performance. For the companies listed at the stock exchange, its ability to distribute dividends is a proof of stability.

Management accounting information an analysis is vital in the management of manufacturing companies in Ghana, thus as a discipline moving from a passive role as information providers for decision-makers (Kibera, 2000). The trend of this shift has resulted to a range of remarkable innovators in management accounting. This is evident through the adoption of innovative modern management accounting techniques like activity based costing, strategic management accounting, just in time, lifecycle costing and contemporary performance measurement systems such as balance score card. As a result of this new developments some researchers argue that relevant lost may be regained in the near future. This resulting gain seems to be gradually adopted by Ghanaian manufacturing companies.

2.2 Different Theories

This section presents two theories. The first theory is contingency theory of management accounting while the second is the new institutional sociology theory of management accounting as discussed by Ribeiro and Scapens (2006).

2.2.1 Contingency Theory of Management Accounting

Burns & Stalker (1961) discussed why management accounting practices may be unalike when comparing one organization to the other. This can be related to organisations operating in different industries or sectors. Otley (1980) applied contingency theory to management accounting practices and explained that there is no single general standard accounting practice that can be applied to all organisations. In essence, each organization will have its own management accounting practices. The theory looks at certain influential factors that will assist management to decide on an appropriate management accounting practice. These factors can either be technological changes and the infrastructure of an organization. For example, a manufacturing food company may want to change the technology used to a more modern hygienic and efficient way of handling, processing and packaging its food. It may then consider installing a computer based system that mass produces its products. However, the type of qualified personnel that is required to operate such highly complex equipment will influence the type of management accounting practices selected and production costs.

Dugdale (1994) highlighted which management accounting practices are widely used in manufacturing organisations. Those that were highly favoured were budgeting for controlling costs and performance evaluation. His findings revealed that budgeting plays an important role in the managing and directing process of the organization. This tells managers what costs to expect over the next budgeted period and also gives an indication when the company might expect to go through a seasonal change and the impact it will have on the company's cash flows and revenues. Perhaps this is the main reason why this particular management accounting practice is highly rated over many other practices. Dugdale (1994) further went on to mention that budgeting enables organisations to effectively plan and develop strategies to achieve their goals. Luther & Longden (2001) also observed that the budgeting process is an integral part of managing and controlling costs in the manufacturing sector, for example, in the UK, South Africa and Australia.

2.2.2 Management Accounting as an Institution

According to Scapens (1994), the ideas incorporated in institutional theory (especially in OIE) are more appropriate than the neoclassical model for understanding some aspects of management accounting. Although the institutional approach is not the only approach (nor even the best approach) for understanding all aspects of management accounting, it does present a valid structure for understanding an important characteristic of management-accounting practices – that they represent institutionalised routines. In fact, management accounting can incorporate and be shaped by the main features of an institution as presented in the previous section:

- assumed nature;
- stability;
- a collective nature;
- provision of meaning to behaviour;
- standards of behaviour; and
- artefacts and rules

Burns and Scapens (2000) have thus used the concepts of "habits", "routines", and "institutions" to describe how accounting practices can turn into routines, and how, over time, they become incorporated into an organisation's presuppositions and beliefs. These presuppositions and beliefs are deeply embedded in the social group; indeed people do not even consider questioning them. Accounting practices and routines can be characterised as "institutionalised" when they become so widely accepted in the organisation that they are taken for granted as forms of management control. Although accounting does not necessarily become entirely routine and institutionalised in these

circumstances, there is significant potential for this to happen. A management-accounting system is an important routine (or set of routines) aiming to support managers' decisions and to provide organisational accountability. Management accounting establishes a fundamental structure whereby economic events are measured and presented to the organisational members who are responsible for various decision-making processes.

Management accounting thus supports the planning process – when alternative courses of action are evaluated, choices are made, and budgets are elaborated. Management accounting is also involved in the operational process – when actual events are identified, measured, and registered. Within this informational framework, reports are produced regularly and routinely through clearly specified rules and habitual procedures. Organisational performance is reported and evaluated, both internally and externally, according to rules and accepted conventions. In this context, management accounting strongly influences the course of managers' JAOC 2,3200 actions (resource allocation, operational decisions, price decisions, and so on) and induces the production of the desired outcomes of the organisation.

Economic events do not speak for themselves; rather, people see organisational activities in accordance with the established logic of accounting measurement, information, and evaluation. Management accounting thus provides an institutional basis for decision-making and for structuring the formation of beliefs and expectations of the different groups of people inside organisation. It provides social coherence in organisational behaviour, and provides individuals and groups inside the organisations with a "structure of meaning" for their daily activities. When accounting practices become institutionalized routines, the members of an organisation accept their roles in the organisational process of corporate decision-making. Apart from providing a means of representing performance, accounting rules and procedures also play an important role in defining the rights held by groups of individuals (owners, founders, managers, workers, and so on). Management accounting thus gives direction to business activities, and it can be used as a conflict mediator inside an organisation. Figure 1 shows a group of elements that show the real essence of institutions:

- They are structured on the basis of taken-for-granted habits and routines;
- They are stable; that is, they prevail and continue;
- They realise forms of thinking and acting that are held in common by a group of persons;
- They give social meaning to persons and allow for their integration in the group;
- They are the natural products of social needs and pressures, and define standards of behaviour; and
- They are realised in the form of organisations' actual artefacts and rules. These elements will be utilised in later sections of this study.

2.2.3 Management Accounting Institutionalisation

Barley and Tolbert (1997) produced a general model of institutionalisation by integrating two conceptual frameworks: institutional theory and theory of structuration. The work of Giddens (1976, 1979, 1984) seems to have been an important source of inspiration for Barley and Tolbert's (1997) model, in which the concepts of "institutional realm" and "realm of action" are emphasised. Barley and Tolbert (1997), in a sense, transformed the static Giddens (1976) model to dynamic model of social structuration in which the ideas of institution and action interact in a temporal dimension – thus modifying the scripts of the actors through the processes of encoding, enacting, replicating (or revising), externalising, and objectifying. Burns and Scapens (2000) modified the initial model of Barley and Tolbert (1997) by incorporating two fundamental concepts of OIE – routines and habits – with the aim of conceptualising management-accounting change. In this context, the idea of "script", which had been prominent in Barley and Tolbert's (1997) model, gave way to the concepts of" routines" and" rules" in Burns and Scapens (2000) model (Figure 2). The model also converted the processes of Barley and Tolbert (1997) into new processes: "encoding", "enacting", "reproduction", and "institutionalisation". The dynamics of the model show the links between the institutional realm and the realm of action. As can be seen in Figure 2, the institutional realm encodes institutional.

