Assessment of Management Accounting Practice & its effect on Firms Performance: The Case of Ethiopian Cement Factories

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February, 2018
Addis Ababa, Ethiopia

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A THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS DEPARTMENT OF ACCOUNTING AND FINANCE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR DEGREE OF MASTERS OF SCIENCE IN ACCOUNTING AND FINANCE.

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February, 2018
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Statement of Declaration

I, Yohannes Fekadu Assefa, have carried out independently a research work on ***"Assessment of Management Accounting Practice & its effect on Firms Performance: The Case of Ethiopian Cement Factories"*** in partial fulfillment of the requirement of the M.SC program in Accounting and Finance with the guidance and support of the research advisor.

This study is my own work that has not been submitted for any degree program in any other university and that all sources of materials used for the thesis have been duly acknowledged.

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Statement of Certification

Addis Ababa University

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This is to certify that the thesis prepared by Yohannes Fekadu Assefa, entitled: ***"Assessment of Management Accounting Practice & its effect on Firms Performance: The Case of Ethiopian Cement Factories"*** and submitted in partial fulfillment of the requirements for the M.SC program in Accounting and Finance complies with the regulations of the university and meets the accepted standard with respect to originality and quality.

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Acknowledgement

I am most grateful to Almighty GOD who through His infinite mercy, his blessing and unconditional love, guided me in every steps I made.

First and foremost, I would like to express my gratitude to my Advisor Ato G/Medhin G. for giving me valuable and fruitful chance throughout this research proposal.

I would like to extend my gratitude for those participants involved in the study that devoted their invaluable time to complete their honest response; their involvement was regarded as a great input to the quality of the research results and all of my friends who contributed for this research to be fruitful & who were there besides me, you devoted same effort as me.

Finally, yet importantly, without the unconditional love and support of my family, I could have never accomplished this. In this respect, I am deeply grateful to my parents who have been motivating and praying for my success especially my Dad, Fikadu Assefa. I also extend my eternal gratitude to all of my friends whom contributed their prayer and advice, every time I lose my patience who gave me courage and unreserved support.

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Acronyms and Abbreviation

MAP =	Management Accounting Practice
BSC=	Balanced Score Card
FDRE=	Federal Democratic Republic of Ethiopia
MoI=	Ministry of Industry
ABC =	Activity Based Costing
ABB=	Activity Based Budgeting
JIT=	Just in Time
FP=	Firm Performance
CS=	Costing System
BS=	Budgeting System
PE=	Performance Evaluation
IFDM=	Information for Decision Making
SA=	Strategic Analysis
ROA=	Return on Asset
ROE=	Return on Equity
TMAT=	Traditional Management Accounting Techniques
AMAT=	Advanced Management Accounting Techniques
CIMA=	Chartered Institute of Management Accountants
IMA=	Institute of Management Accountants
IFAC=	International Federation of Accountants
KPI=	Key Performance Indicator

Abstract

This thesis aims to assess the usage of management accounting practice being used & to examine its effect on performance of Ethiopian cement companies. A mixed research approach was used to answer the research questions that emerge through the review of related literature relevant for the study. The study statistically analyzed data obtained from the survey questionnaire. In order to establish the statistical significance of the independent variables on the dependent variable (performance) regression analysis was employed. The study result indicates that costing practice is the most highly used management accounting practice followed by budgeting practice by Ethiopian cement companies. The rest management accounting practices (performance evaluation, information for decision making and strategic analysis) have been given less attention by respondent companies. The study results further indicate that the independent variables; Cost Management Practices, Budget Management Practices, Performance Evaluation Management Practice, Information for Decision Making Management Practice and Strategic Analysis Management Practice are significant in explaining the performance of Ethiopian cement companies. The study suggest that respondent companies should evaluate performance using non-financial measures of performance evaluation such as Non-financial measure(s) related to customers, Non-financial measure(s) related to operation and innovation and Non- financial measure(s) related to employees in addition to their financial measure of performance, the researcher also recommends that various information for decision making practice should be implemented and get serious attention. Strategic analysis management practice of respondent companies mainly focused on maximizing shareholder value & long range forecasting, however other strategic analysis tools should get room by respondent companies to better understand the dynamics of the market, maintain competitive advantage, and increase performance.

Key Word: Management Accounting Practice & Level of Usage, Performance of Ethiopian Cement Factories

Chapter One - Introduction

1.1 Background of the Study

Hilton (2011) stated that management accounting is the process of identifying, measuring, analyzing, interpreting and communicating information in pursuit of organization's goals. Management accounting is integral part of management process. He also stated that management accountants are important strategic partners in an organization's domestic and international management teams. Usually, the larger the organization is, the greater is management's need for information.

The availability of financial and non-financial information provided by MAPs permits firms to effectively face competition in the market, coping with change, surviving and thereby improves performance (Mia and Clarke, 1999; Reid and Smith, 2002). Although good MAPs may not by themselves guarantee success, an absence of them or poorly implemented practices may significantly reduce the firm's competitive advantages (Folk et al., 2002).

According to a study conducted by FDRE Ministry of Industry, "Ethiopian Cement Industry Development Strategy 2015-2025" some cement companies have started to struggle for survival due to substantially low capacity utilization compared to global standards and emphasized that the industry may face potential challenges for the country unless the industry is strategically managed.

Much has been written about firms in developing countries and in particular about their failure rates (Watson and Everett, 1996). Richard (2000) stated that there are many reasons for the failure rate of companies in developing countries, including lack of adequate working capital, poor market selection, and rapidly changing external market conditions. However, the most significant reason for this high failure rate is the inability of these firms to make adequate use of essential business and management practices. Many firms fail to develop an initial plan, and those that do establish a plan fail to continually adjust and use it as a benchmarking tool.

The primary objective of this study is to assess and highlight the management accounting practices in Ethiopian Cement Manufacturing firms and its effect on financial performance. The

study aims to contribute in attaining the cement industry development strategy and to enhance its growth as well, thus the study also encourage other researchers interested on the subject matter and serve as a base for other researchers.

1.2 Statement of the Problem

In current era of business environment there is a lot of competition in business and corporate world in developed as well as developing countries. The owners of corporations want to go not only up to the mark but also to achieve higher position in the market of their corporations in every aspect of the business (Sleihat et al., 2012). In today's competitive business environment organizations seek to have an upper hand over their competitors, foreign investments are becoming welcomed specially in African market and are growing drastically over time and organizations need to compete with the wide open market avail for foreign investors. This type of competition is an opportunity for organizations that foresee what global market to become in near future and become ready to compete, while it is a threat to those organizations that circled their environment only for the domestic competitors and couldn't image the bigger picture of their future competition environment look like. One way of competing with such type of competitive environment is by making informed business decisions timely, effectively and also efficiently.

Management accounting is a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization's strategy. 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).

Current management accounting practices (MAPs) have incorporated financial and non-financial techniques that aim to provide crucial information at both operational and organizational level. The emergence of sophisticated MAPs such as balanced score card (BSC), activity based costing (ABC), target costing and strategic Management Accounting Practice is the results of growing

adaptation on modern management practices by today's organizations such as total quality management, supply chain management, Lean manufacturing and Just In time (JIT) (Ittner & Larcker, 1998; Abdel-Maksoud et al., 2005).

According to a study conducted by FDRE Ministry of Industry, "Ethiopian Cement Industry Development Strategy 2015-2025" some cement companies have started to struggle for survival due to substantially low capacity utilization compared to global standards and emphasized that the industry may face potential challenges for the country unless the industry is strategically managed, this study was used as a driver for the thesis as igniting factor..

Much has been written about firms in developing countries and in particular about their failure rates (Watson and Everett, 1996). Richard (2000) stated that there are many reasons for the failure rate of companies in developing countries, including lack of adequate working capital, poor market selection, and rapidly changing external market conditions. However, the most significant reason for this high failure rate is the inability of these firms to make adequate use of essential business and management practices. Many firms fail to develop an initial plan, and those that do establish a plan fail to continually adjust and use it as a benchmarking tool.

Another driver of this thesis is the scarcity of research into the use of management accounting information among firms in developing countries. Despite the increasing amount of research in management accounting in the past decade, little is known of its form and effectiveness within firms in developing countries (McChlery et al., 2004). This lack of research based knowledge may have been based on a belief that the discipline in management accounting is best served by studying the most innovative and successful examples of practice that can be found in the leading western and Japanese firms (Mitchell et al., 1998).

There is evidence that accounting study and practice have reasonable gap between them. It is also considerable that this gap is not on the basis of development of accounting as academic but due to the lack of research in accounting and specially management accounting (Inanga & Schneider, 2005).

As per the knowledge of the researcher & reviewed literature most of the existing research literature on accounting in Ethiopia manufacturing companies mainly focused on financial accounting, financial management, information technology adoption and credit accessibility for

manufacturing companies in contrary limited emphasis given to management accounting and its practice especially when it comes to relating management accounting practice with performance. There are very few researches made in Ethiopia on management accounting practice mainly focused on its effect on decision making (Mintesinot H, 2013; Tewodros T, 2009).

However this study comes up with the inclusion of various management accounting practices variables which are found to be significant to influence other similar studies. Therefore, to address the current gap in the literature, this study is designed to examine the effect of management accounting practice in Ethiopia cement companies.

1.3 Objectives of the Study

1.3.1. General Objective

The primary objective of this study is to assess and highlight the usage of management accounting practices and examines its effect on firm's performance in Ethiopian Cement Manufacturing companies. The study aims to contribute in attaining the cement industry development strategy and to enhance its growth as well, thus the study will also encourage other researchers interested on the subject matter and will also serve as a base for other researchers.

1.3.2 Specific Objective

1. To Assess the Management Accounting Practice of Ethiopian Cement companies
2. To Assess effect of Management Accounting Practice on Performance

1.4 Research Hypothesis

Several statements of supposition can be made in view of the effect of management accounting practice on firm's performance. In light of the above research objective, the study was done based on the following research hypothesizes which were derived from the specific objectives and tested throughout the analysis of the study:

The study was done based on the following research hypothesizes which were derived from the specific objectives and tested throughout the analysis of the study:

H1: Costing System has positive effect on Firms performance.

H2: Budgeting System has positive effect on Firms performance.

H3: Performance Evaluation System has positive effect on Firms performance.

