

**EFFECTS OF STRATEGIC CHOICE ON PERFORMANCE
OF SUGAR COMPANIES IN KENYA**

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**Effects of Strategy Choice and Performance on Sugar Companies in
Kenya**

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Philosophy in Business Administration in the Jomo Kenyatta
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DECLARATION

This Thesis is my original work and has not been presented for a degree in any other University.

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DEDICATION

Dedicated to my wife Ruth, my daughters Deborah and Darlene

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LIST OF ABBREVIATIONS/ACRONYMS

CP	Corporate Performance
CSR	Corporate Social Responsibility
CU	Capacity Utilization
DC	Dynamic Capability
DS	Diversification Strategy
ESP	Environment Strategy Performance
IO	Industrial Organization
MDS	Market Development Strategy
ME	Macro Environment
OST	Open System Theory
PDS	Product Development Strategy
RBV	Resource Based View
ROI	Return on Investment
ROS	Return on Sales
SCP	Structure Conduct Performance
SV	Sales Volume
TT	Total Turnover

DEFINITION OF TERMS

Capacity Utilization	is the extent to which a plant, an enterprise or a company actually uses its installed productive capacity (Kelinger, 2007).
Diversification	is an act or practice of manufacturing a variety of products, investing in a variety of securities, selling variety of merchandise so that a failure in or an economic slump affecting one of them will not be disastrous (Porter, 1981)
Macro environment	is a major and uncontrollable factors that influence an organization's decision making, and affect its performance and strategies. These factors include the economic factors; political, social and technological changes (McCarthy, 2000)
Market	is a medium that allows buyers and sellers of a specific good or services to interact in order to facilitate an exchange (Kotler, 2000)
Product	a thing produced by or resulting from a process, can be a service or an item, physical or virtual (Marinelli, 2011)
Strategy	a plan of action or policy designed to achieve a major or Overall Aim (Ansoff, 1985)

ABSTRACT

Performance implications of Strategy-Environment derive from Environment-Strategy-Performance (E-S-P) paradigm whose origin is the Structure-Conduct-Performance (SCP) paradigm of Industrial Organization literature. It is argued that the positive performance impact between environment and strategy of a business is an important theoretical proposition in strategic management. This argument forms the basis on which the current study was conceived with the main objective of determining the effect of strategic choice on the performance of sugar companies in Kenya moderated by macro environment. Five specific objectives emanated from this main objective: one, to determine the extent to which Product Development Strategy affects performance, two, to assess how Market Development Strategy affects performance, three, to establish how Diversification Strategy affects performance, four to determine the extent to which Corporate Social Responsibility affects performance, five to assess the moderating effect of Macro environment on the relationship between strategic choice and performance of sugar companies in Kenya.

Out of these seven objectives, seven hypotheses were stated for testing. The study employed a mixed approach survey design targeting companies in sugar industry in Kenya. Through structured questionnaires and interviews, data was obtained from 8 companies both Government parastatal and privately owned. Secondary data was obtained from published and annual record sources. Both descriptive and inferential statistics were used to analyze the data and test hypotheses of the relationships stated earlier. The results revealed that sugar companies pursued product development, market development, diversification and corporate social strategies in different levels. Statistically significant effects were reported after inclusion of the moderating variable. Finally, the study revealed that the moderating effect of macro environment on the relationship between strategy and performance increased the explanatory power (R^2) of the combined strategy variables over company performance. Therefore the study yielded conclusions with substantial implications in theory while in some cases it concurred and others contradicted related empirical studies.

CHAPTER ONE

INTRODUCTION

1.1 Background Information

Strategic management is about decisions and actions used to formulate and implement strategies that provide a competitively superior fit between the organization and its environment to enable it to achieve organizational objectives (Hannagan, 2002). Strategic choice approach argues that the effectiveness of organizational adaptation hinges on the dominant coalition's perceptions of environmental conditions and the decisions it makes concerning how the organization will cope with these conditions (Miles & Snow, 1978). Product, market and diversification strategies are growth strategies, while corporate social responsibility activities of companies have been found to be those that exceed compliance with respect to environmental or social regulations, in order to create the perception or reality that these firms are advancing a social goal (Morrison & Siegel, 2006). Environmental dynamics have been considered as performance determinants (Abedisi, 1987; Helfat, 2000) while macro environmental factors have been found to impact to a greater extent on almost all organizations (Kariuki, Owino & Ogutu, 2011). Different organizations uses varying measures of performance in terms of qualitative and quantitative. Jauch, Osborn and Glueck (1980) used Return on Assets (ROA) as measures of success, Cool and Schendel (1988) employed Return on Sales (ROS) Onipe (2001), Ramaswany (2001) and Chan and Faff (2005) represented performance by Return on Investment (ROI).

1.1.1 Historical Perspective

Strategic management originated in the 1950s and 1960s amongst the numerous early contributors are Drucker (1954), Selznick (1957), Chandler (1962), Ansoff (1965) and Henderson (1981). Prior to 1960, the term "strategy" was primarily used regarding war and politics not business. Strategy choice theory developed when industrial relations in the US were changing rapidly. Strategic choice theory starts with consideration of relevant forces in the external environment that affects employment relationships. The origins of social responsibility was well defined in the 1950s when the main focus was on business's responsibilities to society and

doing good deeds to society (Carroll, 2008). In the 1960's key events, people and ideas were instrumental in characterizing the social changes ushered in during this decade. In 1970's, business managers applied the traditional management functions when dealing with CSR issues, while 1980s business and social interest came closer and firms became more responsive to their stakeholders. During 1990s, the idea of CSR became almost universally approved, also CSR was coupled with strategy literature and finally, in the 2000s, CSR became definitively an important strategic choice (Carroll, 2008).

Ansoff (1965, 1987) brought into limelight the concepts Product development which he defined as the focus on the needs of the current customers and the wider customer markets. He further defined market development as taking current products and finding new markets achieved through opening up previously excluded market segments, new marketing and distribution channels and entering new geographic markets. On diversification strategy Ansoff (1965) elaborated on the existence of levels which include related markets where customers and markets are new, unrelated markets using existing resources and capabilities where customers and markets are different and unrelated markets which require new resources and capabilities. Bert Spencor has argued that the roots of the current social responsibility movement can be traced to the period 1945 – 1960, the early years of the cold war (Spencor, 2008). In the 1950s, there was some limited discourse about CSR. Abrams (1951) introduced concerns about management's broader responsibilities in a complex world. Abram argued that as management was professionalizing, companies had to think not just about profits but also about their employees, customers and the public at large. Bowen (1953) further contributed in shaping of the subject by publishing his seminar book, social responsibilities of the businessman. Fredrick (1960) a noted contributor to the CSR literature argued that there were three core ideas about CSR that stood out in the 1950s. These included the idea of the manager as public trustee, the balancing of competing claims to corporate resources and corporate philanthropy.