2.3 Historical Thinking
2.3.1 Empirical Studies

Wijeywardena and Zoysa (1999) in a comparative analysis of management accounting practices in Australia and Japan investigated the differences in the adoption of management accounting techniques through a survey questionnaire which was mailed to 1000 largest manufacturing companies in each country. The size of the company was based on total assets. A total of 217 Japanese companies and 231 Australian companies responded to the 31 questions asked covering various aspects of managerial accounting techniques. This analysis involved comparisons of techniques in different cultural contexts. Major cultural differences identified in the study were collective decision making, unique company philosophy, usage of small firms as sub-contractors, company specific cost accounting training for each employee, and the difference in educational background of management accountants as seen in Japan

compared to Australia. Based on responses, the profile (e.g. type, asset size, export ratio, annual sales, and number of employees and nature of market competition) of the sample firms was tabulated in percentage terms. Other variables explored were; importance of management accounting tools, uses of cost accounting data, purposes of standard costing, investment appraisal methods, components of budgets, timings of budget, main overhead allocation bases, manufacturing cost structure, inventories as a percentage of total assets, quantitative techniques, performance evaluation measures, product costing methods, major participants in new product cost estimation, costing systems and significant changes to costing systems. Findings of the comparative survey revealed that management accounting practices of Australian companies placed emphasis on cost control tools (e.g. budgeting, standard costing and variance analysis) at the manufacturing stage while Japanese companies focused attention on cost planning and cost reduction tools such as target costing at the product planning and design stage. This finding is in agreement with another study of Howell and Sukarai (1992) that "Japanese companies seem to understand better than their western counterparts that cost should be managed and avoided during the product planning and product cycle stages rather than when products have entered full scale production".

Adler, Everett, and Waldron (2000) conducted a survey that asked management accountants, in New Zealand manufacturing businesses, to indicate the techniques adopted in their business. While many studies have focused on particular techniques such as ABC or target costing, Adler et al. provided a questionnaire that included a vast array of management accounting techniques to provide a fuller set of response options. Respondents were asked to rank management techniques on a five-point scale "from most used to least used". A judgment sampling method was chosen to achieve a response rate of 19% that provided 165 completed questionnaires. Traditional management accounting techniques, such as full costing, direct costing and standard costing were found to be used more often than advanced management accounting techniques, such as strategic management accounting. The study by Adler et al. (2000) is generally consistent with the lack of adoption of advanced management accounting techniques as stated by the Ainikkal (1993) and Hawkes et al. (2003) studies, but inconsistent with respect to individual techniques. It was found that firms in Australia adopted ABC, and cost of quality techniques and also that big firm were more likely to use modern accounting techniques

Anand et al. (2004) in their study of cost management practices in India studied the responses furnished by 53 CFOs in Indian corporations. The objective of their study was to capture the development in cost management practices such as accounting for overheads, applications of budgetary control and standard costing in corporate India. The survey questionnaire also aimed to verify any significant difference in management motivation for the implementation and use of standard costing as a control tool between activities based cost management (ABCM) user firms and firms using traditional costing systems. The study established that the firms are successful in capturing accurate cost and profit information from their ABC cost systems for value chain and supply chain analysis. The results suggest that the firms have better insight for benchmarking and budgeting with ABC cost system yet the consistency in their priority of budget goals is lacking unlike the firms who are using traditional costing systems.

Abdel-Kader and Luther (2006) studied management accounting practices (MAPs) in the food and drinks industry in the U.K. in order to understand the level of MAP's sophistication and the factors that affect implementation of MAPs in this industry. The research methodology used in this study was a survey questionnaire sent to 650 executives of the industry. In total, 245 usable completed questionnaires were received and analyzed. Respondents were asked to indicate the frequency of use of 38 management accounting practices (MAPs) using a Likert scale (1 indicating never and 5 indicating very often). They were also asked to assess the importance of each technique/practice by rating these as 'not important, moderately important or important. The study found that as companies moved into a more uncertain environment, the sophistication level of management accounting practices increased. Likewise, as their power relative to customers' diminished, companies moved up the stages of evolution. Analysis of the management accounting practices used suggested that the management accounting systems employed in many food and drinks companies were not particularly sophisticated. Taking the industry as a whole, there was little evidence of management accounting directly connected with 'value creation'.

Liaqat (2006) carried out an empirical study to find out the application of contemporary management accounting techniques in Indian industry through a survey of 530 member companies of the National Association of Financial Directors and Cost Controllers. Sixty-three companies responded which constituted the sample; a response rate of about 12%. The sample was stratified in two segments; ABCM user firms and Non ABCM user firms. A five point Likert scale was used. The focus of the study was to find evidence on how widely traditional and contemporary management accounting practices were adopted by Indian industry. The investigations revealed that improvement of overall profitability and cost reduction were the motivating factors for using management accounting in Indian companies. The researcher found a positive association between the adoption of ABC and company characteristics (e.g. degree of customization, pressure of competition, business size, and proportion of overhead to total cost). However, none of the differences was found to be significant at 10% level.

Isa & Thye (2006) examined the usage of management accounting practices in manufacturing firms in Malaysia. They also studied the relationship between product variety, complexity of production process, level of competition, company size, overhead expenses and usage of advanced management accounting practices. Management accountants in 500 manufacturing firms were randomly selected from the 2004/2005 Federation of Malaysian Manufacturers Directory. A total of 75 usable responses were received, that represented a response rate of 15%. Respondents comprised of senior level managers, including Chief Executive Officers, General Managers and Management Accountants. In this study, the measures for traditional management accounting techniques (TMAT) and advanced management accounting techniques (AMAT) were adopted from Waldron and Everett (2004). The TMAT were represented by four techniques: full costing, standard costing, job order costing and process costing. The AMAT comprised thirteen techniques: Activity-Based Costing, Activity-Based Management, Target Costing, Kaizen Costing, Value Added Accounting, Cost of Quality, Economic Value Added, Life Cycle Costing, Target Cost Planning, Cost Modeling, Strategic Management Accounting, Throughput Accounting and Back Flush Costing.

Salawu et al., (2012) did a survey of Activity Based Costing Adoption Among Manufacturing Companies in Nigeria. The study reveals that inability of the traditional cost systems to provide relevant cost was the most highly ranked reason in their decision to adopt ABC. Traditional methods of allocating overhead were therefore believed to be deficient in terms of improving global competitiveness. Also, 60% of the respondents have adopted ABC due to increased ranges of products, competition and increased overhead. Familiarity with and adoption of ABC was found to be across the manufacturing, more than half of the sample are familiar with it. The 40% of respondents who have not adopted ABC cited the cost and complexity involved with implementation as the main reason in non-adoption. However, cost of implementing ABC was enormous which hinder the small scale manufacturing from adopting it. This result may reflect the fact that larger firms are more likely to have the diverse mix of products or services that makes the use of ABC advantages. Consequently, the study recommends that the companies who have not adopted ABC because of its high cost of implementation should endeavor to consider its adoption because in the long run the benefits derive from it will outweigh its cost. It helps to identify inefficient products, departments and activities and helps to allocate more resources on profitable products. In conclusion, the senior management should also give their utmost support to the implementation and success of ABC.