H4: Information for Decision Making has positive effect on Firms performance.

H5: Strategic Analysis has positive effect on Firms performance.

1.5 Scope and Limitation of the Study

The topic of this study was delimited in assessing management Accounting Practice and its effect on performance of Ethiopian Cement Factories and made the analysis using primary source of data obtained from eleven cement companies that may be limited or may not be applicable for other sectors at all. Most of the independent variables used in this study have qualitative nature while the dependent variable (Performance) has both qualitative and quantitative nature, the nature of data type force the research to use primary data necessary to attain the objective of the research, even though performance could be measured using secondary data (financial performance) obtained from financial records of Ethiopian cement factories the researcher found it difficult to use both primary & secondary data in a single model. Using both types of data (Primary & secondary) would make the regression analysis to complex to estimate the equation & the result could be inconclusive, to resolve this issue the researcher used primary data to represent the effect of management accounting practice on financial performance of Ethiopian cement companies.

1.6 Significance of Study

The study is significant to support "Ethiopian Cement Industry Development Strategy 2015-2025" to attain its objective from the perspective of management accounting & to increase competitive advantage of Ethiopian cement companies to strengthen their need for management accounting information to benefit from it. The study will also benefit various other industries in Ethiopia as they will understand the methods and tools available for them.

The recommendations provided will help the companies to improve their management accounting 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.

1.7 Organization of the Study

This study is organized in five chapters, chapter one discussed the introduction part, chapter two contains conceptual and theoretical framework and detailed discussion of empirical studies on management accounting, chapter three discussed about the research methodology adopted in this study, chapter four discussed about the data analysis and interpretation of the research output, the final chapter (chapter five) presents summary of finding, conclusion, recommendation and farther research suggestions.

Chapter Two - Literature Review

This chapter presents definition of management accounting and its concepts, the history &development of management accounting, this chapter will also present various management accounting practices and performance & its determinants, and the chapter finally presents summery of literature relevant to the study.

2.1 Definition of Management Accounting

Scapens (1991) stated that, various definition are available; but some are too general to provide a suitable structure, while others simply emphasis a particular research approach. The evolution of management accounting will now be explored in terms of the changing definitions from three major accounting bodies: The Institute of Management Accountants (IMA); the Chartered Institute of Management Accounting (CIMA); and the International Federation of Accountants (IFAC).

The Institute of Management Accountants (IMA) has provided the initial definition of management accounting by IMA (IMA, 1981, p.1), defined 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 an organization and to assure appropriate use of and accountability for its resources. But more recently, the definition (IMA, 2008, p. 1) was "a profession that involves partnering in management decision making, devising planning and performance management systems, and providing expertise in financial reporting and control to assist management in the formulation and implementation of an organization's strategy".

The Chartered Institute of Management Accounting (CIMA) (2005) define management accounting is an integral part of management, which requires the identification, generation, presentation, interpretation and use of relevant information to inform strategic decisions and formulate business strategy, Plan long, medium and short term operations, Determine capital structure and fund that structure, Design reward strategies for executives and shareholders, Inform operational decisions, Control operations and ensure the efficient use of resources, Measure and report financial and non-financial performance to management and other

stakeholders, Safeguard tangible and intangible assets, Implement corporate governance procedures, risk management and internal controls. CIMA's definitions show that management accounting has moved closer to senior management concerns with a focus on efficiency, strategic planning and value creation.

International Federation of Accountants (IFAC) (IFAC, 1998, p. 86) viewed management accounting as an activity that is interwoven in the management processes of all organizations. Management accounting refers to that part of the management process which is focused on adding value to organizations by attaining the effective use of resources by people, in dynamic and competitive contexts.

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).

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.

2.2 History and Development of Management Accounting

Management accounting was first known as cost accounting. This origin was reflected in the earlier title for practitioners of cost or works accountants (Wilson and Chua, 1988). Accounting historians have long endorsed the view that cost accounting is a product of the industrial revolution Johnson (1981). For example Wilson and Chua (1993) claimed that cost accounting was practiced by the mechanized, multi process, cotton textile factories that appeared in England and United States around 1800. This point of view was consistent with Garner (1947) who pointed out that cost accounting had emerged only after eighteenth century as a result of the rise of the factory system in the industrial revolution. The traditional view contends that cost accounting arose due to the increased use of fixed capital prompted accountants during the

industrial revolution to graft cost accounting onto the double-entry system Johnson (1981). This widely held belief however was rejected by Johnson (1981) who argued that changes in the way textile mills and giant manufacturing firms' organized economic activity, not just changes in the temporal structure of their costs, prompted the industrial organizations to develop internal cost accounting procedures. Cost accounting is defined as the equivalent of 'direct costing' designed to provide financial information for management decision making and control Johnson (1981). Garner (1947) argued that the practices and theories of cost accounting origins can be traced to the fourteenth century. During this period there was a rapid growth of Italian, English, Flemish, and German commerce, and various industrial enterprises were engaged in the manufacture of woolen cloth, books, coins, and other products Garner (1947). Cost accounting at this time was concerned with those specialized aspects of general accounting which have to do with recording and analysis of factory expenditure Garner (1947). Later in the twentieth century, the term of cost accounting started to change into management accounting. Wilson and Chua (1988) claimed that the term 'management' or 'managerial accounting' only came into widespread use at the beginning of the 1960s. A useful distinction between the era of cost accounting and the era of management accounting was made by Horngren, (1975). In an exaggerated sense, the cost accountant's main mission might have been depicted as the pursuit of absolute truth, where truth was defined in terms of getting as accurate or precise costs as possible.

The factor that led from a costing to a managerial emphasis was the development of new corporate structures such as multidivisional organization, the conglomerate and the multinational enterprise Wilson & Chua (1988). These new structural forms placed fresh demands on an organization's accounting function. For instance, a means of evaluating divisional performance had to be devised. Similarly, prices had to be established for goods that were sold by one division to another within the same organization. These extra informational requirements led to a development of the subject beyond a narrow costing emphasis Wilson and Chua (1988).

The first known textbook in management accounting emerged in 1950 written by Vatter and titled managerial accounting Kelly & Pratt (1994). Vatter argued that management accounting has the purpose of supporting managers, not of reporting to owners Kelly and Pratt (1994). The changes from cost accounting to management accounting was also manifested when The Institute of Cost and Works Accountants changed the name of its journal from Cost Accounting to

Management Accounting in 1965 and its own name to the Institute of Cost and Management Accounting in 1972. In 1986 it received its royal charter and became The Chartered Institute of Management Accountants (CIMA) (Allot, 2000). In the United States the National Association of Cost Accountants changed its name to the National Association of Accountants in 1958 (Scapens, 1991, p. 9). This organization became the Institute of Management Accountants (IMA) in 1991. Overall it can be seen that after nineteenth century the focus changed from cost accounting to an emphasis on the provision of information that was appropriate to the needs of managers.

Johnson & Kaplan (1987) argued that the origins of modern management accounting can be traced to the emergence of managed, hierarchical enterprises in the early nineteenth century. (Scapens, R.W. 1991), explained that the industrial revolution in the early nineteenth century resulted in the emergence factory system that dramatically changed the productions process. This has created a new demand for accounting information for decision making. A lot of management accounting information is based on quantitative and qualitative data. This interest was initially prompted by a perceived gap between the theory and practice of management accounting, and specially the generally held belief that the traditional wisdom of management accounting textbooks is not widely used in practice.

In their acclaimed book Relevance cost Johnson and Kaplan (1987) traced the development of management accounting from its origins in the industrial revolution supporting process-type industries such as textile and steel conversion, transportation and distribution. These systems were concerned with evaluating the efficiency of internal processes, rather than measuring organizational profitability. Financial reports were produced using a separate transactions-based system that reported financial performance. Johnson and Kaplan (1987) argued that by 1925 ‘virtually all management accounting practices used today had been developed’. They also described how the early manufacturing firms attempted to improve performance via economies of scale by reducing unit cost through increasing the volume of output. This led to a concern with measuring the efficiency of the production process. Calculating the cost of different products was unnecessary because the product range was homogeneous. Over time, the product range expanded and businesses sought economies of scope through producing two or more products in a single facility. This led to the need for better information about how the mix of products could

improve total profits. However, after 1900 the production of accounting information was largely for external reporting to shareholders and not to assist managerial decision making.

2.3 Management Accounting Practice

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).

Hyvnen (2005) provided empirical evidence on management accounting practices in Finnish manufacturing companies. The study recorded the extent of adoption of the management accounting practices, the perceived benefits from their use and ascertained intentions for future developments in these practices. The results indicated that financial measures like product profitability analysis and budgeting for controlling costs will continue to be important in the future, but noted that greater emphasis will be placed on newer non-financial practices like customer satisfaction surveys and employee attitude surveys in the future.

Wijewardena & De Zoysa (1999) In their study on management accounting practices in large manufacturing firms in Australia and Japan. The results of the survey found a number of important differences between the two countries. The most striking difference was that while management accounting practices in Australian companies placed an emphasis on cost control tools such as budgeting, standard costing and variance analysis at the manufacturing stage, those of Japanese companies devoted much greater attention to cost planning and cost reduction tools based on target costing at the product planning and design stage. Further, the Japanese

companies seem to have introduced more frequent changes to management accounting practices than their Australian counterparts.

2.4 Types of Management Accounting Practice

Management accounting practices can include budgeting, performance evaluation, information for decision-making; and strategic analyses are some of the methods used among many others (Ittner &Larcker 2001).

2.4.1 Cost management Practice

It is the process of planning and controlling the budget of a business. Cost management is a form of management accounting that allows a business to predict impending expenditure to help reduce the chance of going over budget.

According to Harris & Durden (2012) there are main two types of costing. One is activity base costing (ABC) and the second is inter organizational cost management. Due to the rapid change in the business environments the use of activity based costing, just in time, total quality management tools have been emerged in the organizations. In 1980, ABC concepts emerged in the businesses and in 1990 this concept was used as to control costs in an efficient way. But still ABC is not in rapid used by the organizations of the world (Abdel-Kader & Luther, 2008). Another concept of costing is the target costing and kaizen approaches which are the renowned nowadays. These techniques are used to reduce the costs of the product during processes and product design and their results are the continuous improvements in the firms. Due to this production costs, budgeting planning etc are more effective for the organization Monden (1993). According to Abdel-Kader and Luther (2008) the main tools for costing system include Fixed and variable costs, overhead rates on the basis of plant and department, learning curve, cost of quality, target costing & activity based costing.