1.1.2 Theoretical Perspective

Raible (2013) stated that industrial theory is key in the influence on the choice of strategy and decision making of company. Ramsey (2001) further articulates that industrial organizational theory is reflected in the structure-conduct-performance model, which claims presence of a link between the structure of a market, the organizational conduct and organizational performance. Porter (1981) pointed out that the central analytical aspect of industrial organization theory can be used to identify strategic choices. Bastedo (2004) refers to open theory system as a concept that organizations are strongly influenced by environment. According to Daft (2001), asserts open system view considers an organization as a set of interacting functions that acquire inputs from environment, process them and then release the output to the external environment. Kakabadze, Rozuel and Davis (2005) found stakeholder theory as an approach where pivotal concepts play a role when examining the role of business in society.

Carroll (1991) expresses the natural fit between the idea of corporate social responsibility and organizational stakeholders. A resource based view emphasizes the firm's resources as the fundamental determinants of competitive advantage and performance. Bridoux (1997), found that the model assumes that firm's within an industry may be heterogeneous with respect to the bundle of resources that they control. Wernefelt (1984), pointed out that dynamic capabilities theory is rooted in the resource based view, while Zott (2000) found dynamic capabilities of firms may account for the emergence of differential firm performance within an industry.

1.1.3 Conceptual Dimension

Strategic choice has an important performance implication and usually linked to external environment in which the firm operates (Strempek, 1997). Ansoff (1965) explained the concept of strategy as the common thread among the organizations' activities and product markets that defines the essential nature of business that the organization was or planned to be in future. The definition stressed on the commonality of approach that exists in diverse organizational behavior. Organizations and businesses are built around products and services that define their

value offerings. Ansoff exposed key dimensions including the product, market and diversification strategies that result to growth strategies.

Reality shows that firms have recently been able to adapt to a changing world not only by developing economically but also socially and ethically (Poddi & Vergalli, 2008) and therefore brings corporate social responsibility as a determinant of company growth. A need is evidently growing for corporate social responsibility from stakeholders (McWilliams & Siegel, 2001). The demand has been marked by numerous claims linking CSR to firm financial performance (Kanter, 1999). Empirical studies have found positive, negative and curvilinear relationships between CSR and performance. Such studies include McWilliams and Siegel (2000) on corporate social responsibility and financial performance; Porter and Kramer (2002) on the link between competitive advantage and corporate social responsibility; Tsoutsoura, (2004) on corporate social responsibility and financial performance; Pavie and Filho (2008) on a meta-analysis of corporate social responsibility and financial performance.

Prescott (1986) pointed out that relationship between strategy and performance needs to consider environments as moderators of that relationship. Further it is only reasonable to project that environmental variables may play an important role in strategic choice and performance (Ting, Wang & Wang, 2012). Studies depicting business environmental dynamism to have a moderating effect have suggested that environment moderates strategy and firm performance these include; Rasheed (2004) on foreign entry strategy and performance in public SME's in USA; Ting, Wang & Wang (2012) on the moderating role of environmental dynamism on the influence of innovation strategy and firm performance; Adeoye and Elegunde (2012) on impacts of external business environment on organizational performance in food and beverage industry in Nigeria. Moderating effects of environmental factors have been used in performance models relative to domestic strategies according to Dess and Beard (1984). Luo (1999) found support for the moderating effects of environment on the strategy-performance relationship.

1.1.4 Contextual Dimension

Many organizations today are focusing on becoming more competitive by launching strategies that give them an edge over others. Sugar companies are equally facing the same challenge in their choice of strategy given the crisis the subsector is currently experiencing. The challenge of liberalization, increasing competition from cheap sugar imports, poor industry policies and structures in sugar industry forms the basis of this study Institute of Economic affairs (2005). It is worth noting that a major part of the industry's challenges are emerging from the dynamics of macro environment. According to the Institute of Economic affairs (2005), stakeholders have not been involved in the creation of industry policies which brings into focus the role of corporate social responsibility and the resultant outcome of the choice of strategies. Awino, Wandera, Imita and K'obonyo (2009) narrowed down the industry's challenges to government interventions, technology, compliance to international standards further advancing the macro environment dimension in the performance of the sector. This forms the basis for exploring the influence of strategic choice, macro environment, towards the performance in the sub sector. The study focuses on sugar companies in western Kenya which include Sony Sugar company in south Nyanza, Chemelil, Muhoroni and Kibos from Central Nyanza and Mumias, Nzoia, West Kenya and Butali in Western. The choice of western Kenya is appropriate for the study since it forms the greatest single block within which most of the sugar companies are found. Western Kenya further creates convenience to the researcher in gathering data in terms of accessibility and the fact that there is diversity in age, size and operations of the sugar companies therefore posing an ideal context for the study.

1.1.5 Strategic Choice

Strategy is considered a key variable, since by choosing specific strategic priorities, management is able to position the firm in specific environments (Dekker, Groot & Schoute, 2006). Cool and Schendel (1988) grouped strategies into scope commitment, resource commitment and marketing commitments. Jauch, Orborn and Gluek (1980) considered strategic decisions in the light of mission, market development, market penetration, market extension, production efficiency, goal

emphasis, merger and financial restructuring. Kariuki, Owino and Ogutu (2011) advanced strategic choice analysis to incorporate both subjectivist and objectivist perspectives on organizational environment. Strategic choice approach essentially argues that the effectiveness of organizational adaptation hinges on the dominant coalition's perceptions of environmental conditions and the decisions it makes concerning how the organization will cope with these conditions (Miles & Snow, 1978). Strategic choice is recognized and realized through a process whereby those with the power to make decisions for the organizations interact among themselves with other organizational members and with external parties. This study therefore considers choice of strategy mainly in terms of product development, market development, diversification and corporate social responsibility and their relationship with performance in sugar companies.

Product development strategy

Product development has been defined as the focus on the needs of the current customers and the wider customer markets (Ansoff, 1987, 1965). Kotler (2000) says in product development a firm remains in its present markets but develops new products for these markets. The view that new products are helpful to the financial health of sponsoring firms is well argued by scholars. Schumpeter (1934), for instance, opined that innovative new products when first introduced face limited direct competition and, as a result, allow relatively high profits to sponsoring firms. Over time these high profits are likely to disappear because of imitation and competition, he argued, but firms that keep on introducing innovative new products may be able to have high profitability for a sustained period. Large and growing literature supports the positive correlation between innovation and firm profitability. In a study of 721 U.K. manufacturing firms during the period 1972–1983, for instance, Geroski, Stephen and Reenen (1993) showed that the number of innovations produced by firms had a positive effect on their operating profit margin. Clark and Fujimoto (1991) asserts that performance in a development project is determined by a firm's product strategy and by its capabilities in overall process and organization. They further claim that firms products help to shape the market environment; the nature of the market environment changes as consumers and

competitors learn from new products and services. Goedhuys and Veugelers (2008) found that innovative performance is an important driver for firm growth in particular the combination of product and process innovations that significantly improves firm growth. Financial markets may be attuned sharply to product development outcomes in publicly traded firms (Anurag & Nelson, 2004).