Waweru, (1999) study examined the management accounting practices, and management accounting techniques used by publicly quoted companies in Ghana and the type of management accounting reports produced and the frequency of their production. The study also explored the management accounting techniques used by these companies and the extent of their utilization. The basic premises of the study were that the success of any business in a competitive environment depends to a large extent, on the availability of timely and quality information for decision making. The study was a census study of all the publicly quoted companies in Ghana. Data was collected using a semi-structured questionnaire and analysed using tables, proportions, averages and percentages.

The findings however revealed that there was no significant relationship between type and process of budgeting and the ownership and sector of the company. The most important purpose of management accounting reports was planning and control. Most of the management accounting reports are produced monthly. There does not exist a significant gap between management accounting theory and management accounting practice. However, there is limited application of quantitative management accounting techniques in Ghana. There is preference of simple management accounting techniques to the complex techniques. This is probably due to the cost involved and the complexity of these elaborate techniques which may outweigh their benefits. On the basis of these findings, the following managerial recommendations appear appropriate: Companies in Ghana should move towards strategic management accounting.

Thanju (2009) conducted a study on determinants of management accounting changes in three private Hospitals in Nairobi during the study period. Management accounting changes have been documented in developed countries and have been related to changes in business environment. However, no such study had been document in private Hospitals in Ghana. This was the gap that this research intended to fill. The objective of the study was to evaluate the management accounting changes and determinants of these changes that occurred in these three hospitals in Nairobi between the period of 2006 to 2011.To achieve the objectives, the researcher used descriptive cross sectional survey design where primary data was collected through structured questionnaires and personal interviews with financial manager's/ management accountants of the respective Private hospitals. The data was analyzed using descriptive statistics, presented in narrations, graphical and pictorial designs for interpretation and summarization.

The findings indicated considerable management accounting changes in these hospitals in all the areas. The firms also had adopted many modern management accounting techniques. The findings suggest the determinants of management accounting change included high competition, advancement in technology, need for financial and non-financial measures, financial performance, board member's expectation, statutory and regulatory bodies requirements as well as availability of resources. The study revealed that high accounting staff turnover, inadequate staffs, poor

communication with line managers, strict government and regulatory bodies' requirements and difficulties in accessing strategic information about competitors as the main factors that hinder management accounting change.

Njenga (2006) study sought to investigate the relationship between cost X-efficiency and financial performance of companies listed in the Nairobi Securities Exchange in Ghana. The study findings conclude that Cost X-inefficiency may arise because managers use more input than would a best-practice firm (technical inefficiency) or because they employ an input mix that does not minimize cost for a given input vector, moreover its established that X-inefficiency arises from the fact that "neither individuals nor firms work as hard, nor do they search for information as effectively, as they could." More specifically, the results exits that cost X-efficiency as the ratio of the minimum costs that could have been expended to produce a given output bundle to the actual costs expended and varies between 0 and 100 percent.

The 46 businesses and companies listed in the Nairobi Securities Exchange formed the population of the study. The sample included firms in the following sectors, Agriculture, Automobile and accessories, Banking, Commercial & Services, Construction & Allied, energy and Petroleum, Insurance and Investment firms. The findings established that assets management measures demonstrate how efficient management uses a firm's assets to generate sales over a certain period of time. Asset management ratios (asset utilization ratios) show how efficiently and intensively assets are used to create sales efficiently and intensively. These ratios include, for example, inventory turnover, receivable turnover and assets. Moreover, the study findings establish that sell assets to increase their operating efficiency are typically poor performers. Firms are to sell their own assets if they find that alternative funding is too expensive and thus portend that total assets and cost of raw material and sales expenses significantly leads to a higher firm performance.

3.0 RESEARCH METHODOLOGY

This chapter outlines the methodology which the present study took. Outlined here are the research design, population and sample, data collection, and data analysis. Most of the existing research literature on accounting in Ghana manufacturing companies tends to be more biased toward the arm of financial accounting, information technology adoption as well as research in credit accessibility for manufacturing companies, more so only remote exists in regard to effects of management accounting practices on financial performance of manufacturing companies in Ghana (Wairegi, 2011),(Makau, Wawire, & Ofafa, 2013), (Waweru, 2012), (Mugambi, 2010), despite this previous research studies being vital, lack of management accounting practices for decision making and lack of technical skills are as much obstacles to developing manufacturing companies as is the inability to access credit (Mbogo, 2011). This study thus sought to establish the effects of management accounting practices on financial performance of manufacturing companies in Ghana

3.1 Research Design

This study adopted a descriptive survey design. According to Churchill (2011) it is appropriate where the study seeks to describe the characteristics of certain groups, estimate the proportion of people who have certain characteristics and make predictions. The study sought to collect data from the manufacturing companies at one point in time and determine the effects of management accounting practices on financial performance of manufacturing companies in Ghana.

3.2 Ethical Considerations

Research study philosophy is an over-arching term that relates to the development of knowledge and the nature of that knowledge (Saunders et al., 2009). The study was guided by a positivism research philosophy which is part of epistemological viewpoint. In positivism research belief, the research is carried out in a value-free way. The researcher is external to the process of data collection in the sense that there is little which can be done to alter the substance of the data collected. The researcher is independent of and not afflicted by the subject of the research (Saunders et al., 2009).

The basis of applying the positivism paradigm was that it's directly associated with the idea of objectivism. In this type of philosophical approach, the researchers give their viewpoint to evaluate social world with the aid of objectivity in place of subjectivity (Cooper & Schindler 2008). With this approach, a researcher's own beliefs have no value to influence the research study. Positivism asserts that no only objective reality can be observed and tested without bias using standardised instruments. In the positivist paradigm, the researchers see themselves as neutral recorders. Different researchers using the same tools should reach the same conclusions (Cohen et al., 2007).

Relating to Kasi (2009), positivism paradigms seek to develop standardised instruments that specifically tap just one reality. Relating to Cooper and Schindler (2011) assertions, positivism is indicated by a belief in theory before research and statistical justification of findings from empirically testable speculation, the core of tenets of social

science. Positivism helps to test thinking and examines the possible relationship between several variables (Sekeran & Bougie 2010).

3.3 Research Methods
3.3.1 Samples

Target population in statistics is the specific population about which information is desired. According to Ngechu (2004), a population is a well-defined or set of people, services, elements, events, group of things or households that are being investigated. This definition ensures that population of interest is homogeneous. Population studies also called census are more representative because everyone has equal chance to be included in the final sample that is drawn according to (Mugenda and Mugenda, 2003). The target population for this study was the 455 manufacturing companies in Ghana.