Several studies have been supported that target costing and activity base costing are the two main techniques for organizations to create benefits for the firms as a whole. Through these practices decision making for management becomes easy and more accurate in an organization (Islam and Kantor, 2005; Sleihat, et al., 2012)

2.4.2 Budgeting Practice

Budgeting is the very important tool for controlling and forecasting all the activities of the organization. Budgeting includes the rational allocations of organizational resources for achieving the organizational goals and overall objectives. There are a lot of budgeting techniques such as activity based budgeting and activity based costing Drury, et al. (1993). The primary objective of budget is to collect all the costs for example material, labor etc within the organization. Activity based budgeting gives us a true and precise picture of the costs allocations in the organization. Budgeting process contains the different sort of budgets like master budget, cash budget etc. Cash budget includes the receipts and payments of cash and opening and ending cash position of the organization, whereas the master budget includes the entire summary of firm's activities. In the wide range of budgeting, the following practices are belonging from budgeting: Planning purposes budgeting, budgeting for controlling cost, strategic planning, Flexible budgeting, Activity based budgeting (ABB) & Zero based budgeting. Budgeting information is not for everyone because it is an internal document for the company. It may be utilized by the managers of the firms as well as the subordinates of the managers within the organization.

Drury et al. (1993) has defined budgeting as an important tool for forecasting and controlling the activities within an organization and for allocating the entity's resources so as to achieve its objectives and goals. Drury et al. (1993) have also highlighted that there are different forms of budgeting such as activity-based budgeting (ABB) and activity-based costing (ABC). Horngren et al. (2009, p.170) explained activity based costing (ABC) as a method best suited for improving a cost system. ABC is used to identify the cost of a product or service within the activity. Williams et al. (2010, p. 779) defines ABC as "an overhead allocation method that uses multiple overhead rates to track indirect costs by the activities that consume those costs." ABC is perceived to be a better method for costing a product or service based on the use of resources required to produce the product or service. Activity-based budgeting (ABB) has been defined by Ayvaz & Pehlivanli (2011, p. 150) as "the budgeting of sources according to target activities." The application of this type of budgeting system is easy to use, as it focuses on the activities within the process rather than cost objects.

Its primary purpose is to collect all costs within the process which includes materials, setup time, number of hours worked and manufacturing overhead that is to be included in the budget. The comparative advantage of ABB over ABC is that ABB is perceived to be more comprehensive and precise, since it gives a full breakdown of the costs to be expected. The budgeting process is further made up of a number of different budgets such as the master budget and cash budget. The cash budget consists of cash receipts and payments and shows the beginning and ending cash position at the end of the budgeted period. The master budget is a summarized budget that sets specific goals to be achieved and includes the activities of the sales or distribution departments and other divisions in the organization. The majority of companies highly favored the use of budgeting on a regular basis for long-term strategic planning and controlling of costs. Overall, Drury et al. (1993) concluded that surveys have shown that most companies preferred to use ABB over ABC costing systems. However, to support their views, they summed it up by saying most companies were using ABC as a supplementary method to the budgets which are prepared under ABB.

2.4.3 Performance Evaluation

Many of the studied have been shown about the adoption of performance evaluation measures by the companies in the world. It includes financial as well as non-financial measures but mostly financial measures have been used in the companies. The following are the major practices of performance evaluation adopted by the companies in the world. Financial measures, Non-financial measures that are related to the operation and innovation, Non-financial measures that are related to customers, Benchmark of performance evaluation & Non-financial measures about employees.

Ittner & Larcker (1998) stated that, in today's business environment, manufacturing organizations are constantly encountering challenges, namely that of performance evaluation. Ittner et al (1997) further criticized systems which focused entirely on financial components such as maximizing profits and return on capital investment projects. They have also argued that the preparation of financial accounting information has been manipulated due to external reporting conventions. These conventions do not take into account the cost of raising capital and labor turnover. These shortcomings in performance evaluation have caused organizations to create the Economic Valued Added (EVA) mechanism. The "Economic Valued Added" mechanism is

defined by Ittner &Larcker (1998), as looking at the true value that has been added to the company and its cost of capital (for example, stakeholders‟ investment). It takes a different look at the net operating profit after taxes from also an economic perspective rather than only an accounting one. Chen and Dodd (1997, p.318) stated that "EVA is the difference between a company's net operating income after taxes and its cost of capital of both equity and debt." The EVA method has not gained much recognition among organizations, but may be considered a useful tool for measuring performance evaluation in the future. A major shortcoming results from determining the weighted average cost of capital which can sometimes be problematic. Kaplan & Norton (1992) proposed the balance scorecard as a tool for measuring performance and managing the financial and non-financial aspects of the company. The main purpose of the scorecard is for the collection of information to provide feedback to management for the purposes of strategic planning. When this type of management system is implemented, it allows the organization to stay focused on the company's objectives and goals.

Four different perspectives were also recognized for measuring performance: learning and development, customer-related, financial and internal business perspectives. Learning and development perspectives focus primarily on the training of employees, as it realizes that an organization's greatest resource is its employees. The customer-related aspect is emphasized by realizing the importance of customer satisfaction within any organization. If customers are not satisfied with the level of service delivered, they will seek an alternative provider of the service. The financial perspective focuses on measurable criteria such as profitability, sales growth and net income in order to make sound decisions. The final process is the internal business perspective which looks at the internal functions such as the standardization of products and services being delivered to the customer and also if the organization is being managed effectively. This process is useful for addressing any inefficiency which may occur, since it compares performance and also establishes the appropriate methods to be used to improve performance.

2.4.4 Information for Decision Making

Generally, there is a perception about management accounting that its information provides the managers for effective decision making. There are a lot of different tools for decision making in which product profitability analysis, cost volume profit etc. Cost volume profit includes the

potential change in the revenues, costs and prices of the company Horngren, et al. (2009). Decision making practices include Profitability analysis about the product, Break even analysis or cost volume profit analysis, Cash flows, Time value of money and payback period, Profitability analysis about the customer, Probability analysis, & non-financial decision making.

The use of cost volume profit analysis is wide in range by the manufacturing companies. Management accounting provides useful information for the firms to make decisions in which cost volume profit, payback period and accounting rate of return are mostly used. But the cost of capital normally is not widely used LeBurto, et al. (1997). One of the key objectives of management accounting is to provide information for decision making within the organization. The firms may take regular decisions or short term decision making according to the relevant information of management accounting tools such as break even analysis, profitability analysis of product, profitability analysis about customers and control over stock etc. The companies take strategic decision or long term decision making by the following the tools of management accounting which are return on payback period, discounting of cash flows and probability analysis can be used by the companies Abdel-Kader and Luther (2006).

There is a general perception that management accounting provides relevant information for making decisions, both internally and externally and on a long term or short term basis. There are many different tools for making short term decisions such as cost volume profit (CVP) analysis, and customer profitability analysis. Horngren et al. (2009, p.87) defined cost volume profit analysis as a method or tool for measuring potential changes in the company's revenues, costs and prices. CVP analysis is used in manufacturing companies to determine how many units of a particular product must be sold in order to break even. The application of this principle is relatively straight forward with the unit selling price being subtracted from the variable cost per unit to arrive at the contribution margin. The total fixed cost is then divided by the contribution margin in order to arrive at the number of break-even units required. Therefore, this allows managers to see the behavior of the cost prior to making a solid commitment or final decision on a specific order. CVP analysis may also be used by managers when considering if a product should be bought or made. LeBruto et al. (1997) stressed that cost volume profit analysis appears to be a practice that is strongly used by manufacturing companies in the food business. Management accounting can also produce useful information to make financial management

decisions such as payback periods, accounting rate of return and discounted cash flow methods. Most companies used the popular way of measuring return on investment by using the accounting rate of return to calculate the cash flows on major capital projects. However, the use of discounted cash flows and internal rate of return techniques to calculate the cost of capital seems not to be a regular management accounting practice used by businesses.

2.4.5 Strategic Analysis

Roslender & Hart (2003) defined strategic management accounting as the external approach which focuses on the effect of the competitors‟ decisions and cost structures on the future process of the business. Tomkins & Carr (1996) realized that this aspect of strategic management accounting does not carry any sound theoretical structure. This view has been shared by many other academics because they argued that the primary focus is internally rather than externally and as a result, the external environment is constantly overlooked. Organizations in manufacturing, for example perhaps those in the food industry, seem to place more emphasis on long term planning. This also suggests that there is a high occurrence in the usage of management accounting practices among companies in the production of food.

2.5 Performance Measurements

The goal of every manufacturing business is to be as efficient, innovative and flexible as possible. An effective manufacturing operation can offer its customer's wider range of services and products, thinks about its employee's wellbeing, has healthy financial indicators and is able to adapt to the changing environment. Different manufacturing companies have different objectives and targets. No matter what they are, to understand whether the company is moving in the right direction it crucial to be able to track all of the changes happening.

Performance indicators help an organization to reach its strategic and tactical goals in the long and short run. The use of performance indicators helps organizations to better understand the current situation and help evaluate the effectiveness of strategy implementation depending on the current circumstances at any given time. Another thing to keep in mind is that effective indicators must be both measurable and actionable – there should be a clear understanding what is measured, how it is done and what actions can lead to the improvement of the indicator in the future.

Performance of an organization can be measured with various types of indicators; these indicators could be categorized under financial or non-financial performance measures, some of the performance indicators discussed below.

2.5.1 Non-Financial Performance

Customer satisfaction

Morgan & Rego (2006); Fornell et al (2006) define customer satisfaction as a measure of a firms customer base in terms of size, quality and loyalty. Customer loyalty and product repurchase are as a result of customer satisfaction (Eckert, 2007). Among the several ways that an organization can employ to service its customers are through information management and customer collaboration (Langly and Halcomb, 1992) Satisfaction according to Eckert (2005) refers to the quality of the products, services, price performance ratios as well as when a company meets and exceeds the requirements of the customer.

