EFFECT OF MICRO FACTORS ON FINANCIAL PERFORMANCE OF MANUFACTURING FIRMS IN KENYA

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MASTER OF SCIENCE IN COMMERCE (ECONOMICS AND INVESTMENT)

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DECLARATION

I declare that this is my original work and has not been presented for a degree in any other University.I also declare that material contained here has not been written or published by other people except where due reference is made and author duly acknowledged.

Name: ..... Reg No: .....

Sign:……..... Date:…….

This dissertation has been submitted by Dorothy Koki Mutunga. I have examined and certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

Sign:……Date:…….

Dr.Edward Owino,

Dissertation Supervisor,

KCA University

DEDICATION

I dedicate this work to my family and friends. I appreciate your constant support throughout my academic life.

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It would have not been possible for me to write this dissertation without the support and guidance of many.My sincere gratitude to my supervisor for his advice, staff and lecturers at KCA University for their input into this research work. Finally, I salute all family and friends for their encouraging words and motivation during the entire time of writing the research paper.

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LIST OF ABBREVIATIONS AND ACRONYMS

EPZ	Export Processing Zones
FCF	Free Cash Flow
GDP	Gross Domestic Product
HRM	Human Resource Management
ICT	Information and Communication Technology
JIT	Just In Time
LDC	Least Developed Countries
MNE	Multi-National Enterprises
TQM	Total Quality Management

OPERATIONAL DEFINITION OF TERMS

Micro factors: Refers to the factors which are in direct contact with the business organization and can affect the routine activities of business straight away (Rauch, &Frese, 2000).

Manufacturing: Refers to make or process a raw material into a finished product, especially by a large-scale industrial operation. To make or process a product, especially with industrial machines. (Webster's II New University Dictionary, Houghton Mifflin, Boston, 1984)

Performance: The accomplishment of a given task measured against preset standards of accuracy, completeness, cost, and speed(Trivedi, 2010)

Production Capacity: The maximum output that a business can produce in a given period with the available resources (Arnold, 2005).

Operations Practices: Refers to the administration of business practices to create the highest level of efficiency possible within an organization. It is concerned with converting materials and labor into goods and services as efficiently as possible to maximize the profit of an organization(Barbosa, 2005).

Management Practices: Walker (2012) defines strategic management practices as the means of aligning the management of human resources strategy in support of accomplishing former and defining it.

ABSTRACT

The assessment and projections of economic growth of Kenya is pegged on the increase in the contribution of the manufacturing sector to the economy. However, this has not been achieved despite prominence in the government development blueprints such as Vision 2030. In reality, the performance and contribution of the Kenyan manufacturing firms to the economy has been worrying especially in the wake of realizations that other sectors of the economy such as real estate and telecommunications have surpassed it on the contribution to the GDP. In Kenya, Manufacturing share of total Kenyan economic output has stagnated at 10 with a declining contribution to total wage employment. It is this fact that necessitated an enquiry on the role of micro factors on the financial performance of manufacturing firms in Kenya. The specific objectives were; examine the relationship between production capacity and firm financial performance; to establish the relationship between management practices and firm financial performance, to determine effect of operations practices and firm financial performance, and to establish the moderating effect of firm size on micro factors on firm's financial performance. Agency theory is used as the foundational theory, with enforcements from wealth maximization theory and the resources based theory. The research design was descriptive research design. Data was collected using a self-administered questionnaire, from a population of 180 manufacturing firms in Kenya. The response rate was 95%. Descriptive statistics, correlation and regression techniques were used to analyze the data. The results of the study show a statistically positive and significant direct relationship between micro factors on firm financial performance. The results show that relationship between micro factors and firm financial performance is moderated by firm size. This study contributes to the understanding of the link between micro factors, size of the firm and firm financial performance, while at the same time confirms the findings of previous studies that have found a significant positive relationship. The study has empirically confirmed that firm size moderates the relationship between macro factors and firm financial performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Determinants of firm's performance are under consideration of investigation since the evolution of modernfirm. From financial point of view the ultimate goal of a firm is to maximize the stockholders' wealth and firmperformance is one of the most important factors which helps to maximize the shareholder wealth. Firm performance comprises the actual output or results of a firm as measured against its intended outputs, goals and objectives (Banker, Chang, Pizzini, 2004).

It encompasses three specific areas of firm outcomes: financial performance, which includes profits, return on assets and return on investments; secondly product market performance such as sales, market share, service propositions and thirdly shareholder return and economic value added (Lipe&Salterio, 2000). For thisreason, firm performance is among the most important research considerations of financial management. Factors that have important effects on determination of firm performance could be divided into micro and macrofactors (Wellage, 2012).

Factors that affect the performance of manufacturing firms can either be micro factors or macro factors. Micro factors are the internal factors, whereas macro factors are the factors from externalenvironment. Any change in the macro factors in the economy affects the firms which could be seen in theperformance of the firm as well.These effects could be positive or negative depending on the change in themacro environment and structure of the firm. Even the same change in the macro environment may or may nothave the same impact on the two firms which belong to the same industry(Wei & Zhang, 2008).

Micro factors are factors close to a business that have a direct impact on its business operations and success. Micro factors refer to the factors which are in direct contact with the business organization and can affect the routine activities of business straight away (Rauch, &Frese, 2000). They are associated with a small area in which the firm functions. They are also known by the name internal factors. Micro factors are a collection of all the forces that are close to the firm. These forces are very particular for the said business only. They can influence the performance and day to day operations of the company, but for a short term only. Understanding the core micro factors affecting the business helps in planning and preparation, as well as long-term business strategy development (Bøllingtoft, &Ulhøi, 2005).

The micro factors consist of those elements which are controllable by the management. Normally the micro factors do not affect all the companies in an industry in the same way, because the size, capacity, capability and strategies are different. For example, the raw material suppliers are giving more concessions to large sized companies. However, they may not give the same concessions to small companies (Rauch, &Frese, 2000). Micro factors show a very interesting image of firms and suggest the most important areas to develop are those such as cost management, trade and marketing, production, technical development and finances (Volberda, Foss, & Lyles, 2010).

Production Capacity is a micro factor determined within the firm. It is the volume of products or services that can be produced by an enterprise using current resources. Capacity in manufacturing firms is often defined as the capability of an object, whether that is a machine, work center, or operator, to produce output for a specific time period. Companies measure capacity in different ways using the input, output, or a combination of the two as the measure(Tybout, 2000).

Performance is the result of the fulfillment of the tasks assigned. Company performance describes how individuals in the company try to achieve a goal. Company performance illustrates the magnitude of the results in a process that has been achieved compared with the company's goal. Company's performance is evaluated in three dimensions. The first dimension is company's productivity, or processing inputs into outputs efficiently. The second is profitability dimension, or the level of which company's earnings are bigger than its costs. The third dimension is market premium, or the level of which company's market value is exceeding its book value (Wellage, 2012).

Financial performance plays an important role in the company performance that is expressed in monetary term. Financial performance emphasizes on variables related directly to the financial report. Before investing their funds, investors should first know about the performance of thecompany. The simplest way to determine the performance of the company is to look at the company's financial statement. In this intense competition among the companies, the company is expected to be able to maintain and improve its performance in order to compete with others.

Firm performance comprises of the actual output or results of a firm as measured against its intended outputs, goals and objectives (Banker, Chang, Pizzini, 2004). It encompasses three specific areas of firm outcomes: Financial performance, namely profits, return on assets and return on investments; Product market performance such as, sales, market share, service propositions and shareholder return, specifically total shareholder return and economic value added (Lipe&Salterio, 2000). This has called for the need of balancing the accuracy and integrity of financial measures with the drivers of future financial performance of the organization (Banker et al, 2000).

Different approaches to the measurement of firm performance for financial services organizations have been used to analyze the efficiency and performance of financial sectors across the world (Berger & Humphrey, 1997). The traditional approach involves analyzing major financial indicators of the organization over time (Rahut, Castallanos&Sahoo, 2010). Profitability, earning, operational strategy, productivity, efficiency, leverage and liquidity, capital adequacy, growth and aggressiveness and market share were used by Rahut et al. (2010) to represent traditional measures of performance of financial institutions. Mwangi et al. (2013) analyzed the effect of financial innovations on the performance of commercial banks in Kenya. The study used profitability, total income, total assets and customer deposits as proxies of performance of commercial banks. According to Dew (2007),the lifeblood of a Bank is determined by how well it can gather funds from the customers at the lowest cost; buy money, do something with the money, and then sell it to their profit.

The Strategic Balanced score card provides a framework in which both financial and nonfinancial success measures are linked by the firm's strategy (Banker, Chang, Pizzini, 2004). It looks at performance from four perspectives: financial, customer, internal process and learning and growth. According to Kaplan and Norton (1996) the strategic balanced score card can translate a company's vision and strategy into a coherent and linked set of firm performance measures; these measures should include both outcome measures and the performance drivers of those outcomes.

Financial performanceindicators in the form of ratios include profitability, liquidity, utilization financial structure and investment – shareholder ratio (Philip, 2004). Measure of profitability is by grossprofit margin; theamountofmoneymadeafterdirectcostsofsaleshavebeentaken into account, operatingmargin; lies

between the grossand net measuresof profitability and net profit margin; takes all costs into account. Liquidity ratios indicate the ability to meet short- term obligations, efficiency ratios indicate howwellthebusinessassetsareinuseandfinancial leverage/gearingratiosindicatethesustainability totheexposureoflong-termdebt(Leah, 2008). These ratios can be combined to determine the rate of return for a company and its owners and the rate at which the company can grow the sustainable rate of growth. By adding data about the company's stock market performance, the analyst can gain insight into how financial markets view the company's performance (Qayyum andBodla, 2010). Financial performance of could also be as a result of financial planning, financial control and decision making by the management.

There are many subjective and objective measures of financial performance of firms with equally many indicators of such performance. The financial performance of a firm is described as a measure of an enterprise's gains over its operative years, and it is determined by several factors. According to Stierwald (2009) the size of the firm is one of the specific firm level characteristics which can impact on the firm's performance (Bauer, 2004; Joshua, 2008). The size of the firm influences the option of financing that a firm may go for. Larger firms have a tendency of leveraging while smaller ones are inclined to employ equity. The firm size has a significant effect on the financial performance of the firm no matter the industry and other micro-economic variables (Raheman, Afza, Qayyum andBodla, 2010).

Kenya is a favorite destination for investors willing to put their money in manufacturing. While the country is not endowed with the mineral wealth most of its neighbors flaunt, it more than makes up for it, thanks to the following: one of the best workforces in Africa, a productive agricultural sector and hence a dependable source of raw materials for agro-based

manufacturing, a fairly versatile financial services sector, bankable telecommunications and proximity to port facilities(Wambua, 2016).

Kenya also has locational advantages as the gateway and a natural launch pad to the markets of the mostly Landlocked East and Central African countries like Uganda, Southern Sudan, Rwanda, Burundi, parts of northern Tanzania and Eastern Democratic Republic of the Congo (DRC). According to the Economic Recovery Strategy for Employment and Wealth Creation Report, the manufacturing sector in Kenya is a major source of growth, still with high potential for growth and investment. The role of the manufacturing sector in Vision 2030 is to create employment and wealth (Muthui, 2014).

Manufacturing sector in Kenya is among the key productive sectors identified for economic growth and development because of its immense potential for wealth, employment creation and poverty alleviation (Kagechu, 2013). The firms face a number of challenges that include limited access to the market, high labour costs and start-up capital. According to research (Kagechu, 2013), Kenya's manufacturing sector contributes to 10% of the Gross Domestic Product (GDP) and 12.5% of exports (Were, 2007). In recent years, manufacturing firms have increased exports of textiles, mainly targeting the US market. This is attributed to the export-led growth as a policy priority in Kenya.

Most of the firms registered under this sector are owned and operated by families. The bulk of the products manufactured include food and beverages, building and construction materials, household items and chemicals. The sector is key to achieving the country’s vision of becoming prosperous and globally competitive by 2030 (Were, 2007). The manufacturing sector in Kenya has been the main conduit for the country’s integration into regional and world markets like Common Market for Eastern and Southern Africa (COMESA) and the East African

Community (EAC) (Were, 2007). The sector has attracted international investors as well (Muhoro, 2011).

1.2 Statement of the Problem

The manufacturing industry in Kenya has been beleaguered by obstacles. Manufacturing share of total Kenyan economic output has stagnated at 10% with a declining contribution to total wage employment (Kenya Economic Report, 2013). Nearly every news outlet has covered the closing of factories, labor disputes between companies and their employees or reductions in force due to the shift of labor off-shore (Muhoro, 2015). The reputation of the industry has been marred by low production, lack of staff motivation, remuneration and staff training, in addition to quality-control problems (Were, 2016).The assessment and projections of economic growth of is pegged on the increase in the contribution of the manufacturing sector to the economy (GOK, 2013).However, this has not been achieved despite prominence in the government development blueprints such as vision 2030.

The performance and contribution of the manufacturing firms to the economy has been worrying especially in the wake of realizations that other sectors of the economy such as real estate and telecommunications have surpassed it on the contribution to the GDP (GOK, 2014). Job loss in the industry has been ongoing in the past five years preventing the sector from moving out of the infancy stage.This is as a result of companies stopping production altogether or moving production plants to neighboring countries (Muthui, 2014). Even though severalmacro factor challenges are faced by the manufacturing sector that include poor infrastructure, market access and local markets being flooded by cheap imports, improvement in micro factors can counter the effect leading to improvement in performance. It is this fact that has necessitated an

enquiry on the role of micro factors on the financial performance of manufacturing firms in Kenya.

Previous research studies relevant to this study include Gill, Singh, Mathur, andMand, (2014),study on the impact of operational efficiency on the future performance of Indian manufacturing firms, Krasnikov, andJayachandran, (2008), study on the relative impact of marketing, research-and-development, and operations capabilities on firm performance, Tybout, (2000), study on manufacturing firms in developing countries and Muthui, (2014) study on Challenges facing Kenya's soap manufacturing firms exporting to East Africa Community. There is so far little study and evidence on how micro factorseffects differ across different types of industries in Kenya and this study sought to fill this research knowledge gap by assessing the effects of micro factorson the financial performance of manufacturing companies in Kenya.

1.3 Research Objectives

The general objective of the study was to determine the effect of micro factors on financial performance of manufacturing firms in Kenya.