Stratified random sampling method was applied to come up with the sample size, since the population in different manufacturing firms was considered heterogeneous, implying that a simple random sample is unrepresentative. This according to Cooper and Schindler (2006) ensure that each manufacturing subsector is represented. According to Mugenda and Mugenda (2003) at least 10% of the target population is important for the study. The study therefore involved 46 manufacturing companies Nairobi. Table 3.1 shows how the sample size was arrived at.

Sector	No. of Firms	Sample size (10%)
Building	6	1
Food, Beverages	100	10
Chemical	62	6
Energy	42	4
Plastics	54	5
Textile	38	4
Wood Products	22	2
Pharmaceutical	20	2
Metal and Allied	38	4
Leather	8	1
Motor	17	2
Paper	48	5
Total	455	46

3.3.2 Result

The study collected primary data from the respondents. The data collected was both quantitative and qualitative. Qualitative data is a categorical measurement expressed not in terms of numbers, but rather by means of a natural language description. Quantitative data is a numerical measurement expressed in terms of numbers. The study utilized a questionnaire to collect data. The questionnaire designed in this study comprised of two sections. The first part included the demographic and operational characteristics designed to determine fundamental issues including the demographic characteristics of the respondent. The second part was devoted to the questions on the effects of management accounting practices on financial performance of manufacturing companies in Ghana. The secondary data was obtained from the published annual reports spanning five years (2009-2013) for the manufacturing firms in Ghana.

3.3.3 Questionnaires

Questionnaires analysis is the process of bringing order, structure and meaning to the mass of information collected (Mugenda & Mugenda, 2003). Given that the study was conducted using a mixed method approach (defined under "research design"), analysis was done using Statistical Package for Social Sciences (SPSS) and coding/theming. SPSS was used, allowing the researcher to present the information in form of tables and figures.

3.3.3.1 Conceptual Model
The conceptual model in this study is specified as follows:

$Y = f(MAP)$

Where Y is the financial performance;

MAP is the Management Accounting Practices which include Costing, Budgeting Performance Evaluation, Information for Decision Making, and Strategic Analysis.

3.3.4 Interviews

The study used a regression model to predict the extent to which the identified independent variables affect the dependent variable of interviews conducted. In this case SPSS version 18 was used in regression analysis and computation of coefficients. The regression line is represented by the following model:

$$Fp_t = \beta 0 + \beta_1 X1 + \beta_2 X2 + \beta_3 X3 + \beta_4 X4 + \beta_5 X5 + \beta_6 X6 + \beta_7 X7 + e_t .... (2)$$

Where;

FP = financial performance, ROA=$\dfrac{\text{Net Income}}{\text{Total assets}}$

X1= Costing

X2= Budgeting

X3= Performance Evaluation

X4= Information for Decision Making

X5= Strategic Analysis

X_6 and X_7 = other determinants of financial performance (Leverage) and Size

X_5= Ratio of total debt to total assets

X_6 = Size =natural log (Ln) of Total assets

β_0 = constant or intercept; β_1 to…β_7 are regression coefficients

e_t = Error term

The values of X_1 to X_5 were calculated from the mean score response on each likert scaled data for each company. The mean score obtained for the individual variable for each firm was regressed against the values of Y (ROA) for a five-year period.

In order to find out the relationship between management accounting practices and financial performance of manufacturing companies in Ghana, regression analysis was done where the management accounting practices were regressed against the financial performance to find out which practices have significant influence on the financial performance of manufacturing companies in Ghana. The results of the regression analysis were interpreted based on the R square, significance of F statistics and the significance of beta values from the coefficients of the X variables. Significance was tested at 5% level.

4.0 DATA ANALYSIS

This chapter presents the results of data analysis. Responses from 37 firms (representing 80.4% response rate) were used in the data analysis. The chapter presents result on the effects of management accounting practices on financial performance of manufacturing companies in Ghana. The information was gathered from the staff in the finance department including Chief financial officers, accountants and Credits officers as they handle management accountancy issues. The objectives of the study were; to establish the management accounting practices undertaken by the manufacturing companies in Ghana and to establish the effects of management accounting practices on financial performance.

4.0.1 General Information

The respondents were asked a series in relation to their demographic and operational characteristics designed to determine fundamental issues including the demographic characteristics of the respondent. The findings are discussed below.

4.0.1 Respondents' Company Specialization

The study requested the respondents to state what their company deals in. Accordingly, the findings are presented in the figure below.

Figure 4.0. Respondents Company Specialty
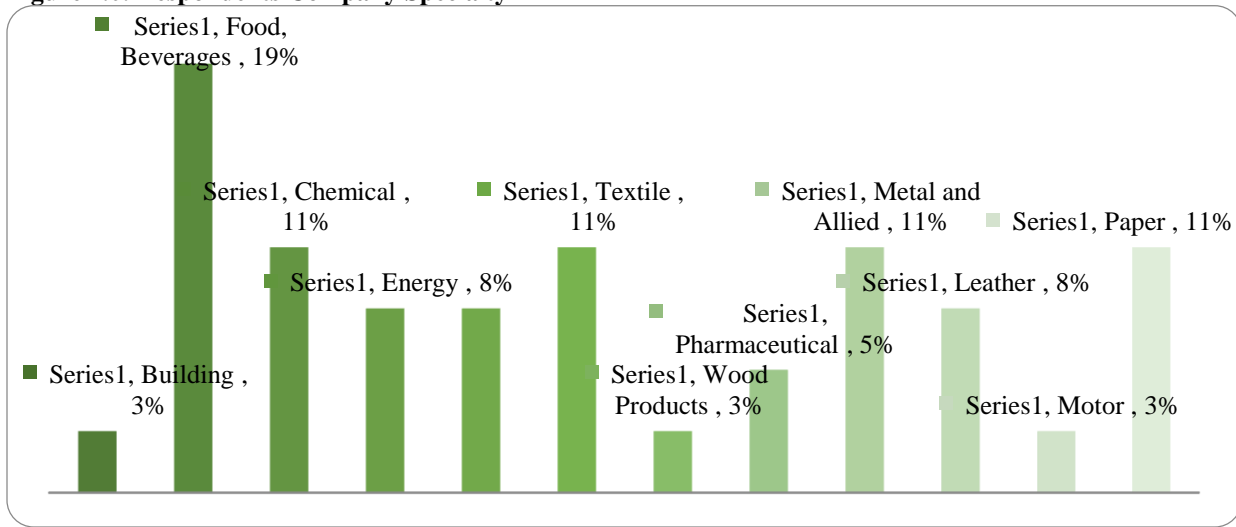
From the findings in figure 4.0 above, most (19%) of the respondents revealed that their company deals in food/beverages, this was followed by 11% who said that their company deals in textile, chemical, paper as well as metal & allied each, 8% said that their company deals in energy, plastics and leather, 5% said that their company deals in Pharmaceutical, and the remaining 3% said that their company deals in building, wood products and motor each. This implies that all the targeted manufacturing companies were involved in the study with most responses emanating from companies dealing in food/beverages.