On-time delivery

According to Wallin (2006), customers are more satisfied if the time taken to deliver their products is less than the time they are willing to wait once they have placed an order. Flexibility is paramount in meeting the delivery deadlines (Gunasekara, 2001) and therefore information sharing is required to enable the members of the supply chain to meet specified delivery dates by the customers (Ellram, 1999). A study carried out by Yin-mei (2013) shows that effective customer delivery influences customer satisfaction and service quality. Customers are said to be more satisfied if their suppliers are able to meet and fulfill their orders within the required time (widing, 2003).

Inventory management

The main aim of inventory management is to ensure that organizations hold inventories at the lowest cost possible while at the same time achieving the objective of ensuring that the company has adequate and uninterrupted supplies to enhance continuity of operations (Mpwanya, 2005). A study carried out by Bhausaheb & Routroy, (2010) shows that companies are keen in managing their inventory so as to reduce costs, improve the quality of service, enhance product availability and ultimately ensure customer satisfaction. Results of a study carried out by Rosenfield &

Simchi-levi (2010) shows that inventory management has a huge financial implication on both the customer satisfaction and financial performance of an enterprise.

2.5.2 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).

There are many different ways to measure financial Performance, 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).

2.6 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 firms 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.

2.7 Empirical Evidence

Oyerogbaet al. (2014) on their study Cost management Practices and Firm's Performance of manufacturing organizations. The study investigates the relationship that exists between cost management practices and firm's performance in the manufacturing organizations using data from 40 manufacturing companies' four hypothesis was formulated for the study. The study relied on secondary data extracted from the audited financial statement. Direct Material cost, direct labor cost, production overhead cost and administrative overhead cost were taken as independent variable while profitability (Operating profit) was taken as dependent variable representing the firm's performance. The study concluded that a positive significant relationship exists between cost Management practice and firm's performance in the manufacturing organizations.

Ashok Kumar (2013) studied Relationship between Inventory management & Profitability on Indian cement companies. The study examined the relationship between inventory management practice of Indian cement companies & its impact on working capital efficiency. The study used gross operating profit as a proxy to measure profitability & inventory conversion period is used as independent variable while size of the firm, financial debt ratio & current ratio used as control variables. Data extracted from sample of five top Indian cement companies for a period of ten years from 2001 – 2010 were used. The study employed regression analysis to determine the impact of inventory conversion period over gross operating profit. The study concluded that inventory conversion period has an inverse relationship with firm's profitability.

Lyndon & Paymoster (2016) in their study effect of inventory cost management on profitability A study of listed brewery companies in Nigeria, examined the effect of inventory cost management proxy by raw material cost, work in progress & Finished goods cost against profitability proxy by gross profit margin using secondary data extracted from annual reports and accounts of selected brewery companies from Nigeria stock exchange for 10 years period covering from 2005 – 2014. Multiple regression technique were used for the study and concluded that inventory cost management has positive significant influence on the profitability of brewery companies in Nigeria.

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.

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.

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.

Kamilah A. (2017) in her study implementation of management accounting practice & its relationship with performance in SME enterprises, examines the extent of usage of management accounting practice among SMEs in developing country and to find if there are any significant relationships between management accounting practice and performance using survey 160 usable questionnaire mailed to accountant or financial executives the study develops two main variables to explore the relationship between management accounting practice and performance, management accounting practice usage was obtained using 5-point Likert scale from 1: Never to 5: Very frequently and management accounting practice performance measures was obtained using perceptual measure of performance in order to gauge data on performance. The results indicate that the uptake for basic management accounting practice was higher (costing, budgeting, and performance measurement system) than for more sophisticated practices (decision and support system and strategic management accounting) Despite the revolution in management accounting practice, research has shown that basic or traditional MAPs are still dominant in most today's firms. The study further concluded that there are significance associations between on management accounting practice adopters (costing system, budgeting system, Performance measurement system and strategic management accounting) and performance & provides support for a claim that management accounting practice plays significant roles in enhancing firm performance.

The effectiveness of management accounting practice in assisting firms achieving their goal has become important research topic. As management accounting practice are presumed to provide relevant information for today's organization, the investigation of the empirical evidences on management accounting practice effectiveness in enhancing business performance should be

carried out. There are substantive efforts have been done in measuring the effects or the relationship of management accounting practice and performance. The prior studies examined individual management accounting practice area and performance based on financial or subjective criteria. An earlier study can be seen in Merchant (1981) who explored a connection between budgeting practices and the relationship with performance. Specifically this study focused on the method of the firm to budgeting based on formal administrative approach and the interpersonal approach and their relationships with organizational performance. The results demonstrated that the administrative approach to budgeting has a strong relationship with a better performance in large firms. Within smaller firms, a more interpersonal approach to budgeting is more associated with organizational performance. Next, Reid and Smith (2000) in a study of UK SMEs found that the impact of the MAS was greatest in those firms which are struggling to survive, where it can be used to monitor finances daily and can help to identify trends in key variables. The respondents tend to place less importance on the provision of management accounting information when their financial performance is adequate. Argile's and Slof (2003) provided empirical evidence on the relationship between the use of financial reports and financial performance based on a sample of Catalan farmers. The study found that the financial performance of respondents using the reports for decision-making purposes was significantly better than those who did not use the reports (Kraus et al. 2006), who examined strategic planning and performance in Austrian smaller enterprises, found that planning formalization has a positive and highly significant impact on the probability of belonging to a group of growth firms, whereas other aspects of strategic planning (time horizon, strategic instruments, and control) did not contribute to performance. Next, Hansen and Van Der Stede (2003) examined the reasons for budgeting in organizations and the link with performance. The study concluded that three reasons-to-budget (operational planning, performance evaluation, and strategy formation) have positive associations with organizational unit performance. Chand and Dahiya (2010) who explored management accounting practice in Indian small and medium hospitality enterprises Suggested that management accounting techniques have a great impact on different firm's aspects especially on cost reduction and quality improvement.

2.8 Summary& Research Gap

As shown in the above empirical literature review researches were conducted by many researchers on the effect of management accounting practice on performance. Fewer studies have been conducted in the area of management accounting practice in developing countries especially in Ethiopia.

There are substantive efforts have been done in measuring the effects or the relationship of management accounting practice and performance. The prior studies examined individual management accounting practice area (such as costing system, budgeting system and performance evaluation) based on financial or subjective criteria.

Despite the growing adaptation and importance of management accounting practices, the effect of management accounting practice on performance is still misunderstood for two main reasons, there is inadequate understanding of the management accounting practice available for them to better influence their performance, secondly their information need is best served by current practice that put in place.

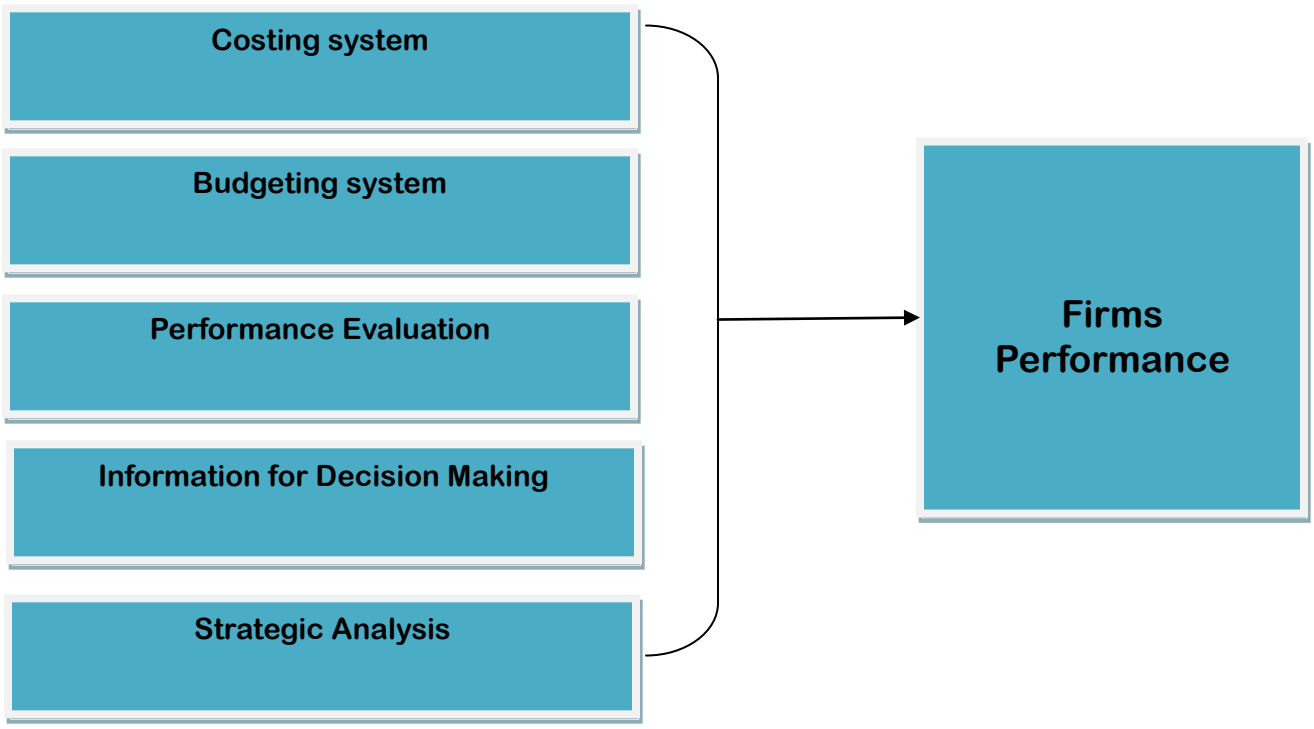
as far as the knowledge of the researcher is concerned, there are very few researches made in Ethiopia on management accounting practice focused mainly on its effect on decision making such as (Mintesinot H, 2013; Tewodros T, 2009).

Furthermore, previous studies conducted on the topic of effect of management accounting practice on performance in other countries identified some other variables in their finding. In corroborating the evidence with a Kenyan study regarding effect of management accounting practice on financial performance by PM Gichiga (2014)

2.9 Conceptual Framework

From the theoretical and empirical literature reviews, the following conceptual framework of the study is developed by the researcher. A conceptual framework for the present study shows the relationship of Management accounting practice implementation and performance and has been depicted in Figure below. The figure conceptualizes that Management accounting practice implementation (Costing system, Budgeting System, Performance Evaluation, Information for decision making & Strategic analysis) influence on performance of Ethiopian cement companies.