The study was guided by the following specific objectives;

i. To assess the effect of production capacity on the financial performance of manufacturing firms in Kenya
ii. To evaluate the effect ofmanagement practices on the financial performance of manufacturing firms in Kenya
iii. To establish the effect of operational practices on the financial performance of manufacturing firms in Kenya

1.4 Research Question

i. To what extend does production capacity influence financial performance of manufacturing firms in Kenya?

ii. How do management practices influence financial performance of manufacturing firms in Kenya?

iii. What is the effect of operational practices on the financial performance of manufacturing firms in Kenya?

1.5 Justification for the Study

There are limited studies that have focused on studying the effect of micro factors influencing performance of manufacturing firms in Kenya. This study provides the manufacturing firms with the importance of best management practices which they can observe in their organizations during restructuring for competitive advantage. The study will give insight to the government and its policy role especially on factors influencing growth and performance of manufacturing firms. It will also provide solutions to the long-term manufacturing firms'under performance and hence economic growth and better service provision.

1.6Significance of the Study

The studydemonstrates the effect of micro factorson the financial performance of manufacturing firms and will help resolve the contestations on the exact role of micro factors on local firms. The findings and recommendations will be of importance the following:

The management of manufacturing firms will gain knowledge on production factor output maximization while the investors within the manufacturing firms will be keen to find out

whether items discussed and the recommendations are adhered to before investing in the firms,it would be of value in having knowledge on the understanding of the importance of micro factors in improving company performance.

It benefits other firms in competitive industry especially on the effects of additional capital injection and consequent micro factors on better performance of the firms.

The study provides more insight into the relationship between micro factorsand performance of firms which would be of value to academicians and researchers in the same field.This study therefore will aid in adding the much-needed literature and stimulate prospective researchers to replicate the study to other sectors of the economy and in other regions of the country. The study may open avenues for further studies in this area.

1.7Scope of the Study

The scope of the study was based only on manufacturing firms in Kenya. Investigation was limited by the study variables of production capacity, the management practices,operational practices and firm size as a moderating factor. The population for this study was all the manufacturing firms in Kenya. The target population was 180 CEOs of the manufacturing firm as census approach was adopted. This study used primary data which were collected through the use of a questionnaire administeredin the year 2016 and 2017.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter presents the theoretical framework. The theoretical framework captures the various theories that inform the study. The chapter also presents the empirical literature review. In the empirical literature review, the findings are critiqued to establish the knowledge gaps. The chapter bases its argument on information retrieved from books, journals, research papers, web articles, conference proceedings and session papers. A conceptual framework shows the relationship between independent and dependent variables

2.2 Theoretical Framework

The theories explaining the effect of micro factors on financial performance are Recourse-based theory, Agency theory and Wealth maximization theory.

2.2.1Resource-based theory

According to the resource-based theory, a firm's competitive advantage is based on the possession of tangible and intangible resources, which are difficult or costly for other firms to obtain. In order to sustain the firm's competitive, advantage these resources must be valuable, rare, inimitable and substitutable (Barney, 1991). A major contribution of resource-based theory is that it explains long-lived differences in firm profitability that cannot be attributed to differences in industry conditions (Peteraf, 1993).It can be argued that considerable resource heterogeneity exists among various shareholder categories. For emerging economy firms, these differences arise from shareholders being either foreign or domestic and financial or strategic.

The impact on firm performance of these owners with diverse resource endowments is expected to differ as a consequence of this heterogeneity in resources and organizational capabilities.

The work carried out by scholars supporting the RBV merges with that of Prahalad andHamel (1990) inasmuch as the latter state that an organization's competitiveness should be based on the development of core competencies. These competencies should follow the criteria of difficultlimitability, providing actual benefits to customers, providing access to different markets, and fosteringan environment of fast learning that must be put to work before the competitors do it.

According to these authors, the most powerful way to face competition is associated with theability to identify, nurture, and exploit core competencies that enable growth (Prahalad and Hamel, 1990). In their opinion, it amounts to securing a portfolio of core competencies, rather than a portfolio of businesses. According to Prahalad and Hamel (2000), core competencies result from collective learning,especially in relation to integrating multiple chains of technology, organizing work, and delivering value to the customer. Here we find a fundamental point of RBV: Customers must clearly see thesecore competencies as unique. In these authors' opinion, the actual sources of competitive advantage are found in the ability to consolidate technologies and the production capacity in competencies thatallow fast adaptation to changes and/or new opportunities.

2.2.2 The agency theory

Campbell and Underdown (2001) argue that the success of any business enterprise is determined by the interaction of two major sets of factors micro factors and macro factors. The latter are beyond the control of business managers and include suchenvironmental conditions as shifting

preferences, the behaviour of consumers, adverse movements in commodity prices, changes in government policy and cyclical market forces.The micro factors emanate from inside the firm and encapsulate the ability of management to develop and implement planning strategies that fit the business to the environment.The probability of changes in environmental factors and the effects of such changes onfuture business performance should be taken into account if an enterprise is to survive andprosper.

The firm's performance, represented by gross profit, depends on the manager's effort and also a chance variable. The agency theory is a supposition that explains the relationship between principals and agents in business. Agency theory is concerned with resolving problems that can exist in agency relationships due to unaligned goals or different aversion levels to risk. The most common agency relationship in finance occurs between shareholders (principal) and company executives,agents(Eisenhardt and Martin, 2000).

Agency theory addresses problems that arise due to differences between the goals or desires between the principal and agent. This situation may occur because the principal isn't aware of the actions of the agent or is prohibited by resources from acquiring the information. For example, company executives may have a desire to expand a business into other markets. This will sacrifice the short-term profitability of the company for prospective growth and higher earnings in the future. However, shareholders that desire high current capital growth may be unaware of these plans (Campbell and Underdown, 2001)

Another central issue dealt with by agency theory handles the various levels of risk between a principal and an agent. In some situations, an agent is utilizing resources of a principal. Therefore, although the agent is the decision-maker, they are incurring little to no risk because all losses will be the burden of the principal. This is most commonly seen when

shareholders contribute financial support to an entity that corporate executives use at their discretion. The agent may have a different risk tolerance than the principal because of the uneven distribution of risk

2.2.3 The shareholder wealth maximization (SWM) Theory

According toJohn, Loy & Clements-Croome, (2005), the main aim of a company is to maximize its stock market value. Managers of the company are responsible for achieving that aim, i.e. for maximizing shareholders' wealth. The performance that a company achieves reveals howsuccessful the management is in adapting to changing circumstances. The ability to quicklyand properly react to changes in the business environment characterizes the quality of thecompany's management. Bharadwaj, (2000) argue that the shareholder wealth maximization (SWM) theory immediateoperating goal and the ultimate purpose of a firm is and shouldbe to maximize return on equity capital. The SWM specification of firm objective makes operating goal and ultimate purpose the same. Managers and investors should focus narrowly on SWM.

The question of whether the firm objective can be a strict emphasis onSWM or must recognize significant differences between the operating goal for managers and investors and the ultimate social purpose of the public corporation liesat the intersection of three literatures. In economics and finance literature, SWM isa standard assumption(John, Loy & Clements-Croome, 2005). This SWM operating goal is expected to yield the most socially efficient allocation of capital. Business ethics, corporate social responsibility,and stakeholder theory literature emphasizes significant differences between anoperating goal of SWM and the ultimate social purpose of the public corporation.Corporation law addresses duties, responsibilities, and rights of both financial andnon-financial stakeholders.

2.3 Empirical Literature

Empirical literature was organized according to the study objectives as shown below:

2.3.1 Production Capacity and Firm's Financial Performance

The production capacity of a firm is largely influenced by the number, quality and expertise of the employees in the firm and more so the manufacturing firms. One of the major concerns of manufacturing companies is focused on improving worker productivity, which is one of the job performance measures, (Borman, 2004). The performance of the employees on the specified task is also critical. Greguras (2006) describes job performance as the extent to which an organizational member (production worker) contributes to achieving the objectives of the organization.

Leadership effectiveness, time management, process change and among others, influences the production worker performance in the medium and large-scale manufacturing industry. Improvement of workers' productivity is usually the biggest component and step towards increase in production capacity. According to Borman (2004), one of the major concerns of manufacturing companies is improving workers' productivity, which is one of the job performance measures. The definition and context of job performance are diverse. Keller (2006) points out that, when you expect the best output from your employees, they will be given the best treatment. On the other hand, when you give employees low incentives and motivation, you receive low performance in return, which was named by Marizoni and Barsoux (2004) as set-up to fail syndrome.

Production capacity and firm productivity are linked concepts and studies have established that invariably, better production capacity leads to better productivity. A study done

by Griffith, Redding and Simpson (2004) on foreign ownership and productivity, found out that there is more productivity dominating from multinational establishments than there owned by purely domestic firms on account of production capacity.The study sorts the reason being foreign multinationals are operating outside their home market which may require them to possess some additional advantage in order to compete effectively through improved production and the attendant enlargement of market share. The production capacity is usually tied to the refinement of processes and use of innovations in production. For instance, a study by Maria (2014) on innovation and foreign ownership affirmed that increased levels of investment activities upon foreign investment are predicted to lead to higher productivity for acquitted firms.

An organization's capacity position is often the culmination of decision-making processes that involve a number of factors. If an organization carries too much spare capacity, operations may become inefficient. Too little spare capacity may result in a loss of sales or other constraints on action (Bradley et al., 2010). The specific role that an organization's capacity cushion takes in the strategic process is often influenced by the environment as well as organizational characteristics. Both scholars and practitioners agree that most organizations operate with at least some slack (Cyert ad March, 2013), but the literature remains inconsistent with regards to its depiction of the performance effects of an organization's capacity position over time.Because the competitive value of a firm's capacity position is a function of both time and sizing, a firm's return on its capacity is likely to vary substantially over time (Hendricks and Singhal, 1995; Daniel et al., 2004).

Capacity plays an important role in firms' efforts to accommodate demand growth or variability (Olhager et al., 2001). Because capacity changes tend to be lumpy, require large capital investments, and have long lead times, decision makers must carefully weigh the

advantages and disadvantages as to when capacity changes are needed (Olhager et al., 2001). According to Hayes and Wheelwright (2004) there are three strategies for responding to anticipated changes in demand: lead, lag or track (Olhager et al., 2001).

2.3.2 Management Practices and Firm's Financial Performance

According to a study done by Carolyne(2015), it was found out that good supplier management practices had a constructive impacton the performance of the manufacturing firm. Walker (2012) defines strategic management practices as the means of aligning the management of human resources strategy in support of accomplishing former and defining it. There are benefits that come along with foreign management skills acquired through foreign ownershipto the host country. Beneficial spin-off effect arises when local personnel who are trained to occupy managerial, financial and technical posts in the subsidiary of a foreign MNE vacate the firm and help to inaugurate local firms. Similar benefits may arise if the superior management skills of a foreign MNE stimulate local suppliers, distributors and competitors to improve their own management skills.

A study done by Kannan and Tan (2005) highlights three types of managerial benefits: Entrepreneurial competence in seeking out investment opportunities, Externalities rising from training gained by employees for instance technical, managerial, secretarial and so on. Asstudied by Dunning (1993).OM practices focus on systems management and include Information and Communication Technology (ICT), Just in Time (JIT), Total Quality Management (TQM), and lean production, amongst others. HRM practices focus on people super vision, in particular the recruitment, development and management of employees Wood and Wall(2002). Progress, empowerment and teamwork are involved in training.

Moreover, it is important for a company to hire enough skilled and educated employers providing them with lifelong learning for it to be able to compete in the global economy as suggested by (Nadler &Wiggs). Roberts and McDonald (2002) noted these as some of the challenges faced by workers and organizations and termed as hindrances to effective management practices, training and growth of human resources in a global economy.Only commonality shared by all the studies is that the management practices are measured in a multidimensional method according to Lawrence and Hottenstein, (2005) who concluded the lack of harmony in the literature on how to measure management practices. Because of the inherently intangible nature of management practices, it is challenging to incorporate objective forms of measurement. Measures are gathered to enable analysis at the plant, firm, industry or country level. Just in time management (JIT) and Total Quality Management (TQM) are two management practices regularly forming the pillars of intelligible organizational systems initially stimulated by Japanese production systems and targeted at maximizing the speed of product conveyance and service quality.

Management Practices is required of the management teams including supply chain relations. In the context of manufacturing firms, supply chains are becoming progressively complex and dynamic; distribution channels are expanding with an increasing dependence on outsourced manufacturing and logistics as viewed by Smith(2004). Furthermore, globalization and fast changing business practices are putting organizations under tremendous pressure to constantly improve product or process quality, delivery index, performance, and responsiveness along with reducing costs. Necessity to improve on supplier-buyer associations is becoming more deceptive in the quest to achieve operational brilliance as studied by Smith (2004). Kannan and Tan (2005) conclude that increasedoutsourcing implies greater reliance on suppliers and

proportionate need to manage the supplier. Comprehensive understanding of buyer – supplier association has become increasingly of importance to the overall competitiveness of a firm as studied by Berkowitz(2004). Improvement in buyer and supplier performance occurs as a product of applyingoperationalsupplier development programs as studied by Gunasekaranand Ngai(2005). With increased outsourcing, buyers must ensure that their supplier capabilities match their expectations in order to compete in the competitive market as studied by Krause and Ellram(1997),Handfield, Krause, Scannel and Monczka(2000). Goffin*et al* (2006) and Li *et al* (2006) affirm that manufacturing firms have realized the importance of the performance of their suppliers to the founding and nourishingof their competitive advantage.

2.3.3Operational Practices and Firm's Financial Performance

Operational practiceis connected to financial performance of firms. Cox and Blackstone (2002) observed thatoperations management as the preparation, scheduling, and control of activities that transform inputs to finished goods and services which clearly corresponds to the administrative role of production economics. Outsourcing is one example, as indicated by Rossetti and Choi (2005). Third, identifying what constitutes a practice is also not simple. Soft cultural aspects of quality operational practices can affect performance as viewed by Kaynak (2003). Tan, Kannan and Narasimhan (2007) found that the competences behind the practice are what determine performance, a result consistent with the Resource-based theory (RBT) of strategy by Barney and Clark (2007).According to Narasimhan, Swink and Kim (2005) organizations are expected to make changes based on best practices to their structural and infrastructural elements in order to attain selected performance goals assuming that internal factors at firms are primarily responsible for performance variation.