Market development strategy

Ansoff (1987, 1965) defines market development as taking current products and finding new markets achieved through opening up previously excluded market segments, new marketing and distribution channels and entering new geographic markets. McCarthy (2000) developed two possible methods of implementing market development strategy as moving the present product into new geographical areas and expanding sales by attracting new markets. Market orientation enables firms to produce offerings, which, relative to offerings by competitors, are perceived by markets to offer better value (Day 1994). Market orientation contributes to organizational effectiveness and researchers have recognized the importance of examining the relationship between market orientation and competitive strategy (Slater & Narver 1996). The association between strategic orientation and performance varies depending on the type of performance measure used (Voss & Voss 2000). Customer orientation has the strongest association with competitive strategy and market performance according to (Kumar & Petersen, 2005). Study on market development suggested that business model and product market strategy are complements, not substitutes (Zott & Amit, 2007).

Diversification strategy

Diversification has been presented in three levels. The levels include related markets where customers and markets are new, unrelated markets using existing resources and capabilities where customers and markets are different and unrelated markets which require new resources and capabilities (Ansoff, 1987, 1965). Diversification is a means by which a firm expands from its core business into other product markets (Aaker, 1980). Research shows corporate management to be actively engaged in diversifying activities. Rumelt (1986) found that by 1974 only 14 percent of the

Fortune 500 firms operated as single businesses and 86 percent operated as diversified businesses. As in any economic activity there are costs and benefits associated with diversification, and ultimately, a firm's performance must depend on how managers achieve a balance between costs and benefits in each concrete case. Performance must depend on how managers achieve a balance between costs and benefits in each concrete case. Diversification can improve debt capacity, reduce the chances of bankruptcy by going into new product/ markets (Higgins & Schall, 1975; Teece, 1982).

Corporate Social Responsibility

Corporate social responsibility has been defined as actions on the part of a firm that appear to advance the promotion of some good beyond immediate interests of the firm/shareholders and beyond legal requirements (McWilliams & Siegel, 2001). CSR activities of companies have been found to be those that exceed compliance with respect to for example environmental or social regulations in order to create the perception or reality that these firms are advancing a social goal (Morrison & Siegel, 2001). Recent theories of CSR (Baron, 2001; McWilliam & Siegel 2006) conjecture that companies engage in profit maximization CSR based on anticipated benefits from these actions. Examples of such benefits include reputation enhancement, the potential to charge premium price for its products or the enhanced ability to recruit and retain high quality workers (Morrison & Siegel, 2006).

Based on the profit maximization CSR hypothesis, most academic studies of CSR have focused on a narrowly defined business oriented research question; do socially responsible firms achieve high, lower or similar levels of financial performance than comparable firms that do meet the same CSR criteria (Griffin & Mahon, 1997; Dowell, Hart & Yeung, 2000). McWilliams and Siegel (2001) pointed out two types of empirical studies of the relationship between CSR and financial performance. One set of studies uses the event study methodology to assess the short-run financial impact (abnormal returns) when firms engage in socially responsible or irresponsible acts, for example, (Posnikoff, 1997; Teoh, Welch & Wazzan, 1999; Wright & Ferris, 1997). The results of these studies have been mixed. Wright and Ferris (1999) found

a negative relationship; Posnikoff (1997) reported a positive relationship; and Teoh, Welch and Wazzan (1999) found no relationship between CSR and financial performance, when examining divestitures from South Africa during the Apartheid controversy. A second set of studies examines the nature of the relationship between some measure of corporate social performance, CSP (a measure of CSR), and measures of long term firm performance, using accounting or financial measures of profitability. The results from these studies have also been mixed. Aupperle, Carroll, and Hatfield (1985) found no relationship between CSP and profitability, McGuire, Sundgren and Schneeweis (1988) found that prior performance was more closely related to CSP than was subsequent performance, while Waddock and Graves (1997) found significant positive relationships between an index of CSP and performance measures such as ROA.

1.1.6 Macro Environment

Environmental dynamics have been considered as performance determinants (Abedisi, 1987; Helfat, 2000). Organization and environment therefore permeate one another both cognitively and relationally – that is both in the minds of actors and in the process of conducting relationships between the two as asserted by (Kariuki, Owino & Ogutu, 2011). Duncan (1972) found business environment as the totality of physical and social factors taken into consideration by a firm for making decisions. Business external environment has been referred to be a phenomena not in the control of the firm and has further been classified into macro (remote) and task environment (Dill, 1958). Macro (remote) environment is comprised of political, social-cultural, economic, ecological and technological categories according Thompson (1967). These factors are further claimed to affect activities of the company in long term environment.

Macro environment consists of broad environmental factors that impact to a greater extent on almost all organizations (Kariuki, Owino & Ogutu, 2011). Macro environmental influence effects on organizations are categorized using PESTEL concurring with the arguments of Thompson (1967). Macro environment influence the success or failure of an organizations strategies while the impact of these general

factors tends to surface in the more immediate environment through changes in the competitive forces on organization (Johnson, Scholes & Whittington, 2002).

1.1.7 Organizational Performance

Continuous performance is the objective of any organization. Knowing the determinants of organizational performance is important especially in the current business competitive environment. Identification of those factors is important and should be treated with keen interest with aim of improving on the performance. This study explored both quantitative and qualitative measures of performance to show the impact of strategy – environment.

1.2 Statement of the Problem

Company performance is a function of combination of factors. The environment in which Kenyan sugar companies operate has been marred with various types of turbulence which has been observed in macro environment factors. Continued existence of these companies necessitates that they continually consider how macro-environment impacts on their strategic behaviours. How consistent their strategic behaviours are with environmental changes is expected to have implications in their performance.

There is empirical evidence of the relationship between choices of strategy on performance of companies. Li (1995) examined effective strategies that reduce the risk of failure in international expansion in computer and pharmaceutical industries in USA. Carrarresi, et. al., (2011) on the relationship between strategic choices and performance in Italian food SME's; Gado (2013) studied on strategic choices and performance in ailing industry in Nigeria. Karuiki, Awino and Ogutu (2011) examined effect of firm strategy and business environment on the firm performance. In the view of the above, there however exist gaps that this study seeks to address. First, whereas there is evidence with regard to performance implications of strategic choice, determining the degree of different strategic choices (product development, market development, diversification and corporate social responsibilities) on performance is still unresolved.