Figure 2.1 the conceptual framework or model of the study



Chapter Three - Research Design and Methodology

In the previous chapter, the literature review, which shows the theoretical part of Management Accounting Practice and determinants of performance of Manufacturing firms and review various literature relevant for the study. The purpose of this chapter is to discuss the methods adopted throughout the study to accomplish the research objectives.

In order to assess Management Accounting Practice and its effects on Performance, this study used specific research methodology that show the logical frame work that discusses research purpose, research approaches, Research strategy, data collection and data analysis method. For the purpose of understanding all the content of this chapter, it is arranged as follows. Section 3.1 shows an overview of the research methodology, the research purpose is presented in section 3.2 and followed by research approach in section 3.3, the research design and population & sample size are shown in section 3.4 and section 3.5 respectively. Finally the last section, section 3.6 presents the type of data used for study.

3.1. Overview of the Methodology

Many researchers have written extensively on research methodology. The underlying factor in most studies on research methodology is that the selection of methodology is based on the research problem and stated research questions. Methodologies cannot be true or false, only more or less useful (Silverman, 2001). (Nachamias et al. 1996) for instance states that methodologies are considered to be systems of explicit rules and produced, upon which research is based, and against which claims for knowledge are evaluated. Conducting any type of research should be governed by a well-defined research methodology based on scientific principles. (Eldabi, 2002) suggested that a series of steps as a research paradigm to be followed in a methodology part of a research. Based on this suggestion researcher follows the basic framework of research paradigm developed by Foster.

There are three types of academic researches depending on the problem area and the nature of the phenomenon that it studies. The purpose of the research can be Exploratory which deals with unknown problem, Descriptive in which there is an awareness of the problem and Explanatory, where the problem is clearly defined (Ahmed 2011).

The type of research employed under this study was Explanatory research. Cooper et al. (2003) discussed that explanatory studies unlike descriptive studies, go beyond observing and describing the condition and tries to explain the reasons of the phenomenon. Thus, explanatory research design was used in this research. The justification for this method is that it assists the researcher to explain the effect of management accounting practice on performance of Ethiopian cement companies. The other advantage is that it goes beyond the description of the situation in the industry about management accounting practice.

3.2 Research Approach

As noted in Creswell (2003, p.13) in terms of investigative study there are three common approaches to business and social research namely, quantitative, qualitative and mixed methods approach. Quantitative research is a means for testing objective theories by examining the relationship among variables (Creswell, 2009). On the other hand, qualitative research approach is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem with intent of developing a theory or pattern inductively (Creswell, 2009). Finally, mixed methods approach is an approach in which the researchers emphasize the research problem and use all approaches available to understand the problem (Creswell, 2003).

Hence, based on the above discussions of the three research approaches and by considering the research problem and objective, in this study, the quantitative method is primarily used. However, to have a better insight and gain a richer understanding about the research problem, the quantitative method is supplemented by the qualitative method of inquiry. That is, to get the benefits of a mixed methods approach, as presented below, and to mitigate the bias in adopting only either quantitative or qualitative approach, the current research combines both quantitative and qualitative research approaches.

Mixed research approach or pragmatist world view is not committed to any one system of philosophy and reality. In this approach, inquirers draw liberally from both quantitative and qualitative assumptions.

In order to achieve the objective of this study and answer the research questions researcher adopts mixed research approach to assess the effect of management accounting practice on performance in Ethiopian Cement manufacturing firms to converge across qualitative and

quantitative methods. Employing this approach is used to neutralize or cancel the biases of applying any of a single approach and a means to offset the weaknesses inherent in a single method with the strengths of the other method (Creswell 2003). Mixed research approach opens door to multiple methods of data collection and helps to generate the findings to a population and develop a detailed view of the meaning of a phenomenon or concept for individuals (Creswell, 2003; pp. 12-22). This research approach pose the researcher to the challenges that need for extensive data collection, the time-intensive nature of analyzing both text and numeric data, and the requirement for the researcher to be familiar with both quantitative and qualitative forms of research (Creswell, 2003; pp. 210).

As noted in Greene et al. (1989, p. 259 cited in Yesegat 2009, pp.75-76) adopting a mixed methods approach has a number of benefits. The first benefit is triangulation pertaining to a situation where researchers seek convergence, corroboration, correspondence of results from quantitative and qualitative methods to increase validity of constructs and inquiry results. Secondly, by mixing methods complementarily, researchers seek elaboration, enhancement, illustration, clarification of the results from one method with the results from the other method. Thirdly, by mixing methods with developmental intent, researchers seek to use the results from one method to help develop or inform the other method.

3.3 Research Design

It is possible to identify some situations in which all research strategies might be relevant and other situations in which two strategies might be considered equally attractive. We can also use more than one strategy in any given study. To this extent, the various strategies are not mutually exclusive. But we can also identify some situations in which a specific strategy has a distinct advantage. There are five strategies to collect data and get results: experiment, survey, archival analysis, history and case study. In addition, there are three criteria to determine the research strategy: types of research questions, control over behavioral events, and focus on present events. But it is important to notice that boundaries among the above methods are not completely clear, they may overlap each other. (Yin, 1989; p. 20).

The methodology will employ in obtaining information about Management Accounting Practice of Ethiopian Cement Factories via a survey conducted on general population of Ethiopian Cement Factories. The survey questionnaire will be designed and distributed to target respondents using purposive sampling. Targeted respondents are the Management Accountants, General Managers & Department Managers that are involved in decision making and that require Management Accounting information. In order for the research to produce a realistic outcome, the collection of data will be distributed over a large population.

3.4 Population & Sample Size

This section describes the population & sampling determination of the research selected relevant for the study to get meaningful outcome and to insure its representativeness & reliability of information obtained throughout the research.

The study was conducted on Ethiopian cement industry in which a total of eighteen cement companies are operating at the moment. For the research purpose out of eighteen cement companies operating in Ethiopia, the researcher selected only eleven cement companies because the market share, production capacity and data availability of the selected companies are very high relatively with the excluded cement companies due to the high market share and production capacity the researcher believe that the selected cement companies represent the total population. Therefore out of eighteen cement companies working in Ethiopia following eleven cement companies drawn for this research purpose. These are; Mugger cement enterprise, Messebo cement factory, National cement Share Company, Abyssinia cement plc, East cement Share Company, Huanshang cement factory, Red fox cement factory, Holleta cement factory, DerbaMidroc cement Plc, Dangote industry Ethiopia & Habesha Cement

The researcher employed purposive sampling method to draw the sample from the selected eleven cement companies and meet the study objective. Therefore, it is reasonable to make generalization from sample to population and meet the study objective. Due to this fact, the researcher selected various staff members Management Accountants, General Managers & Department Managers that are involved in preparation of management accounting information and that require Management Accounting information for decision making.

3.5 Type of Data

Primary source of data collection method were used in the study necessary to attain target of the study, it was adopted from different studies conducted on the same area(Abdel-Kader, 2008)(Khurram Ashfaq, 2014)(Weekes-Marshall, 2011). Questioners were used as a major data collection instrument which was collected using purposive sampling from selected respondent that are employees of Ethiopian cement factories. In order to make the study fruitful various books, government issued documents, reports & websites were reviewed.

For this study the most appropriate type of sampling design was a non-probability purposive sampling method. Purposive sampling where the researcher selects the sample on his particular purpose for instance the researcher may choose people who represent diverse perspective and knowledge on the issue (Leedy and Ormrod,2005)

The survey questionnaires were distributed to target respondents. Targeted respondents were Management Accountants, General Managers & Department Managers that are involved in preparation of management accounting information and that require Management Accounting information for decision making, in order for the research to produce a realistic outcome.

3.6 Model Specification

This section covers the regression model used in the study. The model used for this study to determine the effect of Management Accounting Practice on Performance of Ethiopian Cement Factories presented as follows. The model is adopted from different studies conducted on the same area.(Kamilah. A, 2017)(PM. Gichaaga, 2014)

$Fp = \alpha + \beta CS + \beta BS + \beta PE + \beta IFDM + \beta SA + \varepsilon$

Where: FP = Firm Performance

CS = Costing System

BS = Budgeting System

PE = Performance Evaluation

IFDM = Information for Decision Making

SA = Strategic Analysis

α = constant or intercept; βCS, βBS, βPE, $\beta IFDM$ & βSA are regression coefficients

ε = Error Term

The values of variables Costing System (CS), Budgeting System (BS), Performance Evaluation (PE), Information for Decision Making (IFDM) and Strategic Analysis (SA) 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 mean score obtained from Firm Performance (FP).

In order to find out the relationship between management accounting practices and performance of Ethiopian Cement Factories, regression analysis was done where the management accounting practices were regressed against the firm's performance to find out which practices have significant influence on performance of Ethiopian Cement Factories. 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 variables. Significance was tested at 5% level.

3.7 Data Analysis Techniques

Data analysis is the process of resolving data into its components to disclose its characteristic elements and structure for accuracy (Mugenda, 2003). Data collected was analyzed using both quantitative and qualitative data analysis approaches. Data from questionnaire was coded and entered into the computer using statistical package for social science (SPSS) version 20. The study used ANOVA to test the level of significance of the variables on the dependent variable at 95% level of significance. Regression analysis is a quantitative research method used when the study involves modeling and analyzing several variables, where the relationship includes a dependent variable and one or more independent variables to provide meaningful and accurate conclusions of the phenomenon under study (David, 2005). The study used regression analysis, as it was able to relate dependent variable with multiple variables as stated under model specification.

The methodology part of this study was based on the research paradigm developed by (Foster 1998) as: Research purpose, research approach, Research strategy and specific research methods employed. The purpose of the study was to assess and describe the effect of management accounting Practice on performance of Ethiopian Cement manufacturing industry. The research

approach employed in this study was both quantitative as well as qualitative (mixed) approach. Descriptive & Inferential statistical methods were employed in the study for analysis.

In the case of research method used in this study, data was collected by using questionnaire. All the data's were organized and analyzed to address each objectives of the study. Finally data collected from various sources were analyzed by using statistical package for social science (SPSS) version 20.