Implementations of some operational practices and philosophies have been cited as leading to superior enactment including superior financial performance. One of these practices is the use of total quality management practices (TQM). Kaynak (2003) investigated the links between the different TQM practices, trying, in particular, to define how they affect organizational performance on operational, marketing and financial levels. The results backed up the argument that only a few TQM practiceshave a constructiveresult on an organization's operational performance. The same practices also affect financial and marketing performance through the organization's operational performance. The other common operational practice is the use of Just InTime philosophy (JIT). JIT deals with making goods and services precisely when they become necessary, not before or after. Slack, Chambers and Johnston (2002) divide JIT into philosophy and a sequence of techniques. The philosophy of JIT helps guide the actions of an organization's managers and is grounded on doing things well and simply, refining them constantly, and abolishing waste; all of this with the participation of all in the organization.

Operational Efficiency is described as the extent to which changes in the cash transformation cycle in this context of this study, operating expenses to sales revenue ratio, operating cash flow, and total asset turnover, total debt to total assets ratio, firm size, and operating risk impact the future performance of the firm. The term 'efficiency' is viewed in both the industrial organization and strategic management literature as the product of firm-specific factors such as management skills, innovation, cost control, and market share as determinants of current firm performance and its stability as concluded by Abuzayed and Molyneux (2009). Bank valuations have greatly endorsed the concept of efficiency though it has not been used to great extent in valuation studies related to other private industries.

Various managerial publications assert to have found the formula for business success like the book by Joyce, Nohria and Roberso(2003) that states it in the title what really works: the formula for sustained business success. Operations management has extensively explored the potential of the then successful Japanese management techniques when applied to western companies. This resulted in the Quality Management movement (Cole, 1998) and the Lean Manufacturing approach (Womack & Jones, 1996). Despite its relevance to the field, a more rigorous and scientific evaluation of the impact of management practices in financial performance still shows mixed results as demonstrated in more detail in the literature review section of this paper. There are various reasons accounting for the mixed results.The financial performance being elusive dependent variable as affirmed by March and Sutton, (1997) and being influenced by multiple variables concurrently, making any investigation restricted in terms of controls. Also some operational practices may bring positive outcomes in some settings, but negative outcomes in other settings as well, and the identification of these settings is not easy. Outsourcing is one example, as indicated by Rossetti and Choi (2005). Thirdly, identifying what founds a practice is also not simple. Tan, Kannan and Narasimhan (2007) found that the capabilities behind the practice are what drive performance. Assuming that internal factors at firms are primarily responsible for performance variation, organizations are expected to make changes based on best practices to their structural and infrastructural elements in order to attain selected performance goalsas viewed by Narasimhan, Swink and Kim (2005). Total Quality Management (TQM) is one of the philosophies firms apply to improve processes but, in spite of how extensive it is, the literature has not come to a conclusive definition and, above all, on the quality practices TQM adopts. Slack(2002) confirm this view, arguing that many authors use the same language, but different dialects, to define TQM. In fact, Kaynak (2003) carried out a

comprehensive review of TQM literature, identifying different practices operations researchers attribute to TQM.

A few TQM practicesfor instance supplier quality management have a constructive effect on an organization's operational performance.A comprehensive review by Kaynak (2003) contributed to the discussion by investigating the links between the diverse TQM practices, trying, in particular, to determine how they affect organizational performance on three levels: operational, marketing and financial. Financial and marketing performance is also affected by the same practices through the organization's operational performance.

Better performance is attained by firms implementing the philosophies jointly than those that view and implement them in separation. Some of the articles on the relationship between JIT and organizational performance also deal with TQM practices and the relationships between TQM and JIT, as the two philosophies have several practices in common, as we will see ahead. Literally, JIT means producing goods and services exactly when they become needed, not before or after. Slack *et al.* (2002) divide JIT into philosophy and a series of techniques. The philosophy of JIT helps guide the actions of an organization's managers and is based on doing things well and simply, improving them constantly, eliminating waste and all of this with the involvement of everyone in the organization. JIT as a set of techniques and tools represents the means to attain the fundamentals the philosophy prescribes. Some of the main elements of JIT are also to be found in the TQM philosophy.

According to Fullerton *et al*. (2003) adoption of the JIT approach helps to attain better financial performance as he surveyed 95 firms that had implemented JIT and 158 firms without JIT in various US manufacturing industries. The authors divided JIT practices into three variables: Quality JIT, Manufacturing JIT, and exclusive JIT techniques. Nonetheless no

significant correlation was found between exclusive JIT variables and profitability. Positive correlation between the manufacturing JIT variables and profitability was as well not found as well as negative correlation between quality JIT and profitability.Finally, the authors show that no significant evidence exists that firms with JIT become more profitable over the years. Best performance and greatest evolution were found with firms that had implemented TOC Sale andJIT firms had no better performance than traditional manufacturers according to a study carried out by Sale and Inman (2003) on empirical comparison between JIT and TOC adopters and traditional manufacturers. Their study also showed no improvement after implementation of JIT by the firms.

2.3.4 Firm size and Firm's Financial Performance

Firm size, as a construct for firm characteristics, is one of the most acknowledged determinants of a financial performance (Beard &Dess, 2011). Indeed, firms with the greatest market share and assets report relatively better performance. The market power and access to capital markets of large firms may give them access to investment opportunities that are not available to smaller ones (Amato and Wilder,2012). With this investment power, such big firms are able to diversify their portfolios and hedge their operating risks better. It is no surprise that bigger firms when managed well spread their influence in many sectors of the economy they operate. Past research also shows that the probability of firm growth, firm failure, and the variability of firm growth decreases as firm'sage (Yasuda, 2005).According to the life cycle effect, younger companies are more dynamic and more volatile in their growth experience than older companies.

Firm diversification is a corporate strategy to increase sales volume from new products and new markets.Many researchers have studied the relationship between firm diversification

and performanceRamanujamandVaradarajan (2010), provide excellent surveys,analyses, andcritiques of previous findings. The observation is that there does not seem to be any consistent or conclusive findings between firm diversification and performance. Stimpert and Duhaine (2007), argue that the inconsistencies are duetothefactthediversificationimpactsothervariables,whichinturndeterminesfirm performance.Sincefirmsizeanddiversificationarepositivelycorrelated, the argumentsaboutinertiaandconstraintsonactionrelatedtofirmsizecouldalsoapplyto diversification.

Firm leverage is the degree to which a company uses fixed-income securities, such as debt and preferred equity.Withahighdegreeoffinancialleveragecomehighinterestpayments.The trade-offbetweenagencycostsofdebtandequity(JensenandMeckling,2006);thelimited liability effect of debt (Brander and Lewis, 1986); and the disciplining effect of debt allsuggestapositiveeffectofleverageonperformance.They suggest that leverageopensupopportunitiesforrivalrypredationinconcentratedproductmarkets,thus conditioning the performance effect of leverage on the degree of competition in the life insurance industry.

Firm size is oneofthemostacknowledgeddeterminantsofafinancialperformance(Beard&Dess, 2001). The causal relationships between size and financial performance have been widely tested with ambiguous results. Several studies suggest that a positive relationship exists between company size and financial performance.Bigger firms are presumed to be more efficient thansmaller ones.The market power andaccesstocapitalmarketsoflargefirmsmaygivethem accesstoinvestment opportunitiesthatarenotavailabletosmallerones(AmatoandWilder, 1985). Firm size helps in achieving economies of scale.

Firmage(measuredasthenumberofyearsacompany isoperatinginthemarketsinceitwas founded)isanimportantdeterminantoffinancialperformance.Past researchshowsthatthe probabilityoffirmgrowth,firmfailure,andthevariabilityoffirmgrowthdecreasesasfirm's age (Yasuda, 2005). According to the life cycle effect, younger companies are more dynamic and more volatile in their growth experience than older companies. Maturity brings stability in growth as firms learn more precisely their market positioning, cost structures and efficiency levels.Becker et al. (2010) have studied the effects of firm size on performance in the firms operating in manufacturing sector in USA using the data of years 1987 to 2002. Results of the study showed that negative and statistically significant relations exist between the total assets, total sales and number of employees of the firms and their financial performance.

Krasnikov,and Jayachandran(2010) study found a positive relationship between firm size and financial performance. They used different measures of size, sales and total assets and profitability, profit margin and profit on total assets while applying model on a sample of 15 companies operating in South India in their study, which was based on a simple semi-logarithmeticspecification of the model. Lee (2009) who used fixed effect dynamic panel data model and performed analysis on a sample of more than 7000 US publicly-held firms. According to him absolute firm size plays a remarkable role in explaining performance. Ozgulbas et al. (2006) have studied the effects of firm size on performance over the firms operating in Istanbul Stock Exchange between the years of 2000 to 2005. As a result of their study, they have found that big scale firms have a higher performance as compared to small scale firms. Jonsson (2007) has studied the relation between profitability and size of the firms operating in Iceland. Results of the analysis showed that bigger firms have higher financial performance as compared to smaller firms.

Size-profit relationship for the firms functioning in the financial services sector was tested by Amaton and Burson (2007). They tested both linear and cubic form of the relationship. A negative influence of firm size on profitability was revealed with the linear specification in firm size, evidence of a cubic relationship was detected between return on assets and firm size.Velnampy (2005) pointed a study on investment appraisal and financial performance of toddy bottling project in Sri Lanka which found that the management of the project failed to attain the budgetary results, even though the Net Present Value (NPV), Internal Rate of Return (IRR) and benefit cost ratio showed the project as commendable.

Velnampy (2006) studied the financial position of the companies and the relationship between financial position and profitability with the sample of 25 public quoted companies in Sri Lanka through the use of Altman Original Bankruptcy Forecasting Model. According to his verdicts, out of 25 companies only 4 companies were in the danger of going bankrupt in the near future. Moreover, he also found that in deciding the financial position of the quoted companies, earning/total assets ratio, market value of total equity/book value of debt ratio and sales/total assets in times were the most significant ratios.Banchuenvijit(2012) studied factors affecting performances of the firms operating in Vietnam. A positive relation has been found between total sales and profitability of the firms but on the contrary, a negative relation has been found between profitability and total assets. Additionally, the author found statistically non-significant results between number of employees and profitability.

Velnampy and Nimalathasan (2010) studied the relationship between firm size and financial performance of all the branches of Bank of Ceylon and Commercial Bank in Sri Lanka over the period of 10 years from 1997 to 2006. They observed that there was a positive relationship between firm size and profitability in Commercial Bank, but there was no

relationship between firm size and profitability in Bank of Ceylon.Velnampy (2013) discovered that there was no correlation between corporate governance and firms' performance measures. The sample of 28 manufacturing companies using the data representing the period of 2007 to 2011 revealed that the determinants of corporate governance were not correlated to the performance measures of the organization.

2.4 Conceptual Framework

According to Kombo& Tromp (2009), a concept is an abstract or general idea inferred or derived from specific instances. A conceptual framework is a set of broad ideas and principles taken from relevant fields of enquiry and used to structure a subsequent presentation. A conceptual framework is a logically developed network of interrelationships among variables deemed to be the integral part of the dynamics of the situation being investigated.Mugenda and Mugenda (2003) and Smith (2004), define a conceptual framework a hypothesized model identifying the model under study and the relationship between the dependent and independent variables.

Kothari (2004) defines an independent variable also known as the explanatory variable is the presumed cause of the changes of the dependent variable, while a dependent variable refers to the variable which the researcher wishes to explain.

The goal of a conceptual framework is to categorize and describe concepts relevant to the study and map relationships among them. Such a framework would help researchers define the concept, map the research terrain or conceptual scope, systematize relations among concepts, and identify gaps in literature (Creswell, 2003).Figure 2.1 is a figurative representation of the variables to be explored by this study.

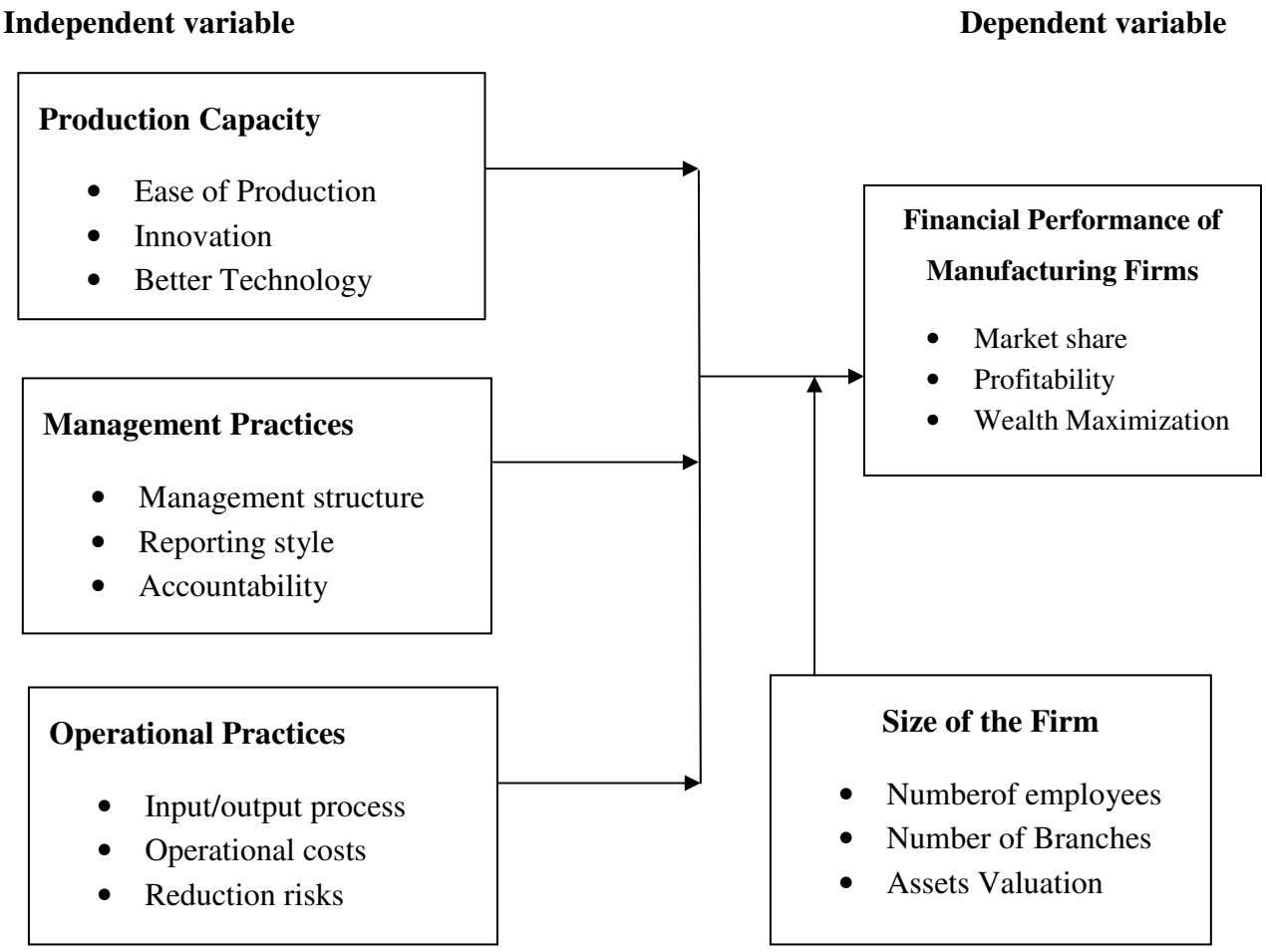

Figure 2.1 Conceptual Framework

Source; Researcher 2016

2.5 Data Hypothesis

H_{01}: Production capacity has no significant effect on the financial performance of manufacturingfirms.