4.0.2 Current Nnumber of Employees in the Respondents Company

The study sought to establish how many employees the respondent's companies have currently. A summary of the findings is illustrated below.

Figure 4.1: Current Number of Employees in the Respondents Company
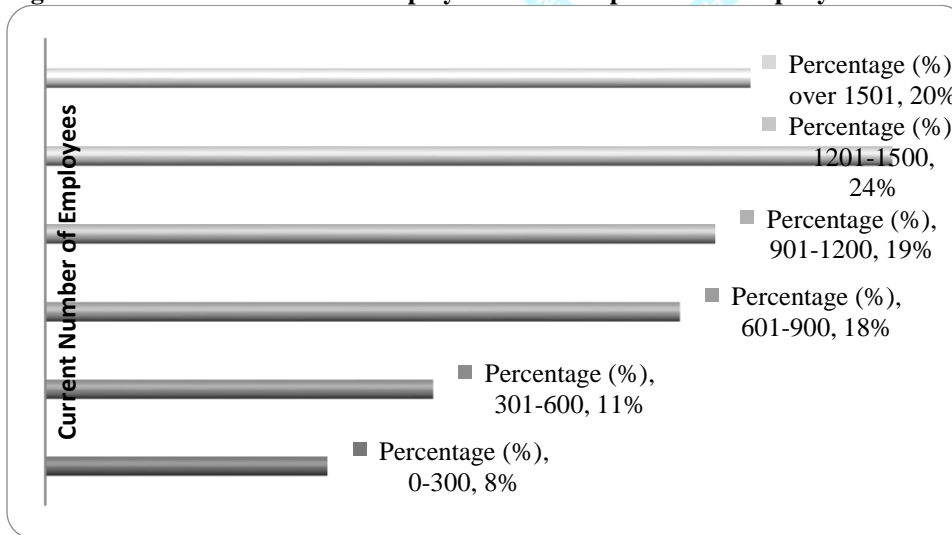
As per the findings in figure 4.1 above, most (24%) of the respondent's company have 1201-1500 employees, 20% have over 1501 employees, 19% have 901-1200 employees, 18% have 601-900 employees, 11% have 301-600 employees and finally 8% of the respondent's company have 0-300 employees.

2.1 CONTENT OF RESEARCH SITES
4.1.1 Management Accounting Practices

The respondents were asked to rate the usage of Costing, Budgeting, Performance Evaluation, Information for Decision Making, and Strategic Analysis management accounting practices in their Company. The ranking ranged from 1 (never) to 5 (very often).

4.1.1.1 Usage of Costing Management Accounting Practices in Respondents Company

The respondents were asked to indicate the extent to which they agreed with statements concerning the Usage of Costing Management Accounting Practices in their Company. The responses were placed on a five Likert scale ranging from 1 (never) to 5 (very often). A mean of above 3 is regarded to measure satisfaction on the test variables. Standard deviation was used to indicate the variation or "dispersion" from the "average" (mean). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data is spread out over a large range of values. The results are as in the Table 4.1 below.

Table 4.1.1.1: Usage of Costing Management Accounting Practices in Respondents Company

	1	2	3	4	5	Mean	SD
The cost of quality	0.0	3.8	10.0	46.2	40.0	4.31	0.78
Department or multiple plant-wide overhead rates	0.0	6.0	8.8	47.1	38.1	4.26	0.88
Separation of variable cost, incremental costs & fixed costs	2.0	6.4	9.6	49.0	35.0	4.20	0.64
Use of plant- wide overhead rate	7.5	2.5	15.0	51.0	31.0	4.10	0.49
Activity- based costing (ABC)	0.0	4.6	15.0	37.5	42.9	4.02	0.45
Target costs	4.2	16.0	25.3	36.5	18.0	3.99	0.60
Regression and /or learning curve techniques	4.5	20.0	42.0	18.0	15.5	3.55	0.82
Overall mean						4.06	0.67

The study found that 86.2% of the Companies often use the cost of quality, 85.2% of the Companies often use departmental overhead rates, 84% of the Companies often use separation of costs, 82% of the Companies often use of plant-wide overhead rates, 80.4% of the Companies often use Activity- based costing (ABC), 79.8% of the Companies often use target costs while 71% of the Companies often use regression techniques and/or learning curve techniques. From the overall mean of 4.06, costing systems were rated as highly used.

2.1.2 Analysis of the Questionnaire
4.1.2.1 Usage of Budgeting Management Accounting Practices in Respondents Company

The respondents were asked to indicate the extent to which they agreed with statements concerning the Usage of Budgeting Management Accounting Practices in their Company. The responses were placed on a five Likert scale ranging from 1 (never) to 5 (very often). A mean of above 3 is regarded to measure satisfaction on the test variables. Standard deviation was used to indicate the variation or "dispersion" from the "average" (mean). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data is spread out over a large range of values. The results are as in the Table below.

Table 4.1.2: Usage of Budgeting Management Accounting Practices in Respondents Company

	1	2	3	4	5	Mean	SD
Budgeting for long-term (strategic) plans	0.0	0.0	10.0	39.2	50.8	4.54	0.59
Zero-based budgeting	0.0	2.5	2.5	35.0	47.4	4.37	0.23
Budgeting for controlling costs	0.0	5.0	5.0	30.7	44.5	4.26	0.09
Flexible budgeting	0.0	0.0	6.5	35.0	42.5	4.20	0.15
Budgeting with "what if analysis"	0.0	6.8	6.0	50.0	20.0	4.14	0.17
Budgeting for planning	1.2	1.5	7.5	39.5	32.5	4.11	0.88
Activity- based budgeting	5.0	4.0	5.0	42.5	25.0	4.08	0.61
Overall mean						4.24	0.39

The results show that all the budgeting practices were used in the respondents companies. According to the findings in Table 4.2, 90.8% of the Companies often use Budgeting for long-term (strategic) plans, 87.4% of the Companies often use Zero-based budgeting, 85.2% of the Companies often use Budgeting for controlling costs, 84.0%

of the Companies often use Flexible budgeting, 82.8% of the Companies often use Budgeting with "what if analysis", 82.2% of the Companies often use Budgeting for planning while 81.6% of the Companies often use Activity- based budgeting. From the overall mean of 4.27, Budgeting was rated as highly used.

4.1.2.3 Usage of Performance Evaluation Management Accounting Practices in Respondents Company

The respondents were asked to indicate the extent to which they agreed with statements concerning the Usage of Performance Evaluation Management Accounting Practices in their Company. The responses were placed on a five Likert scale ranging from 1 (never) to 5 (very often). A mean of above 3 is regarded to measure satisfaction on the test variables. Standard deviation was used to indicate the variation or "dispersion" from the "average" (mean). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data is spread out over a large range of values. The results are as in the Table 4.3 below.