Chapter Four–Data Analysis & Interpretation

This chapter presents the results and analysis of data involved in this study. Accordingly, the descriptive statistics of all the variables used in this study and the results of hypothesis testing i.e. the estimated parameters of the regression equation, the connection between the independent variables and dependent variable regarding the assessment of effect of management accounting practice on financial performance of Ethiopian Cement Manufacturing Industries are presented and discussed in detail.

4.1 Descriptive statistics

In order to analyze the research results, Statistical Package for Social Science (SPSS) Version 20 software is used. SPSS is a computer program used for statistical analysis. SPSS fit with quantitative approach and survey strategy which were adopted in this research; SPSS has many features and properties which can provide appropriate results, these results lead to achieve research purposes. SPSS can provide several statistics for each element in the research questionnaire (DeCoster 2004). Descriptive measures of each questions response with management accountants & management accounting users (managers) selected for the study and their response results are presented in the following sections.

In order to assess and describe the nature of management accounting practice being implemented by Ethiopian cement companies necessary to answer the research question raised above on chapter one, the researcher collected response from targeted respondents that have knowledge & expertise towards the subject matter(Management Accountants, General Managers & Department Managers) that are involved in decision making and that require Management Accounting information using a pre-defined five point likert scale about their level of usage.

A total of 110 questionnaires were distributed to Management Accountants & Management Accounting Users (Managers) for each of the 11 cement factories selected for the study. Out of the total 110 questionnaires, 92 Useable questionnaires were obtained (83.64%) response rate.

Sample Size	110.00
Completed and Returned Questionnaires	92.00
Response Rate	83.64%

4.2 Reliability Test

Reliability and validity tests are important to ensure the accuracy and consistency of the variables. According to Hair et al. (2007) for a scale to be reliable the questions must be answered consistently by respondents in a manner that is highly correlated. If they do not, the scale would not be reliable. For the purpose of this research, reliability was assessed using Cronbach alpha coefficient because it has the most utility for multi-item scales at the interval level of measurement, requires only a single administration and provides a unique, quantitative estimate of the internal consistency of a scale (Cooper & Schindler, 2006). Cronbach's alpha ranges between 0 (denoting no internal reliability) and 1.0 (denoting perfect internal reliability (Bryman, 2007). The closer the coefficient is to 1.00, the more reliable the measurement (Mertens, 2010; Zikmund et al. 2010) view that Cronbach's alpha between 0.8 and above are considered to have very good reliability and those between 0.7 and 0.8 good; while those between 0.6 and 0.7 indicate fair and satisfactory reliability. In this study the Cronbach's Alpha value is 0.699 (between 0.7 and 0.8) the result indicate good reliability as shown below on Table 4.2

Table 4.1 Cronbach's Alpha value Summery

S.N	Cronbach's Alpha value	Reliability
1	0.8 and above	very good reliability
2	Between 0.7 and 0.8	Good reliability
3	Between 0.6 and 0.7	fair and satisfactory reliability
4	Less than 0.6	Weak reliability

Table 4.2 Reliability Test

Reliability Statistics

Cronbach's Alpha	N of Items
0.699	6

4.3 Demographic Information of the Respondents

The study participants on survey questionnaire have different personal information; besides these differences they introduce different responses towards Management Accounting Practice, and its effect on firm Performance. The following discussion shows these differences. The demographic profile of respondents, regarding their gender, age category, educational background & work experience of respondents participated in this study presented below in table 4.3 as follows.

Table 4.3 Demographic profile of respondents

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Female	31	33.70	33.70	33.70
Male	61	66.30	66.30	100.00
Total	92	100	100	
Age	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
18-35	34	36.96	36.96	36.96
36-55	48	52.17	52.17	89.13
Above55	10	10.87	10.87	100.00
Total	92	100	100	
Education Background	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
First Degree	77	83.70	83.70	83.70
Masters	15	16.30	16.30	100.00
Total	92	100	100	
Work Experience	**Frequency**	**Percent**	**Valid Percent**	**Cumulative Percent**
1 - 5Year	7	7.61	7.61	7.61
6 - 10Year	57	61.96	61.96	69.57
11 & Above	28	30.43	30.43	100.00
Total	92	100	100	

Highest percentage of response was obtained from male respondents that account 66.3% of total response, among the age group of respondents 52.17% were found between age group of 36 -55 representing Mid-Aged group, regarding educational background of respondents 83.70% of respondents were first degree holders and 61.96% of respondents have 6 -10 years of work experience.

4.4 Usage of Management Accounting Practices

Response obtained from target respondents about usage of Costing system, Budgeting System, Performance Evaluation, Information for Decision Making, and Strategic Analysis management accounting practice in Ethiopian cement companies based on A five point pre-defined Likert scale ranking ranged from 1 (never) to 5 (very often)presented below.

4.4.1 Usage of Cost Management Practice

To identify the cost management Practice being used on their company respondents were asked to indicate their level of usage with a five point likert scale from 1 (never) to 5 (very often). A mean of above 3 is regarded to measure satisfaction on the test variables. The result is shown on Table 4.4 below.

Table 4.4 Usage of Cost Management Practice on Respondents Company

Cost Management Practices	N	Mean	Std. Deviation
How often your company use separation of variable cost, incremental costs & fixed costs?	92	4.9565	.20505
How often your company use multiple plant-wide overhead rates?	92	4.9457	.22794
How often your company use Activity- based costing (ABC)?	92	4.2065	.80572
How often your company use Target costing?	92	3.6957	.60654
How often your company use cost of quality?	92	1.8587	1.02262
Overall Mean		3.9326	

The finding indicate that 99.13% of cement companies often use separation of variable cost, incremental costs & fixed costs with a mean value of 4.96, 98.91% of cement companies often use multiple plant-wide overhead rates with a mean value of 4.95, 84.13% of cement companies often use Activity based Costing system with a mean value of 4.21, 73.91% of cement

companies often use Target Costing system with a mean value of 3.70, From the overall mean of 3.93, Cost Management Practices were rated as highly used by Ethiopian cement companies.

4.4.2 Usage of Budget Management Practice

To identify the Budget management practice being used on their company respondents were asked to indicate their level of usage with a five point likert scale from 1 (never) to 5 (very often). A mean of above 3 is regarded to measure satisfaction on the test variables. The result is shown on Table 4.5 below.

Table 4.5 Usage of Budget Management Practice on Respondents Company

Budget Management Practices	N	Mean	Std. Deviation
Budgeting for planning	92	4.9022	.29871
Budgeting for controlling costs	92	4.2609	.44152
Master Budget	92	4.8804	.32623
Budgeting for long-term (Strategic) planning	92	4.1087	.50179
Activity based budgeting (ABB)	92	2.4674	1.35429
Flexible budgeting	92	2.8804	.32623
Continuous/rolling budget	92	2.3913	.69467
Overall Mean		3.6988	

The finding indicate that 98.04% of cement companies often use Budgeting for planning with a mean value of 4.90, 97.61% of cement companies often use Budgeting for controlling costs with a mean value of 4.88, 85.22% of cement companies often use Master Budget with a mean value of 4.26, 82.17% of cement companies often use Budgeting for long-term (Strategic) planning with a mean value of 4.11, From the overall mean of 3.70, Budget Management Practices were rated as highly used by Ethiopian cement companies.

4.4.3 Usage of Performance Evaluation Practice

To identify the Performance Evaluation management practice being used on their company respondents were asked to indicate their level of usage with a five point likert scale from 1

(never) to 5 (very often). A mean of above 3 is regarded to measure satisfaction on the test variables. The result is shown on Table 4.6 below.

Table 4.6 Usage of Performance Evaluation Management Practice on Respondents Company

Performance Evaluation Management Practice	N	Mean	Std. Deviation
Performance evaluation using operating income	92	4.5761	.59731
Performance evaluation using variance analysis	92	4.7391	.44152
Performance evaluation using sales growth	92	4.8152	.60998
Performance evaluation using non-financial measure(s) related to customers	92	1.3043	.60654
Performance evaluation using non-financial measure(s) related to operation and innovation	92	1.3478	.56325
Performance evaluation using non- financial measure(s) related to employees	92	1.7174	.73119
Performance evaluation using economic value added or residual income	92	1.9022	.29871
Overall Mean		2.9146	

The finding indicate that 96.30% of cement companies often evaluate performance using sales growth with a mean value of 4.82, 94.78% of cement companies often evaluate performance using Variance analysis with a mean value of 4.74, 91.52% of cement companies often evaluate performance using Operating income with a mean value of 4.58, From the overall mean of 2.91, Performance evaluation Management Practice were rated as Less Likely used by Ethiopian cement companies.

4.4.4 Usage of Information for Decision Making Practice

To identify the Budget management practice being used on their company respondents were asked to indicate their level of usage with a five point likert scale from 1 (never) to 5 (very often). A mean of above 3 is regarded to measure satisfaction on the test variables. The result is shown on Table 4.7 below.

Table 4.7 Usage of Information for Decision Making Management Practice on Respondents Company

Information for Decision Making Management Practice	N	Mean	Std. Deviation
Cost-volume-profit analysis (break-even analysis) for major products	92	3.2283	.83998
Product profitability analysis	92	2.0326	.97723
Stock control models	92	3.9457	.22794
Evaluation of major capital investment based on discounted cash flow method(s)	92	2.0000	.00000
Evaluation of major capital investments based on payback period and/ or accounting rate of return	92	2.0000	.00000
For the evaluation of major capital investments, non-financial aspects are documented and reported	92	2.0000	.00000
Evaluating the risk of major capital investment projects by using profitability analysis or computer simulation	92	3.7609	.47739
Performing sensitivity "what if" analysis when evaluating major capital investments projects	92	2.1739	.60417
Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation	92	1.9130	1.00167
Overall Mean		2.5616	

The finding indicate that 78.91% of cement companies often use stock control models with a mean value of 3.95, 75.22% of cement companies often use evaluating risk of major capital investment projects by using profitability analysis with a mean value of 3.76, 64.57% of cement companies often use Cost-volume-profit analysis with a mean value of 3.23, from the overall mean of 2.56, Information for Decision Making Management Practice were rated as Less Likely used by Ethiopian cement companies.

4.4.5 Usage of Strategic Analysis Management Practice

To identify the Budget management practice being used on their company respondents were asked to indicate their level of usage with a five point likert scale from 1 (never) to 5 (very often). A mean of above 3 is regarded to measure satisfaction on the test variables. The result is shown on Table 4.8 below.