H_{02}: Management practices have no significant effect on the financial performance of manufacturing firms.

H_{03}: Operational practices have no significant effect on the financial performance of manufacturing firms.

H_{04}: Firm size has no significant moderating effect on the relationship between micro factors and financial performance of manufacturing firms in Kenya

2.7 Operationalization of Variables

The study operationalized the effect micro factors on the financial performance of manufacturing firms in Kenya. As shown in table 2.1, the independent variables were production capacity, management practices, operational practices and size of the firm. The dependent variable was financial performance of manufacturing firms.

Table 2.1 Operationalization of the Study Variables

Objective	Variable	Indicators	Measurement Scale	Question in Questionnaire
Production Capacity	Independent	• Ease of Production • Innovation • Better Technology	Ordinal/Interval	6-15
Management Practices	Independent	• Management structure • Reporting style • Accountability	Ordinal/Interval	16-25
Operational Practices	Independent	• Input/output process • Operational costs • Reduction risks	Ordinal/ Interval	26-33
Size of the Firm	Independent	• Number of employees • Number of Branches • Assets Valuation	Ordinal/ Interval	34-39
Financial Performance	Dependent	• Number of employees • Number of Branches • Assets Valuation	Ordinal/ Interval	40-45

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The study sought to assesseffects ofmicro factorson the financial performance of manufacturing firms in Kenya.This chapter discussed the methodology that was used in gathering the data, analyzing the data and reporting the results. Here, the researcher aimed at explaining the methods and tools that were used to collect and analyze data to get proper and maximum information related to the subject under study. The chapter also presented the research design and the sample size which were derived from the population. In addition, the chapter discusses on the validity and reliability tests which were performed on the questionnaire.

3.2Research Design

A research design is the strategy for a study and the plan by which the strategy is to be carried out (Cooper & Schindler, 2001). It specifies the methods and procedures for the collection, measurement, and analysis of data. Gupta (2008) states that a research design is the basic plan that indicates an overview of the activities that are necessary to execute the research project. Kothari (2004) defines a research design as a detailed plan on how the research will be conducted. A research design is a statement of the essential elements of a study and constitutes the blue-print for the collection, measurement and analysis of data (Cooper & Schindler, 2008) hence a logical and systematic plan prepared for directing a research study (Shajahan, 2005).

The study adopted a descriptive survey design. Descriptive surveywas idle for this study since they are designed to obtain information about the current status of a phenomenon or to answer questions like where, what, how, why, when, and who. The study used descriptive

research which refers to the investigation in which data is collected and analyzed in order to describe the specific phenomena in its current trends, current events and linkages between different factors at the current time (Kothari, 2004). Descriptive research design was used because it enabled the researcher to generalize the findings to a larger population.

Sekran (2007) observed that descriptive survey is intended to produce statistical information about aspects of a phenomenal being studied by administering a questionnaire to a sample of individuals. The descriptive design was particularly ideal because all the data on micro factors and financial performance is in numerical form suitable for quantitative description. The other ideally quantitative data on the effects of micro factors on manufacturing firms was analyzed quantitatively by use of five-point likert scale items in the questionnaire.

3.3 Population of the Study

According to Kombo and Tromp (2006) a population is a well-defined set of people, services, elements, events, group of things or households that are being investigated to generalize the results. This definition assumed that the population is not homogeneous. Lumley (2004) defines population as a larger collection of all subjects from where a sample is drawn. It refers an entire group of individuals, events or objects having common observable characteristics (Mugenda&Mugenda, 2003). Cooper and Schindler (2006) observe that a population is the total collection of elements about which one wants to make inferences. Similar view is also expressed by Kothari (2004). Target population in statistics is the specific population about which information is desired (Gupta, 2012). Target population is that population which the researcher wants to generalize results (Mugenda&Mugenda, 2003).

The population for this study wasallthe manufacturing firms in Kenya.There are 180 manufacturing firms in Kenya. Therefore, the target population is 180 CEOs of the manufacturing firms. For this study, since the population was small, census approach was adopted. This allowed for complete enumeration of all the 180 CEO's of the manufacturing companies.

3.4 Data Collection Instrument

This study used primary data which were collected through the use of a questionnaire. Primary data is described by Louis et al. (2007) as those items that are original to the problem under study. A questionnaire with likert scale type of questions was used. Likert scale is an interval scale that uses five or any other anchors that include but not limited to strongly disagree, disagree, neutral, agree and strongly agree. The likert measures the level of agreement or disagreement. Likert scales are good in measuring perception, attitude, values and behavior. The likert scales assist in converting the qualitative responses into quantitative values (Upagade&Shende, 2012, Zikmund, Babin, Carr & Griffin, 2010). The questions will be both closed and open ended.

The questionnaire was ideal to describe the prevalence, frequency, magnitude and effects ofmicro factors on the financial performance of firms. The suitability of questionnaire for this study was validated by following the process presented by Orodho(2009) who defined a questionnaire as an instrument used to gather data, which allows a measurement for or against a particular viewpoint. He emphasizes that a questionnaire has the ability to collect a large amount of information in a reasonably quick space of time. Questionnaires are easy to administer, gives the respondent sufficient time to arrive at a well thought response and are free from the

researcher's bias. The drop and pick method was used where the respondent was very busy or not available. This method enabled the researcher to collect data that would be difficult to get.

Part one of the questionnaire contained the background information of the firm's officials who were the respondents in the study. The background information sought was on age, gender, academic qualification and number of years worked subsequently, some closed Yes/No questions.

The extent to which each one of the effects micro factorson the financial performance of firmswas assessed using likert scale items in the questionnaire. The likert scale items assessed effects of microfactors on the financial performance of manufacturing firms in Kenya. The likert scale items had five categorizations ranging from strongly agree (SA), agree (A), neutral(N), disagree (DA) and strongly disagree (SD). In order to measure the mean (M) and standard deviation (SD) from the likert scale items allotment of numerals was done as follows; SA=1, A=2, ND=3,D=4 and SD=5.

3.5Data Collection Procedure

Data refers to all the information a researcher gathers for the study (Mugenda and Mugenda, 2003). According to Creswell (2002) data collection is a means of collecting information from the selected units of a study. Burns and Grove (2003) define data collection as the precise, systematic gathering of information relevant to the research sub-problems, using methods such as interviews, participant observations, focus group discussion, narratives and case histories. This study used questionnaires to obtain both quantitative and qualitative data for analysis.Mugenda and Mugenda (2003) observe that the choice of a tool and instrument depends mainly on the attributes of the subject, research topic, data and expected results.

The study required primary data. Primary data was collected through questionnaires which wereself-administered to each of the 180respondents. Questionnaires are easy to administer as they gave the respondent sufficient time to arrive at well thought response and were free from the researchers' bias. The drop and pick method was used where the respondent was very busy or not available. This method enabled the researcher to collect data that would be difficult to get.

3.6 Pilot Testing

Pilot testing is undertaken to ensure that the data collected enabled the investigative questions to be answered (Saunders, Lewis and Thornhill 2012). Newing (2011) states that the importance of pilot testing cannot be overemphasized; you will almost always find that there are questions that people fail to understand or interpret in different ways, places in the questionnaire where they are not sure where to go next, and questions that turn out simply not to elicit useful information. Cooper and Schindler (2006) concur that the purpose of pilot test is to detect weaknesses in design and implementation and to provide proxy for data collection of a probability sample.

Sekaran (2006) reinforces that pilot test is necessary for testing the reliability of instruments and the validity of a study. Once the questionnaire is pilot tested and amended and the sample selected, the questionnaire will then be used to collect data in line with Saunders, Lewis and Thornhill (2012). To check the validity and reliability of the questionnaires in gathering the data required for purposes of the study, a pilot study was carried out. The purpose of pilot testing was to establish the accuracy and appropriateness of the research design and instrumentation (Saunders, Lewis &Thornhill, 2007).

3.6.1 Reliability Instruments

Reliability is the consistency of a set of measurement items (Cronbach, 1951). Reliability is the consistency of measurement, or the degree to which an instrument measures the same way each time it is used under the same condition with the same subjects. In short, it is the repeatability of measurement. A measure is considered reliable if a person's score on the same test given twice is similar. According to Hussey & Collis (2009) reliability is defined as the degree of consistency that can be achieved in an assignment of similar phrases, words or other kinds of data to the same theme or pattern by different authors of research. It can also be defined as the degree of consistency that can be assigned by a researcher for similar interpretations or observations at different time periods.

A measure is considered reliable if a person's score on the same test given twice is similar. The purpose of the reliability test was to refine the questionnaire so that respondents had no problems in answering the questions and there were no problems in recording the data. In addition, it enable obtain some assessment of the question's validity and the likely reliability of the data that was collected.

Baker, Veit and Powell (2001) states that the size of a sample to be used for piloting testing varies depending on time, costs and practicality, but the same would tend to be 5- 10 per cent of the main survey. According to Cooper and Schindler (2006) the respondents in a pilot test do not have to be statistically selected when testing the validity and reliability of the instruments.

In this study, data collection instrument which was the questionnaire was tested on 10% of the sample of the questionnaires to ensure that it was relevant and effective. Reliability was tested using questionnaire duly completed by eighteen (18) randomly selected respondents. These respondents were not included in the final study sample in order to control for response biasness.

The researcher used the most common internal consistency measure known as Cronbach‟s Alpha (α) which is generated by SPSS Version 21. It indicated the extent to which a set of test items can be treated as measuring a single latent variable (Cronbach, 1951). This study used the Cronbach's Alpha for the five point likert scale items. This helped the researcher to assess the interval consistency reliability achieved, the cut-off point being 0.7 as proposed by Oncu (1994). The closer Cronbach's alpha coefficient is to 1, the higher the internal consistency reliability (Sekaran, 2006). A coefficient of 0.7 is recommended for a newly developed questionnaire.

3.6.2 Validity of Instrument

Kruger (2003) defines validity as the goodness of data, relevance, richness and accuracy. Gatara (2010) on the other hand defines validity as the degree to which a test measures what it is supposed to measure. The validity of a research instrument concerns the extent to which it yields the same results on repeated trials. According to Mugenda and Mugenda (2003), validity is the accuracy and meaningfulness of inferences, which are based on the research results. Validity refers to whether a questionnaire is measuring what it purports to measure (Bryman and Cramer 1997). It describes validity as the degree of congruence between the explanations of the phenomena and the realities of the world. While absolute validity is difficult to establish, demonstrating the validity of a developing measure is very important in research (Bowling, 1997).

This study used both construct validity and content validity. For construct validity, the questionnaire was divided into several sections to ensure that each section assessed information for a specific objective, and also ensured that the same closely ties to the conceptual framework

for this study. To ensure content validity, the questionnaire was subjected to thorough examination by 5 randomly selected CEOs and the supervisor. They were asked to evaluate the statements in the questionnaire for relevance and whether they were meaningful, clear and loaded of offensive. On the basis of the evaluation, the instrument was adjusted appropriately before subjecting it to the final data collection exercise. Their review comments were used to ensure that content validity was enhanced.

3.7Data Analysis and Presentation

Data analysis is a practice in which raw data is ordered and organized so that useful analysis as the process of computation of certain indices or measures along with searching for patterns of relationship that exist among the data group. Mugenda and Mugenda (2003) added that the data must be cleaned, coded and analyzed so that the researcher is able to make sense of the data. Zikmund et al (2010) views data analysis as the application of reasoning to understand the data that has been gathered with the aim of determining consistent patterns and summarizing the relevant details revealed in the investigation.To analyse is to search and identify meaningful patterns in data. (Orodho, 2005) points out that analysis means, categorizing, ordering, manipulating and summarizing of data to obtain answers to research questions.

In the questionnaire, the researcher has asked questions that attracted both qualitative and quantitative data. For the qualitative data emanating from the dichotomous yes or no questions, simple percentages were used and these may lead to descriptive statistics. Responses to the "how" questions were put in thematic areas, from which descriptive statistics emerged. To be able to make inference from such responses, the researcher intended to consider the various

themes created together with the literature and develop arguments thereafter which can then be used to make conclusions.

For the quantitative responses, the researcher used trend analysis for data collected over time, hypothesis tests for existence of significant differences and ANOVA for goodness fit and to determine whether the overall model is statistically significant. After quantitative data is obtained through questionnaires, it was prepared in readiness for analysis by editing, handling blank responses, coding, categorizing and keyed into statistical package for social sciences (SPSS) computer software for analysis. The choice of SPSS version 21 to other statistical software is that it is user friendly. The statistics generated were descriptive statistics and inferential statistics. The specific descriptive statistics will include percentages and frequencies while the inferential statistics will include a multiple linear regression model and Pearson correlation.

The multiple linear regression models wasused to measure the relationship between the independent variables and the dependent variable which are explained in the model. The regression model helps to explain the magnitude and direction of relationship between the variables of the study through the use of coefficients like the correlation, coefficient of determination and the level of significance.

3.7.1 Descriptive Statistics

Descriptive statistics is a method of presenting data quantitatively and describing it in a manageable form (Babbie& Mouton, 2001).It is the transformation of raw data into a form that can be easily understood and interpreted and usually the first form of analysis where averages are calculated, frequency distributions given and percentage distributions provided. According to

Zikmund et al. (2008), it is the most basic form of information but provides an indication of the frequency or the number of times one variable was considered at a time.