Secondly, and most important, there is empirical evidence of the impact of the external/macro environment and their strategic choices. This is evidenced by studies by Rasheed (2004) on foreign mode strategy and performance where environment is the moderating variable; Adeoye and Elegunde (2012) on impacts of external business environment on organizational performance in Nigeria; Ting, Wang and Wang (2012) on the moderating role of environmental dynamism on the influence of innovation strategy and firm performance; Mashhadi and Rehman (2012) on the external environment on the performance of the fast food industry in Islamabad and Pulaj and Kume (2013), on how Albanian external environment affect the construction industry. This study advances an argument that whereas companies may strive to achieve an appropriate match between their strategic choice and performance, achieving the match can be influenced by the macro-environment (Economic, political, social-cultural technological and demographic factors). The current study introduces macro-environment factors as external contextual factors and measuring their moderating effect on the relationship between strategic choices on performance.

Further, it is evident that the conceptual and operational diversity evident in the studies explain, has contextual differences greatly determine the final findings and conclusions. It is argued that contextual differences result in fundamental differences in company's strategic choices. While most of the studies have been undertaken in companies operating in different contexts such as Italy, USA, Nigeria and in addition in other industries other than manufacturing, the findings and conclusions may not apply to sugar companies in the Kenyan context because of its unique manifestations. This study extends existing knowledge on performance implications of strategic choice by varying the context of research to the Kenya's sugar company's environment. Lastly, studies undertaken in other contexts in the world by Hansen and Wernefelt (1989), Li (1995), Strempek (1997), Phan and Butler (2003), Kariuki, Awino and Ogutu (2011), Gado (2013) have all treated corporate performance as a dependent variable. The findings of each of these studies indicate that company performance is a function of a combination of factors. This study adopts a

fundamentally different operational frame of the independent and moderating variables. The study therefore addresses the effect of different strategic choices on the different performance measures of sugar companies in Kenya and whether there is any moderating effect of macro-environment factors on the relationship between strategic choices on company performance?

1.3 Justification of the Study

The performance of sugar companies in terms of volume of activity and production determines economic growth specifically in the sector and the Kenya's economy in general. Therefore, the performance of sugar companies is pointer to the Kenya's economic development and GDP growth. However, these companies don't operate in a closed system. They are always in constant interaction with the environment and therefore environment serving organizations. The study is intended to significantly shed light on the implication of this phenomenon given that developments in the business environment have an effect on the companies' strategic choices, and hence their performance.

Effective and successful implementation of the strategies resulting from organizational strategic choices is also influenced by macro- environmental factors. Therefore, company performance is both a function of how the companies choose their strategies on one hand, and how the companies' macro-environments are conducive for the chosen strategies. While it is recognized that the performance of sugar companies is a key pointer of Kenya's economic performance, very little is known on the companies' performance implications of adopting different strategies effect with an extended forms on the moderating effect of the companies' macro environment variables. The strategic choice dimensions and macro environment factors considered by the study will be accorded deeper statistical analysis in order to assist company managers to make sound, strategic choices and develop internal initiatives to effectively and successfully implement the chosen strategies within an ever changing macro-environment. This depiction is also intended to contribute significantly into the existing knowledge base in strategic management on the basis of which other researcher will make advancements in theory validation.

It can be observed that antecedent studies (Hansen & Wernerfelt (1989); Li, (1995); Rasheed (2004); Adeoye and Elegunde, (2012) have provided partial explanation on performance implications of strategy-environment – performance. Further, the studies were conceptually replicative of one another but operationally different. Replicative studies have been found to play an important role in strategic management (Hubbard, Himmelberg & Palia, 1998). It was the researcher's argument that the Kenyan sugar industry presents a rather unique context which is expected to fundamentally influence the findings and conclusions of the study. Hence, this study extends the frontiers of knowledge by integrating institutional and resource based theories in assessing the moderating effect of macro environment factors on the relationship between strategic choice and company performance.

1.4 Objectives

The study was guided by the following objectives.

1.4.1 General Objective

The broad objective of the study was to determine the effects of strategic choice on the performance of sugar companies in Kenya region.

1.4.2 Specific Objectives

Consistent with this broad objective, the specific objectives included:

1. To determine the extent to which product development strategy affects performance of sugar companies in Kenya.
2. To assess how market development strategy affects performance of sugar companies in Kenya.
3. To establish how diversification strategy affects performance of sugar companies in Kenya.
4. To determine the extent to which corporate social responsibility affects performance of sugar companies in Kenya.
5. To establish the moderating effect of Macro environment on the relationship between strategic choice and performance of sugar companies in Kenya.

1.5 Research Questions

The study seeks to answer the following research questions.

1. To what extent does product development strategy affect performance of sugar companies in Kenya?
2. How does market development strategy affect performance of sugar companies in Kenya?
3. How does diversification strategy affect performance of sugar companies in Kenya?
4. To what extent does corporate social responsibility affect performance of sugar companies in Kenya?
5. What is the moderating effect of macro environment on the relationship between strategic choice and performance of sugar companies in Kenya?

1.6 Research Hypotheses

The study tested the following null hypotheses.

- H₀₁: There is no significant relationship between product development strategy and performance of sugar companies in Kenya.
- H₀₂: There is no significant relationship between market development strategy and performance of sugar companies in Kenya.
- H₀₃: There is no significant relationship between diversification strategy and performance of sugar companies in Kenya.
- H₀₄: There is no significant relationship between corporate social responsibility and performance of sugar companies in Kenya.
- H₀₅: Macro-environment has no significant effect on the relationship between strategic choice and performance of sugar companies in Kenya.

1.7 Scope of the Study

First, the study is confined to the sugar industry which is a subsector of the larger ministry of Agriculture. While many organizations are focusing on becoming more competitive by launching strategies, sugar companies are equally facing the same challenges given the crisis the subsector is currently experiencing and therefore forms an ideal context of the study. Second, the study focuses specifically on sugar

companies in Kenya. Kenyan sugar companies create convenience in data gathering and therefore posing an ideal context of the study. Thirdly, the study singles out senior management as most applicable in seeking primary data as opposed to the entire staff population. Fourth, choices of strategies are confined to product development, market development, diversification and corporate social responsibility which are the most relevant in the study context.

1.8 Limitation of the Study

The findings of this study were interpreted and understood within the confines of inherent limitations. First, though achievement of 100% response rate in social research is hardly practical, this study attained a statistically acceptable level to conduct an empirical research. Secondly, though private companies responses were not as expected, this was mitigated by reaching respondents in environments out of company premises. These limitations, however did not detract the study's robustness, authenticity, quality of data and value.

CHAPTER TWO

LITERATURE REVIEW

2.1 The Introduction

This chapter reviewed literature related to the study based on the following themes; product development, market development, diversification, corporate social responsibility and performance of sugar companies and macro environment on the relationship between strategic choice and performance of sugar companies in western Kenya, theoretical framework, conceptual framework and summary of literature.