Table 4.8 Usage of Strategic Analysis Management Practice on Respondents Company

Strategic Analysis Management Practice	N	Mean	Std. Deviation
Long-range forecasting	92	4.3478	.47889
Shareholder value	92	3.1413	.80631
Industry analysis	92	1.7500	.58601
Analysis of competitive position	92	1.4565	.83090
Value chain analysis	92	1.0652	.35717
Product life cycle analysis	92	1.9348	.43989
The possibilities of integration with suppliers‟ and/or customers‟ value chains	92	3.4239	.86740
Analysis of competitors‟ strengths and weaknesses	92	1.9239	.69904
Overall Mean		2.3804	

The finding indicate that 86.96% of cement companies often use Long-range forecasting with a mean value of 4.35, 68.48% of cement companies often use integration with suppliers and/or customers with a mean value of 3.42, 62.83% of cement companies often use Shareholder value with a mean value of 3.14, From the overall mean of 2.38, Strategic analysis Management practice were rated as less likely used by Ethiopian cement companies.

4.4.6 Management Practice usage summary

This section summarized the management accounting practice implemented in Ethiopian cement companies

Table 4.9 Management Practices usage summary

Summary of Management Practices	N	Mean	Rank
Cost Management Practices	92	3.9326	1
Budget Management Practices	92	3.6986	2
Performance Evaluation Management Practice	92	2.9146	
Information for Decision Making Management Practice	92	2.5634	
Strategic Analysis Management Practice	92	2.3830	
Overall Mean		3.0984	

The finding indicate that Cost Management Practices were highly used by Ethiopian cement companies with a mean value of 3.93 above the average mean of 3 is regarded to measure satisfaction on the test variables followed by Budget Management Practices with a mean value of 3.70, the rest management accounting practices (Performance Evaluation, Information for Decision Making and Strategic Analysis) were used below the average mean of 3 is deemed insufficient for the test variable.

4.4.7 Firm Performance

To identify the perception of respondents on effect of management practice being used on their company on firm performance respondents were asked to indicate to what extent they agree with the statement of variables stated with a five point likert scale from 1 (very low extent) to 5 (very large extent). A mean of above 3 is regarded to measure satisfaction on the test variables. The result is shown on Table 4.10 below.

Table 4.10 Management Practices usage summary

Firms Performance	N	Mean	Std. Deviation
Return on Asset, ROA (Net income /Total assets) has increased over the last five years as a result of application of management accounting practices.	92	4.6848	0.46715
Sales growth has increased over the last five years as a result of application of management accounting practices.	92	4.8696	0.33863
Profit Margin (Net Income/Net Sales) has increased over the last five years as a result of application of management accounting practices.	92	4.9130	0.28332
Management accounting practice provides important techniques that enhance our company competitive advantage	92	4.9130	0.31976
Management accounting function creates the cultural values necessary to achieve the organization strategic objectives.	92	4.1196	0.35834
To what extent do you agree management accounting practice influence your company operational performance?	92	3.6413	0.52585
		4.5236	

The finding, indicate that 98.26% of cement companies agree with the statement that Profit Margin (Net Income/Net Sales) has increased over the last five years as a result of application of management accounting practices & provides important techniques that enhance their company competitive advantage with a mean value of 4.91, 97.39% of cement companies agree with the statement that Sales Growth has increased over the last five years as a result of application of management accounting practices with a mean value of 4.87, 93.70% of cement companies agree with the statement that Return on Asset(Net income /Total assets) has increased over the last five years as a result of application of management accounting practices with a mean value of 4.68, 82.39% of cement companies agree with the statement that Management accounting function creates the cultural values necessary to achieve the organization strategic objectives with a mean value of 4.12, 72.83% of cement companies agree with the statement that management accounting practice influence their company operational performance with a mean value of 3.64, From the overall mean of 4.52.

4.5 Inferential Statistics

4.5.1 ANOVA Test

From the ANOVA statistics, the processed data had a significance level of 0% which shows that the data is ideal for making a conclusion on the population parameters as the value of significance (p-value) is less than 5%is an indication that there were significant difference between financial performance of Ethiopian Cement companies and Cost Management Practices, Budget Management Practices, Performance Evaluation Management Practice, Information for Decision Making Management Practice and Strategic Analysis Management Practice. The significance value was less than 0.05 indicating that the overall model was significant. This is shown in Table 4.11.

Table 4.11 ANOVA Test

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.564	5	0.512762	15.739	.000[b]
	Residual	2.802	86	0.03258		
	Total	5.366	91			

a. Dependent Variable: FP

b. Predictors: (Constant), SA, CS, BS, IFDM, PE

4.5.2 Model Summary

Adjusted R squared is coefficient of determination which tells us the variation in the dependent variable due to changes in the independent variable. From the findings in the table below the value of adjusted R squared was 0.447it's an indication that there was variation of 44.7% on the financial performance of Ethiopian Cement Companies due to changes in Cost Management Practices, Budget Management Practices, Performance Evaluation Management Practice, Information for Decision Making Management Practice and Strategic Analysis Management Practice at 95% confidence interval. This show that 44.7 % changes in financial performance of Ethiopian Cement Companies is explained by changes in Cost Management Practices, Budget Management Practices, Performance Evaluation Management Practice, Information for Decision Making Management Practice and Strategic Analysis Management Practice.

Table 4.12 Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691[a]	0.478	0.447	0.1805

a. Predictors: (Constant), SA, CS, BS, IFDM, PE

b. Dependent Variable: FP

4.5.3 Regression Analysis

In order to establish the statistical significance of the independent variables on the dependent variable (performance) regression analysis was employed. The results indicate that the independent variables; Cost Management Practices, Budget Management Practices, Performance

Evaluation Management Practice, Information for Decision Making Management Practice and Strategic Analysis Management Practice are significant in explaining the performance of Ethiopian cement companies. The result is shown below in Table 4.13.

Table 4.13 Regression Coefficient

Coefficients[a]

Model		Un-standardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.792	0.351		5.106	.000
	CS	0.153	0.056	.242	2.743	.007
	BS	0.182	0.068	.233	2.677	.009
	PE	0.178	0.072	.213	2.483	.015
	IFDM	0.220	0.107	.172	2.045	.044
	SA	0.157	0.056	.245	2.823	.006

a. Dependent Variable: FP

The established regression equation was:

The findings revealed that holding Cost Management Practices, Budget Management Practices, Performance Evaluation Management Practice, Information for Decision Making Management Practice and Strategic Analysis Management Practice constant, performance of Ethiopian Cement Companies would stand at 1.792. A unit increase in Cost Management Practices would lead to increase in performance of Ethiopian Cement Companies by a factor of 0.153 (15.3%). A unit increase in Budget Management Practices would lead to increase in performance of Ethiopian Cement Companies by factors of 0.182 (18.2%). A unit increase in Performance Evaluation Management Practice would lead to increase in performance of Ethiopian Cement Companies by a factor of 0.178 (17.8%) A unit increase in Information for Decision Making Management Practice would lead to increase in performance of Ethiopian Cement Companies by a factor of 0.220 (22%) and unit increase in Strategic Analysis Management Practice would lead to increase in performance of Ethiopian Cement Companies by a factor of 0.157 (15.7%). The study further revealed that the test variables (Cost Management Practices, Budget Management Practices, Performance Evaluation Management Practice, Information for Decision Making Management Practice and Strategic Analysis Management Practice) were statistically significant to affect the performance of Ethiopian Cement Companies, as all the p value (sig) were less than

0.05%. The study also found that there was a positive relationship between performance of Ethiopian Cement Companies and the test variables (Cost Management Practices, Budget Management Practices, Performance Evaluation Management Practice, Information for Decision Making Management Practice and Strategic Analysis Management Practice). The above findings are in line with prior literature such as (Kamilah. A, 2017)(PM. Gichaaga, 2014), an assertion that regression analysis is able to relate dependent variable with multiple independent variables and provide meaningful and accurate conclusions of the phenomenon under study.

Chapter Five – Summery, Conclusion &Recommendation

The preceding chapter presented the results and discussion, while this chapter presents the conclusions and recommendations. The purpose of the chapter is to review the whole thesis and highlight future research directions. Accordingly, section 5.1 presents summary and interpretation of findings while the section 5.2 presents the conclusion of the research finding. 5.3 presents recommendation of the researcher and the last section 5.4 covers the Limitations and Directions for Future Study.

5.1 Summary of Findings

The aim of this study was to assess & highlight the usage of management accounting practice and to examine the management accounting practice that significantly influence performance of Ethiopian cement companies. Based on the research finding and regression analysis findings outlined in the previous sections, the researcher summarize and concludes with some recommendations to provide insight on effect of management accounting practice on performance of Ethiopian cement companies. However, it should be emphasized again that the limited research on management accounting, mainly in the context of Ethiopia and qualitative nature of the variables limit the scope of the study.

The researcher collected 92 usable responses from the general population of Ethiopian Cement companies. The study variables included in this study are Costing system, Budgeting System, Performance Evaluation, Information for Decision Making and Strategic Analysis as independent variables and performance of Ethiopian cement companies as dependent variable. The analysis was conducted using descriptive statistics, and multiple linear regression analysis models using statistical package for social science (SPSS) version 20.

The descriptive statistics result about the usage of management accounting practice & the overall results obtained from the study presented below.

Cost management practice usage indicate that 99.13% of cement companies often use separation of variable cost, incremental costs & fixed costs, 98.91% of cement companies often use multiple plant-wide overhead rates, 84.13% of cement companies often use Activity based Costing system, 73.91% of cement companies often use Target Costing system with a mean

value of above 3 implying that traditional management accounting practice (use of separation of variable cost, incremental costs & fixed costs & use multiple plant-wide overhead rates) has higher usage rate followed by Advanced management accounting practice (Activity Based Costing & Target Costing) has also a higher usage rate. The overall mean of 3.93 lies above the average response of 3, cost management practice is implemented well by respondent companies.