In this study, the descriptive analysis involved frequencies in their absolute and relative forms (percentage). Mean and standard deviations were used as measures of central tendencies and dispersion respectively. Minimum, maximum values and quartile values were considered.

3.7.2 Multivariate Statistics

The multivariate regression considers the combined effect of all independent variables. A multivariate regression was used. The justification of the use of the multivariate regression was because it enabled the comparison of the magnitude of the probabilities (Twisk, 2003). Put in another way, it enabled the identification of which determinants are stronger than others. In addition, it was useful in estimating the model goodness of fit and overall model significance. The study defined Xi as X1, X2 and X3 as the explanatory indicators, β and β0 as the coefficients, andthe short form of the multivariate regression was expressed as follows;

$$Y= \beta_0+\beta_1X_1+\beta_2X_2+\beta_3X_3+ \mathcal{E}_i$$

Where;

Y= Financial Performance

β_0= Constant

X_1=Production Capacity

X_2=Management Practices

X_3= Operational Practices

$\mathcal{E}_i$= margin of error

In the model α was the constant term while the coefficient β1,β2 and β3was used to measure the sensitivity of the dependent variable (Y) to unit change in the independent variable (X_1, X_2, X_3). $\mathcal{E}$ was the error term which captured the unexplained variations in the model. The results were presented in form of tables.

Using SPSS version 21, the regression model was tested to depict the relationship between the dependent and independent variables. The significance of each independent variable was also tested. Fischer distribution test called F-test was applied. It refers to the ratio between the model mean square divided by the error mean square. F-test was used to test the significance of the overall model at a 95 percent confidence level. The p-value for the F-statistic was applied in determining the robustness of the model.

The hypothesis was tested on the basis of p value. The rule of thumb was that the null hypothesis of the beta was rejected and the alternative accepted if the p value was 0.05 or less. The null hypothesis was accepted and the alternative hypothesis rejected if the p value was greater than 0.05. In other words, if the p-value is less than 0.05 then it was concluded that the model is significant and has good predictors of the dependent variable and that the results were not based on chance. If the p-value is greater than 0.05 then the model was not significant and was not used to explain the variations in the dependent variable.

3.7.3 Test for Moderation

A multiple linear regression was used to test the moderating effect of firm size on the relationship between micro factors and financial performance.

The multi- linear regression model was as indicated;

$Y= \alpha +\beta_1 X_{ii}+\beta_4 X_4+ \mathcal{E}_{ii}$

Where,

Y= Financial Performance

α = Constant

X_{ii}= Micro Factors (X_1, X_2, X_3)

X_4= Size of the firm

The moderating effect was the joint effect of size of the firm and micro factors. The significance of moderating effect was evaluated for significance at a p value of 0.05. If reported p value was less than 0.05, then the moderating effect was considered to be significant.

3.8 Ethical Consideration

For the purpose of this study, approval was sought from KCA University and a letter granted to allow the researcher to carry out the research. The researcher obtained approval from the National Council for Science and Technology to conduct the study. The researcher further sought approval from the management of the respective firms to carry out the study. The researcher explained the purpose of the study to the respondents and assured them of confidentiality of their responses and identities. Data from the secondary sources was not doctored or misrepresented to achieve any preconceived end. The researcher adhered to appropriate behaviour in relation to the right of the respondents to voluntarily participate in the study. A verbal consent was sought from the respondents before questionnaires were administered. The findings of the study were not

doctored to meet any preconceived or commercial ends. Materials and citations from other scholars were duly acknowledged by the researcher.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1Introduction

This chapter presents the findings of the study, data analysis and interpretation. The study aim was to establish the relationship between production capacity, management practices, operational practices, size of the firm and financial performance Manufacturing firms in Kenya.The analyzed data was done per objective. Section one presents descriptive statistics featuring the survey response rate; demographic profiles of the respondents who took part in the study; the confirmatory factor analysis; and the description of the variables. The percentages, means, frequencies, standard deviations, Crobachs Alpha coefficients or reliability and correlations are also computed and presented. Section two presents the results of the test of hypotheses and discussion of research findings. Parametric statistical techniques namely; simple linear regression and multiple regression techniques were used to test the relationships. The choice and use of these parametric statistical methods was informed by the measurement scales used and the purpose of the study. The descriptive data presented in section one forms the basis for hypotheses testing and further inferences. Attempts are made to explain why the findings are the way they are and to what extent they are consistent with or contrary to past empirical findings and theoretical arguments. The discussion of the findings is guided by objectives of the study.

4.2 Response Rate

The number of questionnaires that were administered was 180. A total of 172 questionnaires were properly filled and returned. This represented an overall successful response rate of 95.56% as shown on Table 4.1. According to Mugenda and Mugenda (2003) and also Kothari (2004) a

response rate of 50% is adequate for a descriptive study. Babbie (2004) also asserted that return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Based on these assertions from renowned scholars 90 % response rate is adequate for the study.

Table 4.1: Response Rate

Response	Frequency	Percent
Returned	172	95.56%
Unreturned	8	4.44%
Total	**180**	**100%**

4.3 Demographic Characteristics

This section consists of information that describes basic characteristics such as age of the respondents and years worked in their current position. The gender of the respondents is also given.

4.3.1 Gender of the Respondents

The population of this study consisted of 110 men and 62 females The numbers were arrived by inputting the data into the SPSS software version 21, then running the descriptive frequencies to generate the gender frequencies. At the end of data collection, 64% were male while 36% were female questionnaires were received, processed and analyzed using excel software. Figure 4.1 shows the analysis of men and women who participated in the study.

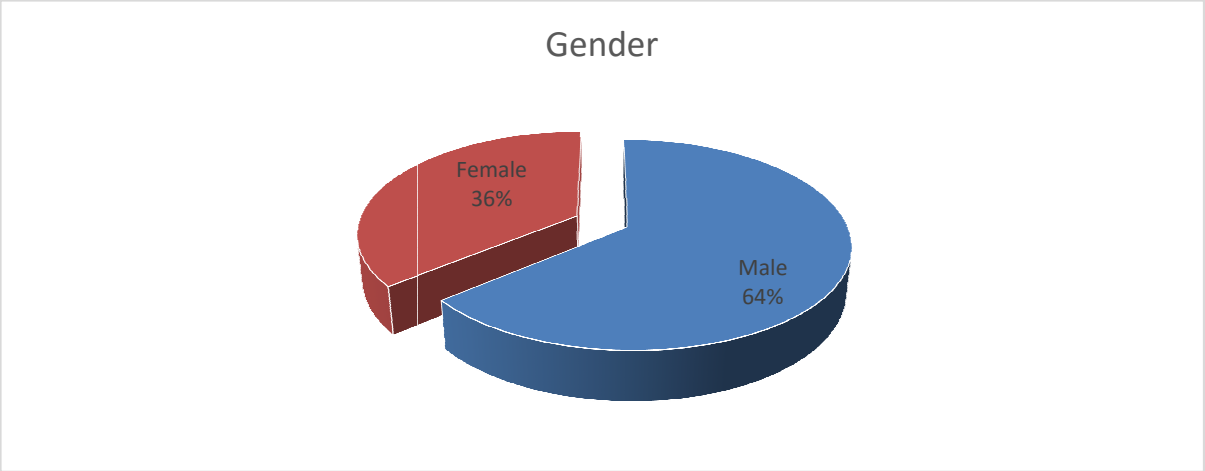

Figure 4.1: Gender of Respondents

According to the results in Figure 4.1, majority of the respondents were male who represented 64% of the sample while 36% were female.This implies that the gender composition of manufacturing firms is male dominated. Gender imbalance my lead discrimination in policies and decision-making, and their enactment will therefore affect the hiring, training, and promotion of women hence reducing performance of supply chain in the long run.

4.3.2 Age of Respondents

The respondents were requested to indicate their age brackets.The aim was to find out if the age has an influence on response and overall results.

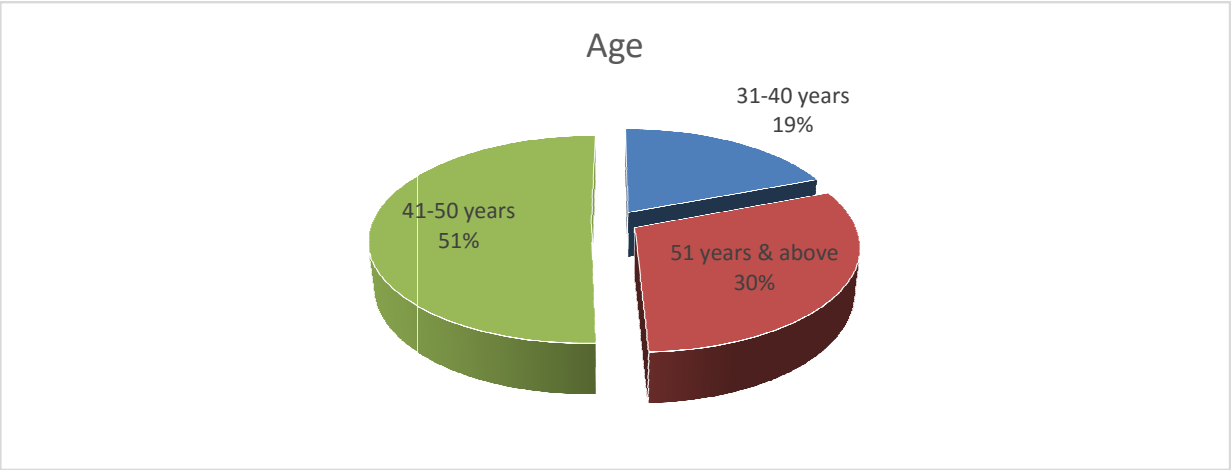

Figure 4.2: Age of Respondents

From the results in Figure 4.2, majority of the respondents (51%) were on age bracket of 41-50 years, 30% were on age bracket of 51years and above, 19% were on age bracket 31-40 years while none were below the age of 30 years old. This implies that majority of the CEOs were middle age staff who were energetic and dynamic and cable of delivering effectively and efficiently on manufacturing firms. According to the Population Situation Analysis Report (2014) the trend of population growth for persons aged 31-45 years has increased from about 12% in 1999 to nearly 15% in the year 2009. Therefore, the finding of this study reflects the current trend of the Kenya population indices.

4.3.3 Level of Education

In question 5 of section A of the questionnaire, the respondents were requested to indicate their highest level of education.The aim was to find out if the level of education has an influence on response and overall results.

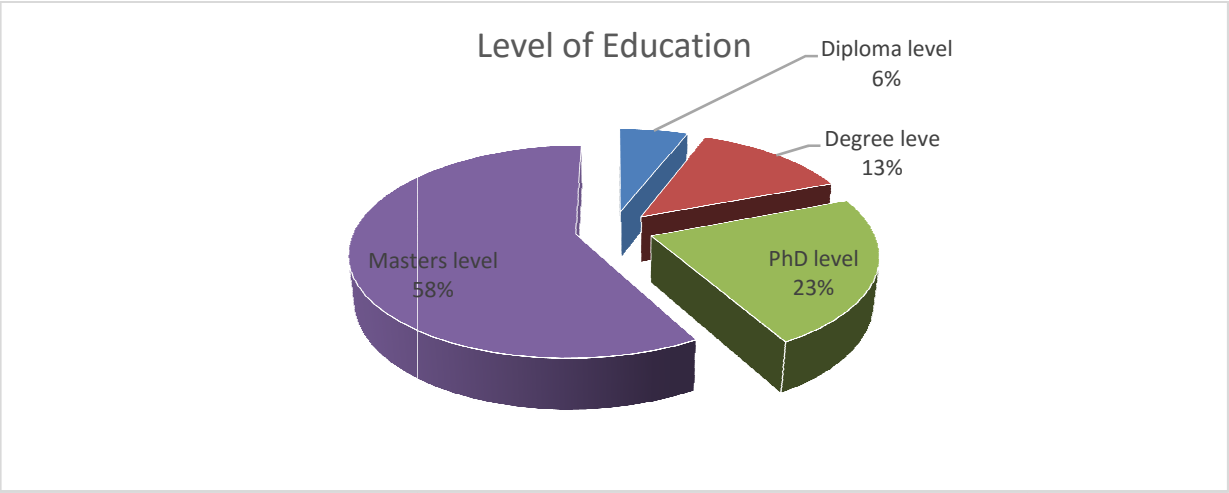

Figure 4.3: Level of Education

From the results in Figure 4.3; 58% of the respondents and who were the majority had masters qualifications, 23% had PhDqualification, 13% had a degree qualification while 6% of the respondents had diploma qualification.

Brown and Duguid (2003) also found that highly skilled personnel enhance production of high quality outcomes and effective quality improvement in an enterprise. The high level of respondents having post graduate level of education in this study indicates the complexity and operations of manufacturing firms is paramount to succeed.

4.3.4 Years worked in the firm

The respondents were requested to indicate years worked in the firm.The aim was to find out if the years worked in the firm had an influence on response and overall results.

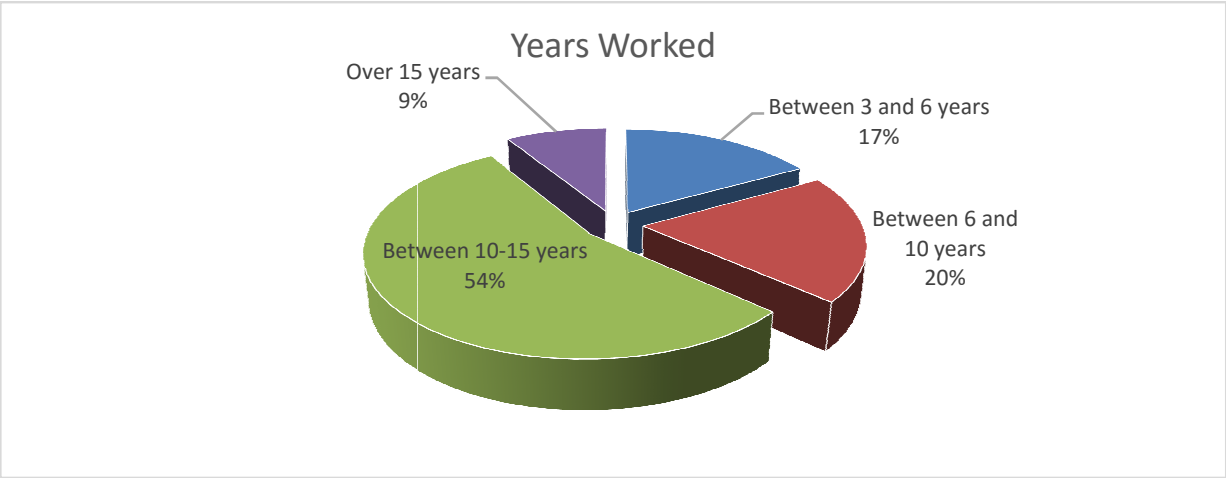

Figure 4.4: Years Worked

From the results in Figure 4.4; 54% of the respondents and who were the majority had worked for between 10-15 years, 20% had worked for between 6 and 10 years, 17% had had worked for between 3 and 6 years while 9% of the respondents had worked for over 15 years. This implies that majority of the respondents have worked for a good period of time therefore have experience. Experience depends on the number of years of service in the sector involved. It is assumed that the longer one worked in an organization, the more they understand the organization and hence the higher the ability to articulate issues pertaining to the organization (Afande, 2013). The experience shows high staff competence in terms of experience among CEOs in manufacturing firms which translates to better performance in management of functions and financial management.