Table 4.1.2.3: Usage of Performance Evaluation Management Accounting Practices in Respondents Company

	1	2	3	4	5	Mean	SD
Non-financial measure(s) related to customers	0.0	0.0	12.0	42.0	46.0	4.38	0.54
Non-financial measures(s) related to operation and innovation	0.0	2.5	2.5	43.5	38.5	4.33	0.61
Non- financial measure(s) related to employees	0.0	0.0	10.5	38.5	40.0	4.29	0.41
Financial measures	0.0	0.0	7.5	67.5	25.0	4.24	0.76
Economic value added or residual income	2.5	7.5	10.0	37.5	42.5	4.09	0.89
Benchmarks	0.0	2.5	22.5	42.5	32.5	4.00	0.66
Overall mean						4.22	0.65

The results show that all the performance evaluation measures were used in the respondent's companies. According to the findings in Table 4.3, 88.0% of the Companies often use non-financial measure(s) related to customers, 87.0% of the Companies often use non-financial measures(s) related to operation and innovation, 86.0% of the Companies often use non- financial measure(s) related to employees, 85.0% of the Companies often use financial measures, 82.0% of the Companies often use economic value added or residual income while 80.0% of the Companies often use benchmarks. From the overall mean of 4.22, performance evaluation measures were rated as highly used.

4.1.2.4 Usage of Information for Decision Making Management Accounting Practices in Respondents Company

The respondents were asked to indicate the extent to which they agreed with statements concerning the Usage of Information for Decision Making Management Accounting Practices in their Company. The responses were placed on a five Likert scale ranging from 1 (never) to 5 (very often). A mean of above 3 is regarded to measure satisfaction on the test variables. Standard deviation was used to indicate the variation or "dispersion" from the "average" (mean). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data is spread out over a large range of values. The results are as in the Table below.

Table 4.1.2.4: Usage of Information for Decision Making Management Accounting Practices in Respondents Company

	1	2	3	4	5	Mean	SD
Evaluation of major capital investment based on discounted cash flow method(s)	0.0	0.0	2.5	27.5	59.5	4.47	0.44
For the evaluation of major capital investments, non-financial aspects are documented and reported	0.0	0.0	2.5	30.0	56.5	4.45	0.41
Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation	0.0	7.2	5.0	34.0	54.0	4.41	0.51
Customer profitability analysis	0.0	4.0	8.0	33.5	54.5	4.40	0.49
Product profitability analysis	0.0	12.8	0.0	37.2	50.0	4.36	0.62
Evaluation of major capital investments based on payback period and/ or accounting rate of return	0.0	13.2	0.0	46.8	40.0	4.34	0.42
Evaluating the risk of major capital investment projects by using profitability analysis or computer simulation	0.0	2.5	7.5	47.2	39.0	4.31	0.43
Stock control models	0.0	0.0	14.0	42.5	42.5	4.28	0.33

	1	2	3	4	5		
Performing sensitivity "what if" analysis when evaluating major capital investments projects	2.5	0.0	12.0	62.5	22.0	4.24	0.67
Cost-volume-profit analysis (break-even analysis) for major products	5.0	7.0	5.0	52.5	30.5	4.16	0.56
Overall mean						4.34	0.49

The results in table 4.4 show that all the information for decision making were used in the respondents companies; 89.4% of the Companies often use Evaluation of major capital investment based on discounted cash flow method(s), 89.0% of the Companies often use For the evaluation of major capital investments, non-financial aspects are documented and reported, 88.2% of the Companies often use Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation, 88.0% of the Companies often use Customer profitability analysis, 87.2% of the Companies often use Product profitability analysis, 86.8% of the Companies often use Evaluation of major capital investments based on payback period and/ or accounting rate of return, 86.2% of the Companies often use Evaluating the risk of major capital investment projects by using profitability analysis or computer simulation, 85.6% of the Companies often use Stock control models, 84.8% of the Companies often use Performing sensitivity "what if" analysis when evaluating major capital investments projects while 83.2% of the Companies often use Cost-volume-profit analysis (break-even analysis) for major products. From the overall mean of 4.34, Information for Decision Making was rated as highly used.

4.1.2.5 Usage of Strategic Analysis Management Accounting Practices in Respondents Company
The respondents were asked to indicate the extent to which they agreed with statements concerning the Usage of Strategic Analysis Management Accounting Practices in their Company. The responses were placed on a five Likert scale ranging from 1 (never) to 5 (very often). A mean of above 3 is regarded to measure satisfaction on the test variables. Standard deviation was used to indicate the variation or "dispersion" from the "average" (mean). A low standard deviation indicates that the data points tend to be very close to the mean, whereas high standard deviation indicates that the data is spread out over a large range of values. The results are as in the Table 4.5 below.

Table 4.1.2.2: Usage of Strategic Analysis Management Accounting Practices in Respondents Company

	1	2	3	4	5	Mean	SD
Analysis of competitors" strengths and weaknesses	0.0	0.0	0.0	37.5	62.5	4.58	0.55
Value chain analysis	0.0	0.0	2.5	45.0	52.5	4.52	0.27
Shareholder value	0.0	0.0	7.5	37.5	55.0	4.47	0.49
Industry analysis	0.0	0.0	0.0	57.5	42.5	4.38	0.33
Analysis of competitive position	0.0	0.0	0.0	70.0	30.0	4.27	0.41
Long-range forecasting	0.0	0.0	25.0	30.0	45.0	4.19	0.74
Product life cycle analysis	2.5	7.5	10.0	37.5	42.5	4.09	0.73
The possibilities of integration with suppliers "and/or customers" value chains	5.0	7.5	37.5	30.0	20.0	3.81	0.65
Overall mean						4.29	0.52

From the results in table 4.5, Strategic Analysis is used in the respondents companies; 91.6% of the Companies often use Analysis of competitors' strengths and weaknesses, 90.4% of the Companies often use Value chain analysis, 89.4% of the Companies often use Shareholder value, 87.6% of the Companies often use Industry analysis, 85.4% of the Companies often use Analysis of competitive position, 83.8% of the Companies often use Long-range forecasting, 81.8% of the Companies often use Product life cycle analysis while 76.2% of the Companies often use The possibilities of integration with suppliers "and/or customers" value chains. From the overall mean of 4.29, Strategic Analysis was rated as highly used.

4.1.2.6 Respondents Opinion on the Importance of Management Accounting Practices
The respondents were asked to state to what extent they agreed with the following statements on importance of management accounting practices. The Scoring ranged from 1 (very low extent) to 5 (very large extent).