2.2 The Theoretical Framework

This study is anchored on industrial organization theory, open system theory, stakeholder theory, resource based view and dynamic capability theory. These theories are further explained in the following sub-sections:

2.2.1 Industrial Organization Theory

The Environment-Strategy-Performance (E-S-P) paradigm was first fronted by Mason (1939) Structure-Conduct-Performance (SCP) paradigm of the industrial organization (IO) economics. Industrial organization theory was adopted in the early fifties through the writings of Andrews (1952). The structure of a market, and how a market is functioning is the concept behind the industrial organization theory (Tirole, 1988). Industrial organization theory is about how a structure of market has an influence on the strategy and decision making of a company (Raible, 2013). Barthwal (2010) advanced that industrial economics is a development of micro economics and is concerned with economics aspects of firms and industrials seeking to analyse their behavior and draw normative implications. Ramsey (2001) pointed that industrial organization theory is reflected in the structure-conduct-performance model, which claims there is a “causal link between the structure of a market in which a company operates, the organizational conduct and in turn the organizational performance in terms of profitability. Industrial organization focuses on the whole industry and market conditions of a company and the central analytical aspect can be used to identify strategic choices, which firms have in their respective industries (Porter, 1981; Teece, Psano & Shuen, 1997). The relevance of industrial organization

to this study is well summarized in Porter's (1981) words that the central analytical aspect of industrial organizational can be used to identify strategic choices which firms have in their respective industries and the contribution is growing rapidly. The study therefore wishes to relate strategy choices and performance in sugar companies.

2.2.2 Open System Theory

An open system is a system which continuously interacts with its environment. Open System Theory (OST) was initially developed by Bertalanffy (1956), a biologist, but was immediately applicable across all disciplines. Perspectives of Open System Theory (OST) were further advanced from the work of Emery and Trist (Emery & Trist, 1960). Open system Theory is a modern system based changed management theory designed to create healthy, innovative and resilient organizations and communities in today's fast changing and unpredictable environments. Organizations continually confront the uncertainty of new challenges and problems that they have to address in a timely, efficient, and effective manner for their survival. Therefore, organizations die or are transformed when the needs satisfied by them no longer exist or have been replaced by other needs (Thompson, 1967). A systems view considers an organization as a set of interacting functions that acquire inputs from the environment, process them, and then release the outputs back to the external environment (Daft, 2001). Open-system models focus on events occurring external to the organization that influence changes within the organization. Sugar companies in Kenya have an open and active adaptive relationship with their external environment and therefore using concepts of Open Systems Theory (OST), the study will bring out the role that macro environment is playing in influencing choice of strategy towards achieving company goals.

2.2.3 Stakeholder Theory

The idea that business has duties towards society and more specifically towards identified constituents (the stakeholders) is widely acknowledged. Stakeholder theory was originally detailed by Freeman (1984). The theory identifies and models the stakeholders of a corporation and then recommends methods by which management

can give due regard to the interests of those groups (Freeman, 1984). Kakabadse, Rozuel & Davis (2005) found corporate social responsibility (CSR) and the notion of stakeholder approach as pivotal concepts when examining the role of business in society. The role of stakeholder theory in business is further supported by Lantos (2001) and Moir (2001) who claim that business people are simply using the resources of the principle they ultimately serve and therefore do more of a disservice than good to society. Carroll (1991) expresses that there is a natural fit between the idea of corporate social responsibility and an organizational stakeholders.

According to stakeholder theory, success of the organization depends primarily on how well are well managed relationships with many key groups and other important community organizations within which it operates (Robins, 2008). Other stakeholder theory the work of a manager is to support all these groups, carefully align their differing interests that should create the organization to be a place where shareholders' interests can be collectively maximize gradually (Freeman & Philips, 2002). Critics have found stakeholder's theory as a failure, because of one, it does not help the management to identify who what groups are or are not stakeholders (Heugens & Van Oosterhout, 2002). Secondly, they theory does not specify how a manager should compare the competing interests of different stakeholder groups (Nesvadborá, 2010). However, this study finds relevance in stakeholder theory in its focus to describe and explain the characteristics and behaviours of firms. The theory is instrumental to this study in identifying connections that exist between the corporate social responsibilities towards stakeholders groups and the achievement of corporate goals.

2.2.4 Resource Based View Theory

The theory has its origin from the work of Penrose (1959), though inadvertently the view was formerly presented by Wernerfelt (1984). He assessed the firm using resource-market matrices instead of the market share-growth combination of the competitive position view presented by the Boston Consulting Group (1972). In the place of emphasizing market entry barriers as a way of gaining a competitive advantage to increase returns, the resource-based theory stressed 'resource position

barriers' as a means of increasing profits (Wernerfelt, 1984 & Barney, 1986). A resource based view (RBV) emphasizes the firm's resources as the fundamental determinants of competitive advantage and performance. The model assumes first that firm's within an industry (or within a strategic group) may be heterogeneous with respect to the bundle of resources that they control (Bridoux, 1997). Second assumption is that resource heterogeneity may persist over time because the resources used to implement firm's strategies are not perfectly mobile across firms.

A resource based view (RBV) is one of the most widely accepted theories of strategic management (Powell, 2001). In terms of performance, resource may increase the firm's capacity to charge high prices and thus contribute to performance by helping the firm to appropriate value linked to competitive advantage. Furthermore resources may be used to erect entry barriers and so increase performance at the industry level (Newbert, 2007). Resource based view has been found to be instrumental due to its emphasis on the important of resources and subsequent implications for firm performance. New organisational resources may increase the flexibility in strategic choices, by allowing firms to benefit from new opportunities (Rangone, 1999).The RBV could be considered as an "inside-out" process of strategy formulation: starting from the internal resources of the firm, their potential for value generation has to be assessed in order to define a strategy allowing the firm to achieve the maximum value in a sustainable way (Grant, 1991; Barney, 1986). In this way, the firm choice strategy is determined by the resources available and the capability to deploy them in the best way to obtain a good performance.

2.2.5 Dynamic Capabilities Theory

Dynamic capability philosophy draws on Schumpeterian reasoning, which sees dynamic capability as another rent-creating mechanism based on the competences of organizations (Schumpeter, 1950). Eisenhardt & Martin (2000) defined dynamic capabilities as 'a set of specific and identifiable processes' that are 'idiosyncratic' in details and somehow 'dependent' in their emergence. Teece, Pisano and Shuen, (1997) define the theory as the firm's ability to integrate, build and reconfigure

internal and external competences to address rapidly changing environments. The theory was first introduced by Hamel and Prahalad (1989). Research on dynamic capabilities is rooted in the resource based view (Wernefelt, 1984). Dynamic capabilities of firms may account for the emergence of differential firm performance within an industry (Zott, 2000). Zott (2000) synthesizing insights from both strategic and organizational theory, found performance relevant attributes of dynamic capabilities to be the timing of dynamic capability deployment and learning to deploy dynamic capabilities.