4.4 Influence of production capacity on financial performance

4.4.1 Descriptive statistics

This section presents the descriptive results on statements on production capacityon financial performance. Descriptive statistics were obtained through running the statements of each objective using descriptive custom table and presenting in percentages. The mean and the standard deviations were obtained through running the descriptive statistics. In this study, production capacity on financial performance was measured by eight questions. The respondents were asked to give their opinion regarding production capacity on financial performance. Specifically, they were asked to rate on a scale of 1 to 5 1=Strongly disagree, 2-Disagree, 3-Neutral, 4-Agree and 5-Stronly agree. The analysis is on Table 4.2. The highest of the mean was 5 while the lowest was 1. Therefore, a mean of 1=Strongly disagree, 2disagree, 3-Neutral, 4-agree and 5-Strongly agree.

Table 4.2: Production Capacity

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
Production capacity has been on an increasing trend	4.7%	7.6%	10.5%	47.7%	29.7%	3.90	1.06
Production capacity planning has enable increase in production	5.2%	9.9%	13.4%	37.2%	34.3%	3.85	1.15
Several trainings on production effectiveness has improved the production rate	9.9%	5.8%	15.1%	40.7%	28.5%	3.72	1.22
The quality of production has been maintained despite the increase in production	19.2%	14.5%	3.5%	45.3%	17.4%	3.27	1.42
Increase in revenue is main mainly caused by the high production capacity	49.4%	33.7%	1.7%	2.3%	12.8%	1.95	1.33
Innovation has led to increase in production capacity	14.5%	6.4%	9.3%	17.4%	52.3%	3.87	1.48
New technologies have aided in the production of quality and quantity units	4.7%	12.8%	9.3%	40.7%	32.6%	3.84	1.15
The ease of production has increase revenue and hence financial performance	4.7%	4.7%	10.5%	40.1%	40.1%	4.06	1.06

According to results in Table 4.3, majority of the respondents who represented 47.7% of the respondents agreed that that production capacity has been on an increasing trend, 29.7% strongly agreed, 10.5% were neutral, and 7.6% disagreed while only 4.7% strongly disagreed. In general, 77.4% agreed with the statement that production capacity has been on the upward trend. Results also indicated that 71.5% agreed that production capacity planning has enable increase in production, 62.7% agreed that the quality of production has been maintained despite the increase in production, 83.1% disagreed with the statement that increase in revenue is main mainly caused by the high production capacity, 69.7%agreed with the statement that innovation has led to increase in production capacity, 73.3% agreed with the statement that new technologies have aided in the production of quality and quantity unitswhile 80.2% of the respondents agreed that the ease of production has increase revenue and hence financial performance.

On a five-point scale, the average mean of the responses was 3.56 which mean that majority of the respondents agreed with most of the statements; however, the answers were varied as shown by a standard deviation of 1.23. The highest of the mean was 5 while the lowest was 1. Therefore, a mean of 1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly agree.

4.4.2 Relationship between Production Capacityand Financial performance of Manufacturing Firms.

Simple linear regression was carried out to determine the relationship between production capacity and financial performance.Regression analysis was performed by using the composites of the two variables. The data was input to the SPSS software. Results were then presented in Tables 4.3, 4.4 and 4.5.

Table 4.3: Model Fitness

Indicator	Coefficient
R	0.224
R Square	**0.050**
Adjusted R Square	0.45
Std. Error of the Estimate	0.4506239

The results presented in Table 4.3 present the fitness of model used in the regression model in explaining the study phenomena. Production capacity was found to be satisfactory variables in explaining financial performance of manufacturing firms in Kenya. This is supported by coefficient of determination also known as the R square of 5.0 %. This means that production capacity explains 5.0 of the variations in the dependent variable which is financial performance of manufacturing firms. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 4.4: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.832	1	1.832	9.023	.003b
	Residual	34.521	170	0.203		
	Total	36.353	171			

Table 4.4 provides the results on the analysis of the variance (ANOVA). The results indicate that the model was statistically significant. Further, the results imply that the independent variables, production capacity, are good predictors of financial performance in manufacturing firms. This was supported by an F statistic of 9.023 and the reported p=0.003 which was less than the conventional probability of 0.05significance level.

Regression of coefficients results in Table 4.5 shows that financial performance of manufacturing firms and production capacity are positively and significant related (r=0.0117, p<0.05).

Table 4.5: Regression of Coefficients

sub construct variable	B	Std. Error	Beta	t	sig
(Constant)	3.084	0.155		19.885	0.000
Production Capacity	**0.117**	0.039	0.224	3.004	**0.003**

4.4.3 Hypothesis Testing

The hypothesis was tested by using simple linear regression (Table 4.5). The acceptance/rejection criteria were that, if the p value is greater than 0.05, the H_0 is not rejected but if it's less than 0.05, the H_0 fails to be accepted.Based on this objective and literature review, the following null hypothesis was formulated for testing;H_{01}: Production capacity has no significant effect on the financial performance of manufacturing firms.

Results in Table 4.5 above show that the p-value was 0.003<0.05. This indicated that the null hypothesis was rejected hence production capacity has significant effect on the financial performance of manufacturing firms.

This study is consistentBorman, (2004) that the production capacity of a firm is largely influences financial performance by the number, quality and expertise of the employees in the firm and in manufacturing firms. The major concerns of manufacturing companies should be focused on improving worker productivity, which is one of the financial performance determinants.

4.5 Influence of management practices on financial performance of manufacturing firms

4.5.1 Descriptive statistics

This section presents the descriptive results on statements on management practices on financial performance. Descriptive statistics were obtained through running the statements of each objective using descriptive custom table and presenting in percentages. The respondents were asked to give their opinion regarding management practices on financial performance of manufacturing firms in Kenya.

Table 4.6: Management Practices

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
Organized Management is responsible for increased profitability of the company	39.0%	43.6%	1.2%	7.6%	8.7%	2.03	1.22
In our firm the managers ensure that there are clear roles vision and mission of the firm	7.6%	16.3%	5.8%	29.7%	40.7%	3.80	1.33
In our firm, there is a proper management policy and thus translating to increased profitability	8.7%	9.9%	11.0%	25.0%	45.3%	3.88	1.32
The flow of information, resources and feedback is all attributed to good management style	6.4%	5.8%	16.9%	33.1%	37.8%	3.90	1.16
The leadership ensures employees are innovative	7.0%	8.7%	17.4%	28.5%	38.4%	3.83	1.23
Everyone's opinion is taken highly and weighted in decision making	4.7%	7.6%	8.1%	51.2%	28.5%	3.91	1.04
Management upholds accountability and transparency leading to improved firm's revenue	17.4%	16.3%	10.5%	27.9%	27.9%	3.33	1.47
The reporting channels are clear and quick	12.2%	4.7%	15.7%	32.0%	35.5%	3.74	1.32
Average						**3.55**	**1.26**

According to results in Table 4.3, 82.6% disagreed with the statement that organized management is responsible for increased profitability of the company. Results also indicated that70.4% agreed that their firm managers ensured that there are clear roles vision and mission, 70.3% agreed that there was a proper management policy in their firm which translate to increased profitability, 70.9% agreed with the statement that the flow of information, resources and feedback was all attributed to good management style, 79.9%agreed with the statement that the leadership ensures employees were innovative, 79.7% agreed with the statement that Everyone's opinion is taken highly and weighted in decision making,55.8% agreed thatmanagement upholds accountability and transparency leading to improved firm's revenue while 77.5% of the respondents agreed that the reporting channels were clear and quick.

On a five-point scale, the average mean of the responses was 3.55 which mean that majority of the respondents agreed with most of the statements; however, the answers were varied as shown by a standard deviation of 1.26. The highest of the mean was 5 while the lowest was 1. Therefore, a mean of 1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly agree. Therefore, average mean of the responses was 3.55 which mean that majority of the respondents agreed with most of the statements.

4.5.2 Relationship between Management Practices and Financial performance of Manufacturing Firms.

Simple linear regression was carried out to determine the relationship between management practices and financial performance. Regression analysis was performed by using the composites of the two variables. The data was input to the SPSS software. Results were then presented in Tables 4.7, 4.8 and 4.9.

Table 4.7: Model Fitness

Indicator	Coefficient
R	0.381
R Square	**0.145**
Adjusted R Square	0.140
Std. Error of the Estimate	0.4275327

The results presented in Table 4.7 present the fitness of model used in the regression model in explaining the study phenomena. Management practices were found to be satisfactory variables in explaining financial performance of manufacturing firms in Kenya. This is supported by coefficient of determination also known as the R square of 14.5%. This means that management practicesexplain 14.5% of the variations in the dependent variable which is financial

performance of manufacturing firms. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 4.8: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.279	1	5.279	28.883	**.000b**
	Residual	31.073	170	0.183		
	Total	36.353	171			

Table 4.8 provides the results on the analysis of the variance (ANOVA). The results indicate that the model was statistically significant. Further, the results imply that the independent variables, management practices, are good predictors of financial performance in manufacturing firms. This was supported by an F statistic of 28.883 and the reported p=0.00 which was less than the conventional probability of 0.05significance level.

Regression of coefficients results in Table 4.9 shows that financial performance of manufacturing firms and management practices are positively and significant related (r=0.295, p<0.05).

Table 4.9: Regression of Coefficients

sub construct variable	B	Std. Error	Beta	t	sig
(Constant)	2.447	0.206		11.895	0.000
Management Practices	**0.295**	0.055	0.381	5.374	**0.000**

4.5.3 Hypothesis Testing

The hypothesis was tested by using simple linear regression (Table 4.9). The acceptance/rejection criteria were that, if the p value is greater than 0.05, the H_0 is not rejected but if it's less than 0.05, the H_0 fails to be accepted.Based on this objective and literature review, the following null hypothesis was formulated for testing;H_{02}: Management practices have no significant effect on the financial performance of manufacturing firms.

Results in Table 4.9 above show that the p-value was 0.000<0.05. This indicated that the null hypothesis was rejected hence management practices have significant effect on the financial performance of manufacturing firms.

This study is consistentCarolyne (2015), who found out that good management practices had a constructive impact on the financial performance of manufacturing firms. Walker (1992) defines management practices as the means of aligning the management of human resources strategy in support of accomplishing former and defining it.

4.6 Influence of operational practices on financial performance of manufacturing firms

4.6.1 Descriptive statistics

This section presents the descriptive results on statements on operational practices on financial performance. Descriptive statistics were obtained through running the statements of each objective using descriptive custom table and presenting in percentages. The respondents were asked to give their opinion regarding operational practices on financial performance of manufacturing firms in Kenya.

Table 4.10: Operational Practices

Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
Improved operational practices has led to better revenues	4.7%	5.8%	9.3%	49.4%	30.8%	3.96	1.03
Efficient operation promotes better service delivery in the firm	4.7%	9.9%	12.2%	36.6%	36.6%	3.91	1.14
Before any manufacturing process the firm calculates the risks and returns	17.4%	16.3%	14.0%	29.7%	22.7%	3.24	1.42
The quality of inputs and outputs is clearly supervised to meet the standards	6.4%	9.9%	4.7%	52.9%	26.2%	3.83	1.12
Our HR department motivates the staff through attractive remuneration and compensation thus improved firm's performance	47.7%	34.9%	2.3%	5.2%	9.9%	1.95	1.27
The operation efficiency has ensured normal risks and losses are minimized	14.5%	4.7%	10.5%	15.7%	54.7%	3.91	1.47

According to results in Table 4.10, 80.2% agreed with the statement that improved operational practices has led to better revenues, 73.2% agreed that efficient operation promotes better service delivery in the firm, 52.4% agreed that before any manufacturing process, their firm calculates the risks and returns, 79.1% agreed with the statement that the quality of inputs and outputs was clearly supervised to meet the standards, 82.6%disagreed with the statement that HR department motivates the staff through attractive remuneration and compensation thus improved firm's performance, while 70.4% of the respondents agreed that The operation efficiency has ensured normal risks and losses are minimized.

On a five-point scale, the average mean of the responses was 3.47 which mean that majority of the respondents agreed with most of the statements; however, the answers were varied as shown by a standard deviation of 1.24. The highest of the mean was 5 while the lowest was 1. Therefore, a mean of 1=strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and

5=Strongly agree. Therefore, average mean of the responses was 3.47 which mean that majority of the respondents agreed with most of the statements.

4.6.2 Relationship between Operational Practices and Financial performance of Manufacturing Firms.

Simple linear regression was carried out to determine the relationship between operational practices and financial performance.Regression analysis was performed by using the composites of the two variables. The data was input to the SPSS software. Results were then presented in Tables 4.11, 4.12 and 4.13.