Table 4.3 Importance of management accounting practices

	Mean	std

The management accounting function identifies key factors that influence performance and risky areas that require improvements	4.69	0.21
Return on equity, ROE (Net income / Average Equity) has increased as a result of application of management accounting practices	4.69	0.27
The management accounting function develops strategies that enable the manufacturing companies to exploit financial innovations in creating a sustainable competitive advantage	4.68	0.25
Management accounting provides information from its environment to management to facilitate decision-making	4.68	0.15
Return on Asset, ROA (Net income /Total assets) as a result of application of management accounting practices	4.67	0.48
financial leverage or (Equity / Total Assets) as a result of application of management accounting practices	4.61	0.34
Management accountants apply their skills to assist financial managers in evaluating profitability prospects and anticipated risks thereby creating a competitive advantage.	4.55	0.17
Management accounting function creates the cultural values necessary to achieve the organization strategic objectives	4.55	0.13
The manufacturing companies manages interest rates in such a way that it reduces risks and creates a competitive advantage with the help of the management accounting function	4.49	0.14
Accurate measures of the cost of financing an organization operations allow a manufacturing company to compare prices between alternative funding sources and to ensure that assets are priced high enough to cover and pay shareholders the required return	4.47	0.16
Management accounting practices enable firms from all sectors to raise money in larger amounts and at a cheaper cost than they could elsewhere	4.41	0.41
Innovative management accounting practices are important in providing techniques that are used to manage the above-risk exposures	4.39	0.14
The management accounting function provides important techniques that may enhance credit risk management and a competitive advantage in the manufacturing sector	4.35	0.28

The results in table 4.6 depict that the most important element of management accounting practices was; The management accounting function identifies key factors that influence performance and risky areas that require improvements and Return on equity, ROE (Net income / Average Equity) has increased as a result of application of management accounting practices, (Mean=4.69 each), this was followed by The management accounting function develops strategies that enable the manufacturing companies to exploit financial innovations in creating a sustainable competitive advantage and Management accounting provides information from its environment to management to facilitate decision-making (Mean=4.68 each), Return on Asset, ROA (Net income /Total assets) as a result of application of management accounting practices (Mean=4.67). Financial leverage or (Equity / Total Assets) as a result of application of management accounting practices (Mean=4.61). Management accountants apply their skills to assist financial managers in evaluating profitability prospects and anticipated risks thereby creating a competitive advantage and Management accounting function creates the cultural values necessary to achieve the organization strategic objectives (Mean=4.55 each).

The manufacturing companies manages interest rates in such a way that it reduces risks and creates a competitive advantage with the help of the management accounting function (Mean=4.49), Accurate measures of the cost of financing an organization operations allow a manufacturing company to compare prices between alternative funding sources and to ensure that assets are priced high enough to cover and pay shareholders the required return (Mean=4.47), Management accounting practices enable firms from all sectors to raise money in larger amounts and at a cheaper cost than they could elsewhere (Mean=4.37),innovative management accounting practices are important in providing techniques that are used to manage the above-risk exposures(Mean=4.41), Innovative management accounting practices are important in providing techniques that are used to manage the above-risk exposures (Mean=4.39) and The management accounting function provides important techniques that may enhance credit risk management and a competitive advantage in the manufacturing sector (Mean=4.35).

4.1.3 Conclusion from the Questionnaires

The study further applied multiple regressions to determine the predictive power of the management accounting practices on financial performance of manufacturing companies in Ghana.

4.1.3 Analysis of the Interviews

Regression analysis is the statistical technique that identifies the relationship between two or more quantitative variables: a dependent variable, whose value is to be predicted, and an independent or explanatory variable (or variables), about which knowledge is available. The technique is used to find the equation that represents the relationship between the variables. Multiple regressions provide an equation that predicts one variable from two or more independent variables. The researcher conducted a multiple regression analysis so as to test relationship among variables (independent) on the financial performance of manufacturing companies in Ghana.

The researcher applied the statistical package for social sciences (SPSS V 18.0) to code, enter and compute the measurements of the multiple regressions for the study. Coefficient of determination explains the extent to which changes in the dependent variable can be explained by the change in the independent variables or the percentage of variation in the dependent variable (financial performance of manufacturing companies in Ghana) that is explained by all the five independent variables (Costing, Budgeting, Performance Evaluation, Information for Decision Making, and Strategic Analysis). The study adopted multiple regression guided by the following model:

$$Fp_t = \beta 0 + \beta_1 X1 + \beta_2 X2 + \beta_3 X3 + \beta_4 X4 + \beta_5 X5 + e_t$$

Table 4.8 shows the regression model summary results where R square, adjusted R square and standard error of estimate are presented.

Table 4.1.3 Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.891[a]	.794	.642	3.31805

The results in Table 4.7 indicate that the management accounting practices had a joint significant effect on financial performance of manufacturing companies in Ghana as shown by r value of 0.891. The R squared of 0.794 shows that the independent variables accounted for 79.4% of the variance on financial performance of manufacturing companies in Ghana. Table shows the ANOVA results which explain the model fit through the F statistic and the probability of F-statistic.

Table 4.1.3 ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	124.469	12	24.894	2.001	.018[b]
Residual	220.189	15	11.009		
Total	344.657	37			

The results in Table 4.8 show that the F statistic was 2.001. At 5% level of confidence, the F statistic was significant. In this case, all the predictor variables (costing, budgeting, and performance evaluation information for decision making, strategic analysis, size, leverage) explain a variation in financial performance and that the overall model is significant.

Table 4.9 shows the coefficient results for the model variables, the t-values of each of the independent variables as well as the significance (p-value).

Table 4.1.3: Coefficients

Model		Unstandardized		Standardize	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.706	.229		.670	.018
	Costing	.556	.018	.441	.787	.007
	Budgeting	.601	.025	.321	.801	.016
	Performance	.599	.044	.245	.591	.015
	Information for	.679	.089	.361	.491	.000
	Strategic Analysis	.654	.079	.355	.671	.004

Size	.434	.054	.371	.348	.020
Leverage	.409	.066	.381	.421	.034
a. Dependent Variable: financial performance					

From the findings in the above table the study found that holding costing, budgeting performance evaluation, information for decision making, and strategic analysis, size and leverage constant financial performance will be 0.706, the study also found that a unit increase in Costing practices will cause a .556 increase in financial performance, further it was established by the study that a unit increase in Budgeting practices will lead to an increase in financial performance by 0.601, it was also found that a unit increase in Performance Evaluation practices will lead to an increase in financial performance by a factor of 0.599, it was further found by the study that a unit increase in Information for Decision Making practices will lead to an increase in financial performance by a factor of 0.679, a unit increase in Strategic Analysis will further lead to an increase in financial performance by a factor of 0.654, a unit increase in Size will further lead to an increase in financial performance by a factor of 0.434 and a unit increase in Leverage will further lead to a increase in financial performance by a factor of 0.409.

4.1.4 Conclusions for Interview

The study indicates that the management accounting practices have a joint significant (79.4%) effect on the financial performance of manufacturing companies in Ghana. At 5% level of confidence, the F statistic was significant. The sum of squares also confirms that the regression model explained less than the residual. Likewise, Chenhall and Langfield-Smith (1998b) found greater use of advanced management accounting practices, such as quality improvement programs, benchmarking and activity-based management, in firms that placed a strong emphasis on product differentiation strategies, ultimately resulting in high performance. This concurs with Ittner and Larcker (1995), and Sim and Killough (1998) who both found a significant positive interaction between management accounting information and performance, while Mia and Clarke (1999) found an indirect association between the intensity of market competition and business unit performance through the use of management accounting information.