The emerging consensus in the field of strategic management suggests that dynamic capabilities are; one, embedded in organizational processes (Amit & Schoemaker, 1993). Two, dynamic capabilities are learned regular patterns of organizational activity (Zollo & Winter, 1999). Three, dynamic capability as directed to serve change a firm's capabilities, knowledge and competencies (Kogut & Zander, 1992). Four, dynamic capabilities create and shape a firm's resource positions (Eisenhardt & Martin, 2000). Dynamic capabilities act as a buffer between firms' resources and the shifting business environment by helping a firm adjust its resource base and thereby maintain the sustainability of its competitive advantage, which otherwise might be eroded (Protogerou, Caloghirou, & Lioukas, 2008). Dynamic capabilities has however been challenged by some scholars, that it differs from functional or operational competences by emphasizing change (Winter, 2003). Dynamic capability is about organizational competitive survival rather resource based view's achievement of sustainable competitive advantage. Dynamic capability theory explains the capacity of an organization to purposefully create, extend or modify its resource base which refers to the choice of strategy an organization adopts to achieve its goals.

2.2.6 Conceptual Framework

The conceptual framework presented the perceived relationships as formulated for testing. It shows the various relationships among the variables in the choice of Strategy – Macro environment – Performance. Further, the model demonstrates how Macro-environment moderates the link between Strategic choice and Firm

Performance. According to the model, Firm Performance is the dependant variable with both quantitative and qualitative as indicators is influenced separately by Macro Environment and Choice of Strategy. Macro Environment comprising of economic, political, social cultural, technological and demographic factors as indicators is presented as a moderating effect on the influence of strategic choice on Firm Performance. Independent variables are presented by product development, market development, diversification and corporate social responsibility and their corresponding indicators.

The study was guided by the following conceptual framework.

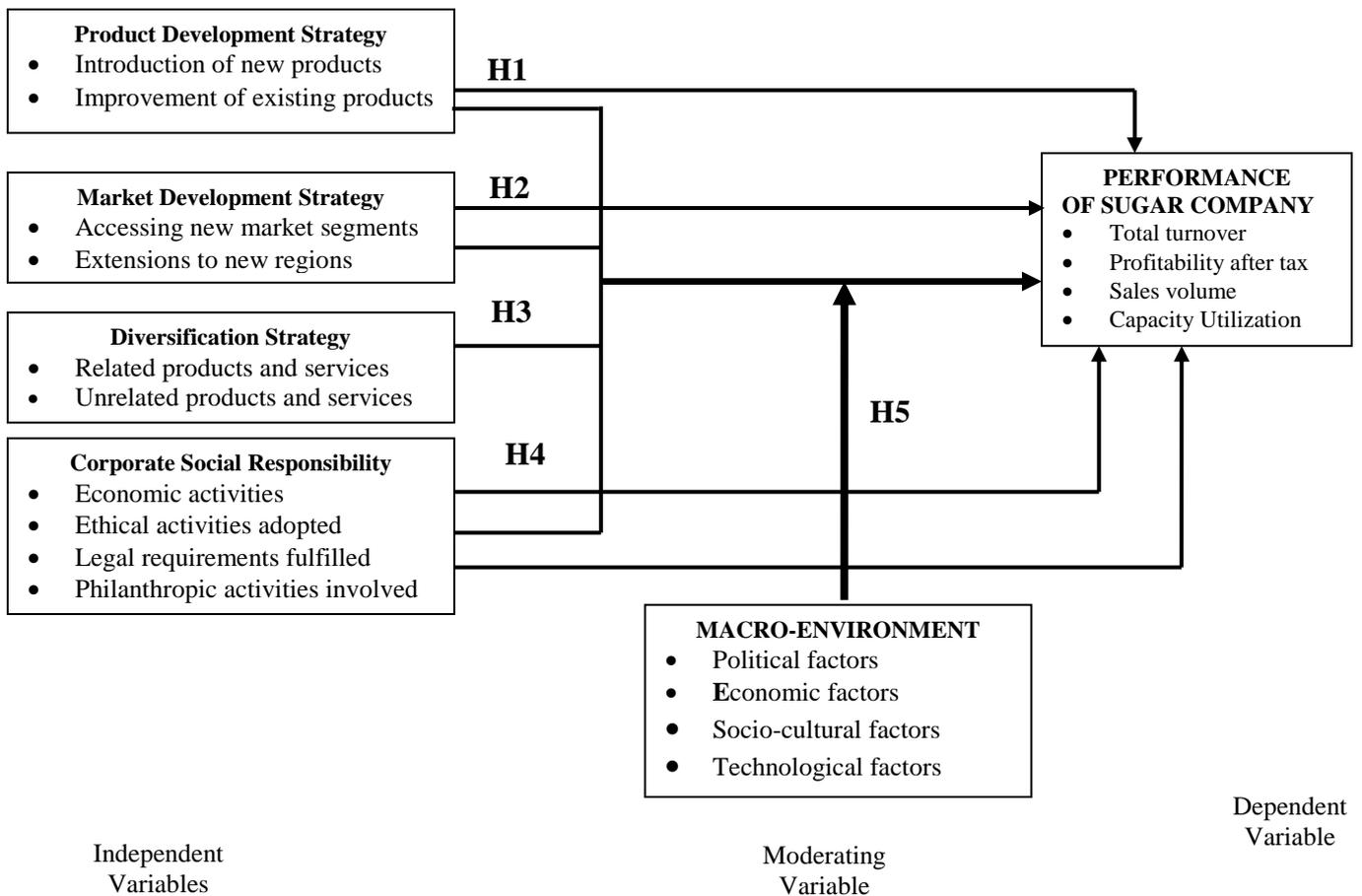


Figure 2.1: Conceptual Framework depicting the relationship between strategic choice and performance of sugar companies

2.3 Empirical review of existing literature relevant to the study

This section covers empirical overview of the relationships among the key study variables. First, is the relationship between product development strategy and performance, market development strategy and performance, diversification strategy and performance and corporate social responsibility and performance and finally macro environment and performance in sugar companies. The section includes the summary of empirical studies with a focus on their findings; methodology used and study gaps that emerged.

2.3.1 Product development strategy and organizational performance

Strategies adopted by Kenyan sugar companies were explored by Atsango (2012) in response to globalization using Mumias sugar company as a case study research design. Data was collected using questionnaires and analyzed using descriptive and inferential statistics. The analyzed data was then presented using bar graphs, pie charts and tables. Findings showed that, globalization brought about challenges and opportunities and the sugar industry was prepared for the challenges and opportunities brought about by globalization (Atsango, 2012). The study however ought to have incorporated operational level employees and customers.

Using World Bank ICS data from Brazilian manufacturing firms, a study by Goedhuys and Veugelers (2008) identified innovation strategies of firms in particular internal technology creation and external technology acquisition and their effect on successful process and product innovations. The study used the World Bank's Investment Climate Survey (ICS) data collected in Brazil in 2003. The survey collected data for the period 2000, 2001 and 2005, through intensive interviews of firms while analysis was done through Chi-sq test, bivariate probit for significance in correlation. The results indicated that innovative performance is an important driver for firm growth in particular the combination of product and process innovations that significantly improves firm growth. Both innovation and growth performance are supported by access to finance. The study, even though stated that international openness is important for stimulating firm growth performance, this openness works particularly through competition as an incentive device for cost improvements,

stimulating firm growth, but not necessarily as a mechanism for technology absorption improving innovative performance (Goedhuys & Veugelers, 2008).