Table 4.11: Model Fitness

Indicator	Coefficient
R	0.369
R Square	**0.137**
Adjusted R Square	0.131
Std. Error of the Estimate	0.4297047

The results presented in Table 4.11 present the fitness of model used in the regression model in explaining the study phenomena. Operational practices were found to be satisfactory variables in explaining financial performance of manufacturing firms in Kenya. This is supported by coefficient of determination also known as the R square of 13.7%. This means that operational practices explain 13.7% of the variations in the dependent variable which is financial performance of manufacturing firms. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 4.12: Analysis of Variance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.963	1	4.963	26.878	**0.000b**
	Residual	31.390	170	0.185		
	Total	36.353	171			

Table 4.12 provides the results on the analysis of the variance (ANOVA). The results indicate that the model was statistically significant. Further, the results imply that the independent variables, operational practices, are good predictors of financial performance in manufacturing firms. This was supported by an F statistic of 26.878 and the reported p=0.00 which was less than the conventional probability of 0.05significance level.Regression of coefficients results in Table 4.13 shows that financial performance of manufacturing firms and operational practicesare positively and significant related (r=0.327, p<0.05).

Table 4.13: Regression of Coefficients

sub construct variable	B	Std. Error	Beta	t	sig
(Constant)	2.173	0.255		8.188	0.000
Operational Practices	**0.394**	0.076	0.369	5.184	**0.000**

4.6.3 Hypothesis Testing

The hypothesis was tested by using simple linear regression (Table 4.13). The acceptance/rejection criteria were that, if the p value is greater than 0.05, the H_0 is not rejected but if it's less than 0.05, the H_0 fails to be accepted.Based on this objective and literature review, the following null hypothesis was formulated for testing;H_{03}: Operational practices have no significant effect on the financial performance of manufacturing firms.

Results in Table 4.13 above show that the p-value was 0.000<0.05. This indicated that the null hypothesis was rejected hence Operational practices have significant effect on the financial performance of manufacturing firms.This study is consistentCox and Blackstone (2002) that operational practice is connected to financial performance of firms. They observed that operations management as the preparation, scheduling, and control of activities that transform inputs to finished goods and services which clearly corresponds to the administrative role of production economics.

4.7 Correlation Analysis

Preliminary analysis was carried out to determine whether there were significant associations between the micro factors and the financial performance. In this study, Pearson's product-moment correlation coefficient (r) was used to explore relationships between the variables, specifically to assess both the direction and strength. This was crucial to assess the nature of relationships existing between the variables before carrying out further analysis.

Pearson's product-moment correlation coefficient (r) was used to examine the extent of correlation between the variables of study and to show the strength of the linear relationships between the variables in the regression. r ranges between ±1. Where r= +0.7 and above it indicates a very strong positive relationship; r=+0.5 to below 0.7 is a strong positive relationship; r=0.3-0.49 is a moderate positive relationship while r=0.29 and below indicates a weak positive relationship. Where r=0 it indicates that there is no relationship and if less than 0 then a negative correlation between variables exists. (Esther- Smith, Thorge and Love, 1999). The results of correlation analysis are presented in table 4.14.

The correlation analysis results in table 4.14 revealed that there was a positive and a significant relationship between production capacity and financial performance (r=0.370, p=0.000). The results indicated that there was a positive and a significant relationship between Management Practices and financial performance (r=0.629, p=0.001). The results also indicated that there was a positive and a significant relationship between Operational practices and financial performance (r=0.281, p=0.001).

Table 4.14: Correlation analysis

		Financial Performance	Production capacity	Management Practices	Operational practices
Financial Performance	Pearson Correlation	1			
	Sig. (2-tailed)				
Production capacity	Pearson Correlation	.370**	1		
	Sig. (2-tailed)	0.00			
Management Practices	Pearson Correlation	.629**	.372**	1	
	Sig. (2-tailed)	0.00	0.00		
Operational practices	Pearson Correlation	.292**	.612**	.522**	1
	Sig. (2-tailed)	0.00	0.00	0.00	
	** Correlation is significant at the 0.01 level (2-tailed).				

4.8 Influence of firm size on the relationship between micro factors and financial performance of manufacturing firms

4.8.1 JointRegression model before moderation

A regression model was first run before moderation. A regression model was run to determine the relationship between independent and dependent variables. The results in Table 4.15 present the fitness of model used in explaining the relationship between production capacity,

management practices, operational practicesand financial performance of manufacturing firms in Kenya. The independent variables (production capacity, management practices, operational practices) were found to be satisfactory variables in determining the financial performance of manufacturing firms in Kenya. This was supported by the coefficient of determination also known as the R-square of 0.251. This means that production capacity, management practices and operational practices explain 25.1% of the variations in the dependent variable which is financial performance of manufacturing firms in Kenya. These results further mean that the model applied to link the relationship of the variables was satisfactory.

Table 4.15 Model Fitness

R	R Square	Adjusted R Square	Std. Error of the Estimate
0.501	0.251	0.237	0.402669
Predictors: (Constant), Operational practices, Production capacity, Management Practices			

Table 4.16 provides the results on the analysis of the variance (ANOVA). The results indicate F statistic of 18.734 which is statistically significant as supported by the reported p=0.00 which was less than the conventional probability of 0.05 significance level. Further, the results imply that the independent variables, production capacity, management practices and operational practices, were good predictors of financial performance of manufacturing firms in Kenya.

Table 4.16: Analysis of Variance

	Sum of Squares	df	Mean Square	F	Sig.
Regression	9.113	3	3.038	18.734	**0.000**
Residual	27.24	168	0.162		
Total	36.353	171			

Regression of coefficients results in table 4.17 shows that Production capacity and Firm financial performance are positively and significantly related (r=0.092, p=0.000). The table further indicates that Management practicesand firm financial performance are positively and significantly related (r=0.227, p=0.009). It was further established that Operational practicesand firm financial performance were positively and significantly related (r=0.286, p=0.000).

Table 4.17: Regression of Coefficients before moderation

Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.348	0.298		4.518	0.000
	Production capacity	0.092	0.035	0.177	2.638	0.009
	Management Practices	0.227	0.054	0.293	4.204	0.000
	Operational practices	0.286	0.075	0.269	3.843	0.000
a Dependent Variable: Financial Performance						

A regression model before including firm size as a moderating variable was therefore of the form:

$Y=\alpha+ \beta_1X_1+ \beta_2X_2+ \beta_3X_3$..... *(3)*

Where;

Y= Financial Performance

X1=Production Capacity

X2=Operational Practices

X3=Management Practices

$Y=1.348+ 0.092X_1+ 0.286X_2+ 0.227X_3$

The hypothesis was tested by running an ordinary least square regression model. The acceptance/rejection criteria were that, if the p value is greater than 0.05, the Ho is not rejected but if it's less than 0.05, the Ho fails to be accepted.

The null hypothesis for the first objective was that there is no significant relationship between production capacity and financial performance of manufacturing firms in Kenya. The p-value of 0.009 indicated that the null hypothesis was rejected hence there is a positive significant relationship between production capacity and financial performance of manufacturing firms in Kenya.

The null hypothesis for the second objective was that there is no significant relationship between management practices and financial performance of manufacturing firms in Kenya. The p-value of 0.000 indicated that the null hypothesis was rejected hence there is a positive significant relationship between management practicesand financial performance of manufacturing firms in Kenya.

The null hypothesis for the third objective was that there is no significant relationship between operational practices andfinancial performance of manufacturing firms in Kenya. The p-value of 0.000 indicated that the null hypothesis was rejected hence there is a positive significant relationship between operational practices andfinancial performance of manufacturing firms in Kenya.

4.8.2 Regression model after moderation

Regression analysis was performed by using the composites of the variables. The data was input to the SPSS software. Results were then presented in Tables 4.18, 4.19 and 4.20.

Table 4.18: Model Fitness

Indicator	Coefficient
R	0.542
R Square	**0.294**
Adjusted R Square	0.281
Std. Error of the Estimate	0.3909937

The results presented in Table 4.18 present the fitness of model used in the regression model in explaining the study phenomena. The composite variables were found to be satisfactory variables in explaining financial performance of manufacturing firms in Kenya. This is supported by coefficient of determination also known as the R square of 29.4%. This means that composite variables explain 29.4% of the variations in the dependent variable which is financial performance of manufacturing firms. This results further means that the model applied to link the relationship of the variables was satisfactory.

Table 4.19: Analysis of Variance of Moderated Model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.670	3	3.557	23.264	**.000b**
	Residual	25.683	168	0.153		
	Total	36.353	171			

Table 4.19 provides the results on the analysis of the variance (ANOVA). The results indicate that the model was statistically significant. Further, the results imply that the independent variables are good predictors of financial performance in manufacturing firms. This was supported by an F statistic of 23.264 and the reported p=0.00 which was less than the conventional probability of 0.05significance level.

A regression model was secondly run after moderation.

Table 4.20:Regression model after moderation

Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.202	0.285		4.221	0.000
	Micro Factors	0.434	0.074	0.4	5.861	0.000
	Firm size	0.165	0.046	0.246	3.593	0.000
	X* X_4	0.026	0.009	0.187	2.857	0.005

a Dependent Variable: Financial Performance

Regression of coefficients results after moderation in table 4.18 shows that micro factors and firm financial performance are positively and significantly related (r=0.434, p=0.000). It was further established that firm size and firm financial performance were positively and significantly related (r=0.165, p=0.000).

Further the interaction between the independent variables and moderating variable (firm size) is statistically significant (0.005), therefore firm size moderate the relationship between production capacity, management practices, operational practices and firm financial performance.

A regression model after including firm size as a moderating variable was therefore of the form:

Y= 1.202 +0.434X+0.165X4+0.026X* X4

Where,

Y= Financial Performance

X= Micro Factors

X4= Size of the firm

Firm size is a moderator variable; thus, moderation is supported. Since the calculated p value of the interaction is 0.005<0.05, the null hypothesis is rejected and thus firm size

positivelymoderates the relationship between production capacity, management practices, operational practices and firm financial performance.

This finding is consistent with that of Beard &Dess, (1981) that the probability of firm growth, firm failure, and the variability of firm growth decreases as firm'sage. Firms with the greatest market share and assets report relatively better performance. The market power and access to capital markets of large firms may give them access to investment opportunities that are not available to smaller ones. Also, Amato and Wilder, (1985) that with the investment power, such big firms are able to diversify their portfolios and hedge their operating risks better. It is no surprise that bigger firms when managed well spread their influence in many sectors of the economy they operate.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter is a summary of major findings of the study, conclusions and recommendations. The structure of the chapter is guided by the research objectives and hypotheses. Attempt is made to relate the results to the objectives of the study and hypotheses. This is followed by the main limitations of the study and recommendations for further research as well as policy and practice.

5.2 Summary of Findings

The main purpose of this study was to empirically determine the effect of micro factors on financial performance of manufacturing firms in Kenya. The data for the study was collected from 180 manufacturing firms using a structured self-administered questionnaire.

5.2.1 Effect of production capacity on the financial performance of manufacturing firms in Kenya

Thefirst objective of the study was to establish the relationship production capacity and manufacturing firms'financial performance. From this objective, it was hypothesized that there is no relationship between production capacity and manufacturing firms' financial performance. The results showed that production capacity has a positive and statistical significant effect on manufacturing firms'financial performance. This implied that an increase in production capacity will lead to a positive change in manufacturing firms' financial performance. This was further supported by descriptive results findings where in on a five-point scale, the average mean of the

responses was 3.56 which mean that majority of the respondents agreed with most of the statements on production capacity and firm performance.

This finding was in agreement with that of Borman, (2004) that the production capacity of a firm is largely influences financial performance by the number, quality and expertise of the employees in the firm and in manufacturing firms. The major concerns of manufacturing companies should be focused on improving worker productivity, which is one of the financial performance determinants.

5.2.3 Effect of management practices on the financial performance of manufacturing firms in Kenya

The secondobjective of the study sought to assess the effect of management practices on manufacturing firms' financial performance. From this objective, it was hypothesized that there is no relationship between management practices on manufacturing firms' financial performance. The results showed that management practices strategy have a positive and statistical significant effect on manufacturing firms' financial performance. This implies that an improvement in management practices will lead to an improvement in manufacturing firms' financial performance. This was further supported by descriptive results findings where on a five-point scale, the average mean of the responses was 3.55 which mean that majority of the respondents agreed with most of the statements on management practices and firm performance

This finding agreed with that of Carolyne (2015),who found out that good supplier management practices had a constructive impact on the financial performance of manufacturing firms. Walker (1992) defines management practices as the means of aligning the management of human resources strategy in support of accomplishing former and defining it.

5.2.4 Effect of operational practices on financial performance of manufacturing firms in Kenya

The third objective sought to determine effect of operational practices on manufacturing firms' financial performance.From this objective, it was hypothesized that there is no relationship between operational practices on manufacturing firms' financial performance. The results showed that operational practices strategy has a positive and statistical significant effect on manufacturing firms' financial performance.The results mean that an improvement in operational practices will lead to an improvement in manufacturing firms' financial performance. This was further supported by descriptive results findings where on a five-point scale, the average mean of the responses was 3.47 which mean that majority of the respondents agreed with most of the statements on operational practices and firm performance.

This finding agreed with that of Cox and Blackstone (2002) that operational practice is connected to financial performance of firms. They observed that operations management as the preparation, scheduling, and control of activities that transform inputs to finished goods and services which clearly corresponds to the administrative role of production economics.

5.2.5 Effect of firm size on the relationship between micro factors and financial performance of manufacturing firms in Kenya

The study sought to establish the moderating effect of firm size on the relationship between micro factors and financial performance of manufacturing firms in Kenya. It was hypothesized that firm size has no significant moderating effect on micro factors and financial performance of manufacturing firms in Kenya.Simple linear regression analyses (for individual independent effect) and multiple regression analysis (for joint effect) were carried out. It was established that

firm size and firm financial performance were positively and significantly related. Further, the interaction between the independent variables and moderating variable (firm size) was statistically significant, therefore firm size moderate the relationship between production capacity, management practices, operational practices and firm financial performance.

Table 5.1 outlines the objectives and corresponding hypotheses that guided the study, the results and remarks on hypotheses. Linear and multiple regression analyses statistical tools were used to analyze the data.