Budget management practice usage indicate that 98.04% of cement companies often use Budgeting for planning, 97.61% of cement companies often use Budgeting for controlling costs, 85.22% of cement companies often use Master Budget, 82.17% of cement companies often use Budgeting for long-term (Strategic) planning with a mean value of above 3 implying that traditional management accounting practice has higher usage rate while Advanced management accounting practice such as Activity Based Budgeting are off table (with a mean value of below 3) for usage by respondent companies. The overall mean of 3.70 lies above the average response of 3, Budget management practice is implemented well by respondent companies.

Performance Evaluation Management practice usage indicate that 96.30% of cement companies often evaluate performance using sales growth with, 94.78% of cement companies often evaluate performance using Variance analysis, 91.52% of cement companies often evaluate performance using Operating income with a mean value of above 3 implying that traditional management accounting practice that focuses only on financial measure of performance has higher usage rate while Advanced management accounting practice such as non-financial measure of performances are off table (with a mean value of below 3) for usage by respondent companies. The overall mean of 2.91 falls below the average response of 3, performance evaluation management practice is not implemented well by respondent companies.

Information for decision Making Management practice usage indicate that 78.91% of cement companies often use stock control models, 75.22% of cement companies often use evaluating risk of major capital investment projects by using profitability analysis, 64.57% of cement companies often use Cost-volume-profit analysis, with a mean value of above 3 implying that traditional management accounting practice has higher usage rate as compared to Advanced management accounting practice with a mean value of below 3. The overall mean of 2.56 falls below the average response of 3, information for decision making management practice is not implemented well by respondent companies.

Strategic Analysis Management practice usage indicate that 86.96% of cement companies often use Long-range forecasting, 68.48% of cement companies often use integration with suppliers and/or customers, 62.83% of cement companies often use Shareholder value implying that traditional management accounting practice has higher usage rate as compared to Advanced management accounting practice with a mean value of below 3. The overall mean of 2.38 falls below the average response of 3, Strategic management practice is not implemented well by respondent companies.

5.2 Conclusion

The study specifically assesses the usage of management accounting practice and examines its effect on performance of Ethiopia cement companies based on the following conclusions.

The study concludes that costing practice are the most highly used management accounting practice followed by budgeting practice by Ethiopian cement companies. While performance evaluation, information for decision making and strategic analysis management accounting practices have given less attention by respondent companies.

Respondents perceived that management accounting practices enable management to obtain relevant information for meaningful decision making& management accounting practices employed within the companies were very effective and contributed to help their company succeed.

The regression results show that the independent variables; Cost Management Practices, Budget Management Practices, Performance Evaluation Management Practice, Information for Decision Making Management Practice and Strategic Analysis Management Practice has positive significant relationship with performance of Ethiopian Cement Companies and are significant in explaining the firms performance. The above findings are in line with prior literature such as (Kamilah. A, 2017; PM. Gichaaga, 2014)

5.3 Recommendations

Unlike cost management practice and budget management practice Ethiopian cement companies give less attention for other management accounting practices proposed by the study (performance evaluation, information for decision making and strategic analysis), hence the study indicates that those management accounting practices have joint significance for performance of the firm's, thus Ethiopian cement companies should give due attention to those management accounting practices left with less care to increase their performance and remain competitive in the industry.

Undoubtedly effective decision making and control requires relevant information and special analysis of data. The accounting department is a primary source of information necessary in making decisions and control. The accounting department is expected to provide information to all levels of management. Surprisingly the finding of the research work shows this crucial management practice is not highly used by the firms may be due to high reliance on traditional management accounting practice such as Cost-volume-profit analysis (break-even analysis) for major products & stock control model, apparently in to days competitive world information is a key for decision making and effective decision making the researcher recommends that various information for decision making practice should be implemented and get serious attention.

From the finding the researcher also recommends that the performance evaluation management accounting practice of respondent companies need to improve, the research finding indicate that their evaluation of performance is highly depend on financial measure of performance evaluation methods, thus non-financial measures of performance evaluation such as Non-financial measure(s) related to customers, Non-financial measure(s) related to operation and innovation and Non- financial measure(s) related to employees should be implemented in addition to their financial measure of performance evaluation.

The researcher further conclude that strategic analysis management practice of respondent companies mainly focused on maximizing shareholder value & Long range forecasting in contrary strategic analysis tools such as Industry analysis, Analysis of competitive position, Value chain analysis, Product life cycle analysis, integration with suppliers and/or customers, value chains, analysis of competitors strengths and weakness are off table and should get room

by respondent companies to better understand the dynamics of the market and maintain competitive advantage.

5.4 Limitations and Directions for Future Study

The study depends on questionnaires which were not free from biasness, so future studies may require additional included questionnaires as well as interviewed.

The findings of this study are important to managers in manufacturing companies in Ethiopia as it highlights the most widely used management accounting practices in Ethiopian cement companies. This study fills the research gap on management accounting practices in manufacturing companies in Ethiopia. There has been little research done on management accounting practices in manufacturing companies in Ethiopia. Finally, academics and practitioners can use the findings of this study to understand how management accounting practices can help to improve business performance in companies.

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APPENDICES

Appendix A: Questionnaires guide.

Introduction to questionnaire

Dear Sir/Madam

My name is Yohannes Fekadu, Msc student in department of Accounting and Finance at Addis Ababa University. The aim of this questionnaire is to *assess the Management Accounting Practice in Ethiopian Cement Factories.* The information you provide in response to the items in the questionnaire will be used as part of the data needed for the study. I would like to assure you that the information you provide will be used only for the purpose of achieving academic award. Your involvement is regarded as a great input to the quality of the research results. Hence, I believe that you will enlarge your assistance by participating in the study. Your honest and thoughtful response is invaluable.

Thank you for your participation
Best regards,
Yohannes Fekadu,
MSc student at Addis Ababa University
School of Business and Economics
Department of Accounting and Finance
November , 2017

General Instruction

This questionnaire contains three sections and 3 pages that will be expected to take approximately 15 to 20 minutes to complete. Please provide your responses to the questions based on the instructions under each section. If you have comments or if you want to provide further explanations, please use the space provided at the end of the questionnaire.

Section I: Demographic profile of respondents

Please indicate the following by ticking (√) on the spaces in front of the response options:

1. Gender: Male ☐ Female ☐

2. Age: 18 -35 ☐ 36 - 55 ☐ 56 & Above ☐

3. Educational Level High school complete ☐ Diploma ☐ 1st Degree ☐ Masters ☐

2. Work Experience: 1 to 3 Years ☐ 3 to 6 years ☐ More Than 6 Years ☐

4. Your Position in the company (if you may)_____

Section II: Questionnaires related to Management Accounting Practice usage.

Instruction: Below are lists of Management Accounting Practice. Please indicate how often does your company use the following management accounting practices? by ticking (√) on the spaces that specify your choice from the options that range from " None" to „" Very Often" .Each choice were identified by numbers ranged from 1 to 5.

Types of Management Accounting Practices	**1**	**2**	**3**	**4**	**5**
Costing System					
How often your company use separation of variable cost, incremental costs & fixed costs?					
How often your company use multiple plant-wide overhead rates?					
How often your company use Activity- based costing (ABC)?					
How often your company use Target costing?					
How often your company use cost of quality?					
Other please specify					
Budgeting System					
Budgeting for planning					
Budgeting for controlling costs					
Master Budget					
Budgeting for long-term (Strategic) planning					
Activity based budgeting (ABB)					
Flexible budgeting					

Continuous/rolling budget					
Performance evaluation					
How often your company Evaluate performance using operating income?					
How often your company Evaluate performance using variance analysis					
How often your company Evaluate performance using sales growth					
How often your company Evaluate performance using non-financial measure(s) related to customers					
How often your company Evaluate performance using non-financial measures(s) related to operation and innovation					
How often your company Evaluate performance using non- financial measure(s) related to employees					
How often your company Evaluate performance using Economic value added or residual income					
Information for decision making					
Cost-volume-profit analysis (break-even analysis) for major products					
Product profitability analysis					
Stock control models					
Evaluation of major capital investment based on discounted cash flow method(s)					
Evaluation of major capital investments based on payback period and/ or accounting rate of return					
For the evaluation of major capital investments, non-financial aspects are documented and reported					
Evaluating the risk of major capital investment projects by using profitability analysis or computer simulation					
Performing sensitivity “what if” analysis when evaluating major capital investments projects					
Calculation and use of cost of capital in discounting cash flow for major capital investment evaluation					
Strategic analysis					
Long-range forecasting					
Shareholder value					
Industry analysis					
Analysis of competitive position					
Value chain analysis					

Product life cycle analysis					
The possibilities of integration with suppliers‟ and/or customers‟ value chains					
Analysis of competitors‟ strengths and weaknesses					

Section I I I: Perceived benefit of Management Accounting Practices

To what extent do you agree with the following statements on importance of management accounting practices? Score using the key which ranges from 1 (very low extent) to 5 (very large extent)

Perceived benefit of Management Accounting Practices	**1**	**2**	**3**	**4**	**5**
Return on Asset, ROA (Net income /Total assets) has increased over the last five years as a result of application of management accounting practices.					
Sales growth has increased over the last five years as a result of application of management accounting practices.					
Profit Margin (Net Income/Net Sales) has increased over the last five years as a result of application of management accounting practices.					
Management accounting practice provides important techniques that enhance our company competitive advantage					
Management accounting function creates the cultural values necessary to achieve the organization strategic objectives.					
To what extent do you agree management accounting practice influence your company operational performance?					

Appendix B:- ReliabilityTest.

Reliability Statistics

Cronbach's Alpha	N of Items
0.699	6

Appendix C:- ANOVA Test.

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.564	5	0.512762	15.739	.000[b]
	Residual	2.802	86	0.03258		
	Total	5.366	91			

a. Dependent Variable: FP

b. Predictors: (Constant), SA, CS, BS, IFDM, PE

Appendix D:- Model Fitness Test.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691[a]	0.478	0.447	0.1805

a. Predictors: (Constant), SA, CS, BS, IFDM, PE

b. Dependent Variable: FP

Appendix E:- Regression Result.

Coefficients[a]

Model		Un-standardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.792	0.351		5.106	.000
	CS	0.153	0.056	.242	2.743	.007
	BS	0.182	0.068	.233	2.677	.009
	PE	0.178	0.072	.213	2.483	.015
	IFDM	0.220	0.107	.172	2.045	.044
	SA	0.157	0.056	.245	2.823	.006

a. Dependent Variable: FP