Study motivated by the financial losses made by Mumias Sugar Company limited was done by Wamalwa, Onkware and Musiega, (2014) and the contribution of sugar in the Kenyan economy. The study explored the effects of lean manufacturing technology strategy implementation on factory time efficiency in a sugar company. Using purposive sampling to select a sample of 95 employees from Human Resources, Engineering, Production, Quality Assurance, Sales and Distribution sections, data was collected using a structured questionnaire consisting mainly with closed ended questions and was analyzed using descriptive and inferential statistics. The study revealed that Mumias sugar company limited has not adopted and implemented holistically lean technology. It further showed that the level at which the company has adopted lean manufacturing has very little impact to factory time efficiency (Wamalwa, Onkware & Musiega, 2014). The study did not however state the level in which lean manufacturing practices supports overall company business strategy.

While examining empirically the effects of new product development outcomes on overall firm performance, Anurag and Nelson (2004) chose the pharmaceutical industry as the empirical context. This was appropriate for the study's analysis due to the gate-keeping role played by the Food and Drug Administration (FDA) provides a specific event date on which to focus the event study methodology. The study estimated market model parameters using a 300-day period. Daily return data were obtained on individual securities from DataStream International and abnormal return for firm. The expected returns were estimated using the market model where returns on security, the daily returns of each firm in days were regressed against the return on market portfolio during the corresponding time period to obtain estimates. This study's results showed that market valuations are responsive strongly and cleanly to the success or failure of new product development efforts. Further conclusions were that financial markets may be attuned sharply to product development outcomes in

publicly traded firms (Anurag & Nelson, 2004). However the study did not consider the intersection of marketing and finance literature.

Strategic Alliances and Product Development in High Technology New Firms, with the moderating effect of Technological Capabilities study was done by (Haeussler, 2008). Using a database of biotechnology firms the study sought to know how new firms maximize the benefits of these alliances while reducing their risks. Testing the study hypotheses required measuring the alliance portfolio, technological capabilities and product development by HTNFs. The study surveyed biotechnology firms in the UK and Germany, the largest and most developed biotech industries in Europe. Face to face Interviews were conducted with 118 British and 162 German firms which agreed to participate in the study. There was a response rate of 47 percent for Germany and 34 percent for the UK. In the study analysis the study used descriptive statistics to determine correlations among, the study's variables. The study found that the specialization of new firms' technological capabilities can help managers use alliances more productively when it comes to NPD. The results were stable over a variety of different model specifications and when accounted for the endogeneity of alliances (Haeussler, 2008). However, the results drew attention to the importance of the breadth versus depth of the degree of a firm's technological specialization, an issue not explored in this study.

A research seeking to understand which of three different strategic orientations of the firm (customer, competitive, and technological orientations) is more appropriate, when, and why, in the context of developing product innovations was done by (Gatignon & Xuereb 1997). By using questionnaires to collect data from market executives, of these 239 marketing executives, 87.5% (209 managers) agreed to participate in the study. Multiple item scales were developed based on items previously proposed and used successfully in survey research studies. The results suggested that the appropriateness of a given strategic orientation, even a customer orientation, is not unconditional (Gatignon & Xuereb 1997). It was however difficult for the study to evaluate the reasons for the part of the variance which is unexplained.

Examining recent empirical research, Cusumano and Nobeoka (1991) conducted and published their findings on product development in the automobile industry. Their objective was to identify what has been learned, and what is yet to be learned about the effective management of this activity. The study focused 22 organizations from Japanese manufacturers in general, while the basic framework used to compare the studies examined variables related to product strategy, project structure or organization, and project as well as product performance. Evidence from the study indicated that Japanese automobile producers have demonstrated the highest levels of productivity in development as well as of overall sales growth, and have used particular structures and processes to achieve this (Cusumano & Nobeoka, 1991). The evidence does not however clearly indicate what the precise relationships are between development productivity and quality or economic returns.

2.3.2 Market development strategy and organizational performance

A study on competition in the regional sugar sector was conducted by Chisanga, et. al., (2014) did entitled; the case of Kenya, South Africa, Tanzania and Zambia and later presented the paper at pre-ICN conference. The study which was basically empirical reviews found progressive liberalisation of global markets are likely to result in increased competitiveness in the regional sugar industry as firms seek to grow their capabilities in order to trade globally. The study further showed that while firms have strategically positioned themselves in markets which are characterised by trade and investment incentives, the competitive outcomes in the region are more likely to be affected by protectionism (Chisanga et. al., 2014). The study fell short of exploring same industry similarly in other economies in Africa.

A study on strategic orientation and firm performance in an artistic environment building on the market orientation research was explored by (Voss & Voss, 2000). The study examined the impact of three alternative strategic orientations—customer orientation, competitor orientation and product orientation—on a variety of subjective and objective measures of performance in the nonprofit professional theater industry. The study instituted a two-stage research design in conjunction with

Theatre Communications Group (TCG), a national service organization for the nonprofit professional theater field. To test the hypotheses, the study conducted a series of regression analyses that substituted the various performance measures as dependent variables. For each performance measure, the study conducted a hierarchical, moderated regression analysis that tests for independent and interaction effects for the hypothesized moderator. The results indicated that the association between strategic orientation and performance varies depending on the type of performance measure used (Voss & Voss, 2000). However, the most unambiguous result was that a customer orientation exhibits a negative association with subscriber ticket sales, total income, and net surplus/deficit. The study's focus on a single artistic industry limited the generalizability of the findings.

A Review of theoretical and empirical evidence, using a customer-level marketing strategy to enhance firm performance, Kumar and Petersen (2005) used data sources from several business to business (B2B) and business to customer (B2C) firms to validate some of the empirical findings in previous research. The study looked at the theoretical and empirical evidence of seven key customer-level tactics a firm should consider when managing its marketing resources. Findings showed each of these tactics had been linked directly to the firm's performance in the literature and offered firms a way to use resources efficiently and effectively to streamline their marketing efforts (Kumar & Petersen, 2005). Even though the study sought to tie each of the seven aforementioned marketing tactics together to create an overall framework, it did not analyze how practical each of these strategies are given the variance in business types and product offerings.

Investigating the mediating effects of a firm's competitive strategy in the market orientation-performance relationship, Ge and Ding (2005) used descriptive statistics, correlation coefficients and reliabilities of the constructs together with mean scores on the three competitive strategies. Based on a sample of 371 manufacturing firms in China, evidence found that the three dimensions of market orientation exert different effects on competitive strategy and performance. Among them, customer orientation has the strongest association with competitive strategy and market performance. The

results of structural equation analyses indicated that the mediating effect of competitive strategy is mainly revealed in innovation strategy, the most vital factor in creating superior value for the company in the emerging market (Ge & Ding, 2005). Although this study provided interesting insights into the understanding of the market orientation-performance relationship in China, it relied mainly on the single key informant approach for data collection, which may cause a halo effect or common method variance. Secondly this study relied primarily on subjective measures of performance and thirdly this study did not examine the potential impacts of environment on the market orientation-performance relationship.