Table 5.1: Summary of Tests of Hypotheses and Results

Objective	Hypotheses	Results	Remarks on Hypotheses
To assess the effect of production capacity on the financial performance of manufacturing firms in Kenya	Ho1: Production capacity has no significant effect on the financial performance of manufacturingfirms	R^2=0.050, p<0.003; F=9.023; β=0.117; t=3.004, p<0.003.	Reject Ho_1
To evaluate the effect of management practices on the financial performance of manufacturing firms in Kenya	Ho2: Management practices have no significant effect on the financial performance of manufacturing firms.	R^2=0.145, p=0.00; F=28.883; β=0.295; t=5.374, p=0.000.	Reject Ho_2
To establish the effect of operational practices on the financial performance of manufacturing firms in Kenya	Ho3: Operational practices have no significant effect on the financial performance of manufacturing firms.	R_2=0.137; p=0.000, F=26.878; β=.394, t=5.187, p=0.000	Reject Ho_3
To establish the moderating effect of firm size on the relationship between micro factors and financial performance of manufacturing firms in Kenya.	Ho4: Firm size has no significant moderating effect on the relationship between micro factors and financial performance of manufacturing firms in Kenya	R_2=0.294; p=0.000, F=23.264; β=0.026, t=2.857, p=0.005	Reject Ho_4

5.3 Conclusion

The main purpose of this study was to empirically determine the effect of micro factors on financial performance of manufacturing firms in Kenya.

The study concluded that there is a positive relationship between production capacity and manufacturing firms' financial performance.

Secondly, the studyconcluded that there is a positive relationship between management practices and manufacturing firms' financial performance.

Thirdly, the study concluded that there is a positive relationship between operational practices and manufacturing firms' financial performance.

The study further concluded that there is a positive relationship between the moderating effect on micro factors and manufacturing firms' financial performance.

Based on these observations, the study empirically confirmed that micro factors have a significant positive effect on the financial performance of manufacturing firms in Kenya.

5.4 Limitations of the Study

During the research process, the researcher experienced a number of limitations, but which did not have any significant interference with the outcome of the study. The first limitation was the geographical spread of the organizations. The researcher had to travel and in some cases, send the questionnaires by email; this led to delays in receiving responses. However, the completed questionnaires were received within a reasonable time for analysis.

The second limitation was the nature of the data collection instrument and procedures that were adopted by the researcher. The survey questionnaire was a structured self-report and self-

administered instrument that relied upon the integrity of the respondents. Nevertheless, we believe that the respondents were realistic in their responses to the survey.

Moreover, as a result of the increased competition there has grown a lot of mistrust and most players in the industry manage information regarding its operations. It was therefore a great challenge to the researcher. The researcher ensured anonymity to encourage the respondents to share their records for research purposes only.

5.5 Suggestions for Further Research

The study sought to determine the effect of micro factors on financial performance of manufacturing firms and therefore an area for further studies could consider service and Insurance companies for the purpose of making a comparison of the findings with those of the current study.Future researchers could also consider introducing different variables other than micro factors discussed and firm characteristics in testing for mediation and moderation effect of such variables on the relationship macro factors and firm financial performance.

5.6 Chapter Summary

Chapter Five has presented the summary, conclusion and recommendations of the study. The chapter begins with the summary of objectives of the study, which are presented in Table 5.1. Out of the four hypotheses tested: all the null hypotheses were rejected. The broader implications of the findings for practice, limitations of the study and suggestions for areas of future research are also provided.

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APPENDICES

Appendix I: Letter of Introduction

RE: OFFICIALS OF MANUFACTURING FIRMS

I am a master's student at KCA University conducting a research on: Effect of micro factors on the financial performance of manufacturing firms listed in the Nairobi Securities Exchange**.** I hereby request you for the below stated information required for me to achieve my research objectives as part of requirement for my MSC degree.

Information offered will be treated confidentially and used for the purpose of this research only. The findings of the research will ultimately help improve the performance of this company and especially the effectiveness of initiating and implementing business strategies.

Appreciation is offered as you aid in the creation of new knowledge to aid both the academy and the industry.

Regards,

……..

Dorothy Koki Mutunga,

The Researcher/ Student

Appendix II: Questionnaire

SECTION A:DEMOGRAPHIC DATA

Tick appropriately to responds to the following questionnaires and supply additional information on the spaces provided.

1. Gender
   a) Male ( )
   b) Female ( )
2. Age
   a) Less than 30 years( )
   b) 31-40 years( )
   c) 41-50 years( )
   d) 51 years & above ( )

3.Highest level of education

a)Diploma level( )

b) Degree level( )

c) Masters level( )

d) PhD level( )

4.How many years have you been at this firm?

a) Less than 3 year
b) Between 3 and 6 years
c) Between 6 and 10 years
d) Between 10 and 15 years
e) Over 10 years

5.In which of the following categories of manufacturing does the company fall

a) Cement Manufacturing
b) Beverage Production
c) Gas Production
d) Electrical Cables
e) Paint Manufacturing
f) Cigarette and Tobacco Manufacturing

SECTION B: PRODUCTION CAPACITY

Please tick the extent to which you agree with the following statements

Statements	**Strongly Disagree [1]**	**Disagree [2]**	**Neutral [3]**	**Agree [4]**	**Strongly Agree [5]**
Production capacity has been on an increasing trend					
Production capacity planning has enable increase in production					
Several trainings on production effectiveness has improved the production rate					
The quality of production has been maintained despite the increase in production					
Increase in revenue is main mainly caused by the high production capacity					
Innovation has led to increase in production capacity					
New technologies have aided in the production of quality and quantity units					
The ease of production has increase revenue and hence financial performance					

In your opinion, does production capacity influence financial performance?

a) Yes
b) No

If yes, to what extend does it influence financial performance

a) Low extend
b) Moderate extend
c) High extend

SECTION C: MANAGEMENT PRACTICES

Please indicate the extent to which you agree with the following statements

Statements	**Strongly Disagree [1]**	**Disagree [2]**	**Neutral [3]**	**Agree [4]**	**Strongly Agree [5]**
Organized Management is responsible for increased profitability of the company					
In our firm the managers ensure that there are clear roles vision and mission of the firm					
In our firm, there is a proper management policy and thus translating to increased profitability					
The flow of information, resources and feedback is all attributed to good management style					
The leadership ensures employees are innovative					
Everyone's opinion is taken highly and weighted in decision making					
Management upholds accountability and transparency leading to improved firm's revenue					
The reporting channels are clear and quick					

In your opinion, do management practices influence financial performance?

c) Yes
d) No

If Yes, to what extend does it influence financial performance

d) Low extend
e) Moderate extend
f) High extend

SECTION D: OPERATIONAL PRACTICES

Please indicate the extent to which you agree with the following statements

Statements	Strongly Disagree [1]	Disagree [2]	Neutral [3]	Agree [4]	Strongly Agree [5]
Improved operational practices has led to better revenues					
Efficient operation promotes better service delivery in the firm					
Before any manufacturing process the firm calculates the risks and returns					
The quality of inputs and outputs is clearly supervised to meet the standards					
Our HR department motivates the staff through attractive remuneration and compensation thus improved firm's performance					
The operation efficiency has ensured normal risks and losses are minimized					

In your opinion, do operation practices influence financial performance?

e) Yes
f) No

If Yes, to what extend does it influence financial performance

g) Low extend
h) Moderate extend
i) High extend

SECTION E: SIZE OF THE FIRM

Please indicate how well the following indicators determine the magnitude of firm size in your organization

Indicators	**Very Low [1]**	**Low [2]**	**Moderate [3]**	**High [4]**	**Very High [5]**
Asset Base					
Capital Size					
Market Capitalization					
Revenue Size					
Customer Base					
Number of Employees					

SECTION F: FINANCIAL PERFORMANCE OF PRODUCTION-BASED FIRMS.

Please indicate the extent to which you agree with the following statements

	Strongly Disagree [1]	Disagree [2]	Neutral [3]	Agree [4]	Strongly Agree [5]
The firm's revenue has been increasing over the years					
Profitability has been on an upward trend over the years					
The shareholders' wealth maximization has improved over the years					
There has been increase in assets over the years					
The firm is able to meet both short and long term obligations					
The going concern of the firm is not questionable					

Appendix III :List of Manufacturing firms in Kenya

1. 42 Geomatic Services Ltd.
2. Abu Engineering Ltd
3. Acme Container Ltd
4. Adhesive Solutions Africa Ltd
5. Africa Kaluworks (Aluware) Division K
6. African Cotton Industries Ltd
7. Africa Oil Kenya B.V
8. Agni Enterprises Ltd
9. Ali Glaziers Ltd
10. Alpha Dairy Products Ltd
11. Alpha Fine Foods Ltd
12. Apex Steel Ltd
13. AquaSanTec
14. Aquva Agencies Ltd -Nairobi
15. Arrow Rubber Stamp Company Ltd.
16. Artech Agencies (KSM) Ltd
17. Ashut Quality Products
18. ASL Ltd – HFD
19. Athi River Mining Ltd
20. Atlas Copco Eastern Africa Ltd
21. Bamburi Special Products Ltd
22. Beta HealthCare
23. BIDCO Oil Refineries Limited
24. Bilco Engineering
25. biodeal laboratories ltd
26. blowplast
27. Blowplast Limited
91. Kiesta Industrial Technical Services Ltd
92. Kim-Fay E.A Limited
93. KingSource Plastic Machinery Co.,Ltd.
94. Lake Turkana Solar Power Limited
95. Magadi Soda
96. Makiga Engineering Service Limited
97. Manufacturers & Suppliers (K) Ltd - Head Office
98. Manzil Glass & Hardware Ltd
99. Mather & Platt Kenya Ltd
100. Maweni Limestone Ltd
101. Mellech Engineering & Construction Ltd.
102. Metal Crown Ltd
103. Metsec Ltd.
104. MGS International (K) Ltd
105. Microsoft East Africa
106. Mjengo Limited
107. Mohajan Trade International
108. Mombasa Canvas Ltd
109. Ndugu Transport Co Ltd
110. New RuarakaHardwares
111. New World Stainless Steel Ltd
112. Njoro Canning Factory Ltd
113. Octagon Express (kenya) Limited
114. Orbit Chemical Industries Ltd
115. Orpower 4, Inc
116. Packaging Industries Ltd

28. Blue Ring Products Ltd
29. Blue Triangle Cement
30. Bobmil Industries Limited
31. Bogani Industries Ltd
32. Bosky Industries Ltd
33. British American Tobacco Kenya Ltd
34. C. Dormans Ltd
35. Chandaria Industries Limited
36. Chemplus Holdings LTD
37. Chevron Kenya Ltd
38. Chloride Exide Kenya Limited
39. Climacento Green Tech Ltd
40. Colgate-Palmolive(East Africa) Ltd
41. Collis F B
42. Commrecial Motor Spares Ltd
43. Cosmos Limited
44. Creative Fabric World Co Ltd
45. Creative Innovations Ltd.
46. Crown-Berger (K) Ltd.
47. Cuma Refrigeration EA Limited
48. Doshi Group of Companies
49. East Africa Glassware Mart Ltd
50. East African Breweries Limited
51. East African Cables Kenya Ltd.
52. East African Cables Ltd.
53. East African Portland cement
54. Eastern Chemical Industries Ltd
55. Eco Consult LTD
56. Ecolab East Africa (K) Ltd
57. Ecotech Ltd
117. Patco Industries Ltd
118. Pelican Signs Ltd
119. Petmix Feed
120. Platinum Packaging Limited
121. Polythene Industries Ltd
122. Print Fast Kenya Ltd.
123. Protec
124. Protocols Microcomputer Applications
125. Pudlo Cement Company (PCC)
126. Pwani Oil products Limited
127. PZ Cussons East Africa Ltd.
128. Quad cypher systems
129. Raghad Enterprises
130. Ramco Printing Works Limited
131. Redsea Chemist
132. Reesi Hospitality Ventures
133. Regional Centre for Mapping of Resources for Development – RCMRD
134. Reliable Concrete Works Ltd
135. Renscope Scientific Kenya
136. Rhino Special Products Ltd
137. Rock Plant Kenya Ltd.
138. ROM East Africa Limited
139. Rosewood Office Systems Limited
140. Rotam Sub-Saharan Africa
141. Rupa Cotton Mills EPZ Ltd
142. Rural Electrification Authority
143. Sameer Group
144. Sanpac Africa Ltd
145. Shade Systems(E.A)Ltd

58. Energy Pak (K) Ltd
59. Energy Regulatory Commission
60. Equatorial Tea Ltd
61. Eveready East Africa Limited
62. Excel Chemical Ltd.
63. FairdealUpvc, Aluminium and Glass Ltd
64. Famiar Generating Systems Ltd
65. Farmers Choice Ltd
66. Flexoworld Ltd
67. Foam Mattress Ltd.
68. Forbes Media Electronic Advertising Solutions
69. furmart furnishers
70. Gahir Engineering Works Ltd
71. goldrock international enterprises
72. Goods Chemistry Practise& Allied Cert. Corp L.T.D
73. Guan Candle Making Machine Co.,Ltd.
74. Heluk International Limited
75. Hills Converters [K] Ltd
76. Hydraulic Hose & Pipe Manufacturers Ltd
77. Imani Workshops
78. JET Chemicals (Kenya) Ltd
79. Kapa Oil Refineries Limited
80. Kapa Oil Refineries Ltd
81. Kapa Oil Refineries Ltd
82. Kenbro Industries
83. Kenya Association of Manufacturers
146. Shadetents And Exquisite Designs
147. Shamas Motor Spares
148. Shankan Enterprises Ltd
149. Sigma Engineering Co. Ltd
150. Simco Auto Parts Ltd
151. Slumberland Kenya Ltd
152. Solarworks East Africa
153. South Hill Motor Spares Ltd
154. Stainless Steel Products Ltd
155. Stamet Products (K) Ltd
156. Statpack Industries Limited
157. Steel Structures Limited
158. Sudi Chemical Industries Limited
159. Sunrays Solar Ltd
160. SuperfitSteelcon Ltd
161. Tamoil Africa Holdings Limited
162. TARPO Industries Limited
163. Tenacity Locks Ltd
164. The Kensta Group
165. Tianjin Haopu Chemical Co. Ltd
166. Top Tank
167. Tripac Chemical Industries Ltd
168. Unga Farm Care (EA) Ltd
169. Unga Group Ltd.
170. Unighir Ltd.
171. Unilever Kenya Limited
172. Universal Ponds Kenya Limited
173. Warren Concrete Ltd
174. Wartsila Eastern Africa Ltd
175. Welfast Kenya Ltd

84. Kenya Electricity Generating Company Limited.
85. Kenya Fluorspar Company Ltd (KFC)
86. Kenya Grange Vehicle Industries Ltd
87. Kenya Petroleum Refineries Ltd
88. Kenya Power and Lighting Company Ltd
89. Kenya Solar
176. Welrods Limited
177. Wigglesworth Exporters Ltd
178. Williamson Power Ltd
179. Wines Of The World Limited
180. Zena.net Services