The study also revealed that holding Costing, Budgeting Performance Evaluation, Information for Decision Making, and Strategic Analysis, Size and financial performance constant financial performance will be 0.706. Information for Decision Making practices was established as having the greatest impact on financial performance of manufacturing companies in Ghana followed by Strategic Analysis, Budgeting, Performance Evaluation, Costing, Size and financial performance respectively. This concurs with a well-established empirical evidence for an association between MAP and performance. Likewise, Baines and Langfield-Smith (2003) found that firms with a greater reliance on non-financial accounting information improved their performance. Ittner and Larcker (1995), Mia and Clarke (1999), and Sim and Killough (1998) found a positive interaction between management accounting information and performance. These findings support the suggestion that changes in MAS are associated with good financial performance (Laitinen, 2006). They included; Analysis of competitors' strengths and weaknesses, Value chain analysis, Shareholder value, Industry analysis, Analysis of competitive position, Long-range forecasting, Product life cycle analysis and the possibilities of integration with suppliers "and/or customers" value chains.

5.0 EVALUATION OF THE RESEARCH

The general objective of this study was to investigate the effects of management accounting practices on financial performance of manufacturing companies in Ghana. This study adopted a descriptive survey design. The target population for this study was the 455 manufacturing companies in Ghana. The study found that costing systems were rated as highly used. The costing systems included; cost of quality, departmental overhead rates, separation of costs, plant-wide overhead rates, Activity- based costing (ABC), target costs and regression techniques and/or learning curve techniques respectively. The study also found out that the budgeting practices were highly used in the respondent's companies. They included; budgeting for long-term (strategic) plans, zero-based budgeting, budgeting for controlling costs, flexible budgeting, budgeting with "what if analysis", budgeting for planning and activity- based budgeting. Performance evaluation measures were also found to be highly used in the respondent's companies. They included; non-financial measure(s) related to customers, non-financial measures(s) and benchmarks.

The study found out that information for decision making were used in the respondent's companies. These included; evaluation of major capital investment based on discounted cash flow method(s), evaluation of major capital investments, and Cost-volume-profit analysis (break-even analysis) for major products. Strategic Analysis was also established to be highly used in the respondent's companies.

5.1 Findings and Discoveries

The study found that costing systems were rated as highly used. The costing systems included; cost of quality, departmental overhead rates, separation of costs, plant-wide overhead rates, Activity- based costing (ABC), target costs and regression techniques and/or learning curve techniques respectively. The study only concentrated on the management accounting practices of manufacturing companies in Ghana and not all the companies in the economy.

These results are therefore only limited to the manufacturing companies and may be of little or no use to the companies in other sectors in the country. Due to the self-report nature of data which entailed the use of questionnaires, responses on the survey may not accurately convey their real involvement in the management accounting practices. Some of the respondent did not return the questionnaires therefore, resulting to lesser the targeted sample thus, influencing the nature of statistical reporting.

Furthermore, firms did not accurately disclose the ROA figures due to the nature of the sensitivity of financial information disclosure. Therefore, this affected proper statistical analysis of the data.

Finally, due to limited time available to carry out the research, the above areas were not comprehensively studied to provide a national wide picture. This would be an important area because policy makers and implementers argue that the effects of management accounting practices on financial performance of manufacturing companies in Ghana can only be resolved by providing them with research action points based on empirical data.

5.2 Limitations of the Study

The study only concentrated on the management accounting practices of manufacturing companies in Ghana and not all the companies in the economy. These results are therefore only limited to the manufacturing companies and may be of little or no use to the companies in other sectors in the country.

Due to the self-report nature of data which entailed the use of questionnaires, responses on the survey may not accurately convey their real involvement in the management accounting practices. Some of the respondent did not return the questionnaires therefore, resulting to lesser the targeted sample thus, influencing the nature of statistical reporting.

Further, some firms did not accurately disclose the ROA figures due to the nature of the sensitivity of financial information disclosure. Therefore, this affected proper statistical analysis of the data.

Finally, due to limited time available to carry out the research, the above areas were not comprehensively studied to provide a national wide picture. This would be an important area because policy makers and implementers argue that the effects of management accounting practices on financial performance of manufacturing companies in Ghana can only be resolved by providing them with research action points based on empirical data.

5.3 Recommendations

This study examined effects of management accounting practices on financial performance of manufacturing companies in Ghana. From the practice perspective, this study recommends the creation and enhancement of awareness among firms of the importance of information for decision making practices as this is the most highly used management accounting practice amongst the manufacturing companies in Ghana.

The findings recommend that to achieve a proper measure of financial performance, firms need not only to integrate Return on Equity, Return on Asset and Earnings per share as the measures for accounting but also other value based measures which have gained popularity in academic literature in last two decades.

As an efficient accounting ethical practice, it is the responsibility of the management accounting professionals to remain relevant in adding value to the companies for which they work and to their profession by keeping abreast of research findings in their area of responsibility.

In relation to policies, accounting curriculum should be developed consistently to the changing role of accountants. Accounting Education must equip their student with capabilities in coping with the rapid changing of the business environment so that they can always provide relevant management accounting information to managers.

Academics and practitioners can use the findings of this study to fully understand how management accounting practices can help to improve business performance in companies.

5.5 Further Study and Research

Research should be carried out that also includes those companies in other sectors to establish if they also consider the management accounting practices as important and to establish the frequency of usage of the practices.

Further research is important in other countries with similar or almost same micro and macroeconomic environments for manufacturing companies. The findings of would enhance a cross-country comparison of the management accounting practices and their impact on financial performance.

In addition, future studies should examine specific factors as to why manufacturing companies are not adopting newly developed management accounting tools. The relatively limited benefits associated with new management accounting techniques raises the question of the conditions necessary to effective implement these tools.

Finally, the dependence between traditional and new management accounting techniques needs further investigation.

5.5 Conclusions

The study concludes that Information for Decision Making practices is the most highly used management accounting practice amongst the manufacturing companies in Ghana followed by Strategic Analysis, Budgeting, Performance Evaluation, Costing, Size and Leverage respectively.

The study further concludes that the most important elements of management accounting practices amongst the manufacturing companies in Ghana are; The management accounting function identifies key factors that influence performance and risky areas that require improvements and Return on equity, ROE (Net income / Average Equity) has increased as a result of application of management accounting practices.

The management accounting function develops strategies that enable the manufacturing companies to exploit financial innovations in creating a sustainable competitive advantage and Management accounting provides information from its environment to management to facilitate decision-making and Return on Asset, ROA (Net income /Total assets) as a result of application of management accounting practices.

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