The study by Zott and Amit (2007) examined the fit between a firm's product market strategy and its business model. Data was collected on a sample of firms that had gone public in Europe or in the United States between April 1996 and May 2000. The study randomly sampled 170 firms on their business model characteristics and product market strategies. Analysis for the study was done through descriptive statistics, confirmatory factor analysis and partial least squares regression. The study manually collected dataset and found that novelty-centered business models—coupled with product market strategies that emphasize differentiation, cost leadership, or early market entry—can enhance firm performance. Data suggested that business model and product market strategy are complements, not substitutes (Zott & Amit, 2007). The study was however limited in addressing how business models evolve and in particular how they coevolve with the product market strategy of the firm.

2.3.3 Diversification strategy and organizational performance

Challenges facing the implementation of differentiation strategy in the operations of the Mumias Sugar Company Limited was a study conducted by Awino, Wandera, Imaita and K'Obonyo (2009). The study employed a positivist philosophical orientation with a target population of all departments within Mumias Sugar Company Limited (MSCL), and a population estimate of 300 permanent workers. The study used primary data obtained through questionnaires with selected managers. Findings of the study showed that few differentiation strategies were

carried out in Mumias Sugar Company Limited. The study also found out that there are other challenges, which included inadequate interdepartmental communication. Recommendations of the study included regular staff meetings needed to be put in place to enhance team work and creativity (Awino *et. al.* 2009). The study however did not explore challenges from other Porter's strategies like focus and low cost.

This interdisciplinary research attempts to verify whether firm level diversification has any impact on performance was explored by Pandya and Rao (1998). This study used specialization ratio (SR) to classify firms into three classes of diversification. SR is a ratio of the firm's annual revenues from its largest discrete, product-market activity to its total revenues. Using compustat database, the study classified 2188 firms in three groups: Single Product Firms ($SR > 0.95$), Moderately Diversified Firms ($0.5 \leq SR \leq 0.95$), and Highly Diversified Firms ($SR < 0.5$), for each of the seven years, from 1984 to 1990, for which complete segmental data was available. To test the null hypothesis, a test of equality of means of each classification group, and for each performance variable was done. The results suggested that the average performance of diversified firms (especially highly diversified ones) perform well on a risk-return basis on accounting measures as well as market-based measures, when compared with group of firms that are not as highly diversified (Pandya and Rao, 1998). The study did not however address the question whether investor portfolios outperform diversified firms.

The relationship between diversification and firm's performance and possibility of a causal relationship was a research conducted by Marinelli (2011). Through longitudinal studies using both accounting and market indicators, the sample included diversified firms available from compustat's north America Industrial Annual file. Econometric's model was used to take into account three critical considerations; the existence of the time invariant firm's specific effect, to control for heteroscedasticity and the length of time series. The study concluded that this relationship was not causal but attributable to factors other than the degree of relatedness among business units and the degree of efficiency of the internal capital market. The study further found that some diversified firms persistently created

shareholder value, beat the market index and had lower market volatility while some others persistently reached opposite results. Higher performance was associated with an unrelated portfolio of business segments (Marinelli, 2011). However more complete models including firm's performance and management skills should have also be taken into consideration.

Investigation of firm diversification in a transition country done by Santarelli and Tran (2013) where three interrelated and consecutive stages were considered; decision, degree, and outcome. Panel firm-level data from 2001 to 2006 were extracted from the GSO (General Statistics Office) of Vietnam's database of annual national enterprise surveys. The study took into account the sample selection and endogeneity issues from correlated disturbances by applying different advanced parametric and semiparametric estimation methods for both static and dynamic treatments of firm-level panel data. Findings included: (i) factors stimulating firms to diversify do not necessarily encourage them to extend their diversification strategy; (ii) firms which are endowed with highly skilled human capital are likely to successfully exploit diversification as an engine of growth; (iii) while industry performance does not influence profitability of firms, it impacts their diversification decision and degree (Santarelli & Tran, 2013). From the study it was still not clear what factors determine firms' decision to diversify and to what degree (relatedness of their activities).

Afza, Slahudin, and Nazir (2008) investigated the relationship between diversification and a firm's financial performance in the case of Pakistan. A sample of 65 firms were categorized as diversified and non-diversified. For these firms, the financial performance in terms of risk and return was analyzed with the return measured by Return on Assets (ROA), Return on Equity (ROE), Market Rate of Return (MKRT) and Tobin's q , and the coefficient of variation used as the measure of risk. The results showed that the non-diversified firms performed better than the diversified firms. However, the high return of non-diversified firms was accompanied by low risk and the low return of diversified firms was more risky. But there was a contrast in results based on book values and market values. The study

concluded that managers had to be careful while selecting the degree of diversification since the diversified firm may not only capture more market share but can also reduce its profitability (Afza, Slahudin, & Nazir, 2008). The study however leaves many doors open for further research like the influence of group size on diversification, the nature of corporate diversification whether it is related one or unrelated, level of related diversification and the influence of group size on nature of diversification.

In their study on investigating the impact of corporate diversification on firm performance in selected companies, Ojo (2009) used survey design and simple random sampling technique in selecting the case study companies as well as the respondents. Primary data were collected through questionnaire while data was analyzed through descriptive statistics and correlation and coefficient of determination were used to test the hypotheses. It was discovered that diversification impacted performance of these companies positively and recommended that these companies should engage in geographical diversification in addition to other forms of diversification they are currently involved in for maximum performance (Ojo, 2009). The study however suffers from being associated with single country and single industry category analysis.

Examining how a firm's contractual manufacturing model affects the relationship between corporate diversification and firm performance, was a study conducted by Chia-Wen and Heng-Yih (2008). Their investigation evaluated performance consequences of both product and international diversifications with particular emphasis on the relationship among product diversity, customer diversity, and geographic diversity with firm performance. The sample was derived from the companies listed in the information and electronics technologies category on the Taiwan Stock Exchange (TSE). The sample contained 124 hardware manufacturing companies in Taiwan, including electronic components (69 companies), consumer electronics (20 companies), computer peripherals (24 companies), and computer system (11 companies). The study pooled regression results using the firm performance measured as the dependent variable. Using a longitudinal data

containing firm-level operation information during 1997-2002, the empirical investigation found that product diversity and customer diversity are positively associated with firm performance, whereas geographic diversity is negatively associated with firm performance. However, contractual manufacturing model was not only positively associated with firm performance, but also acted as a moderator between product diversity and firm performance (Chia-Wen & Heng-Yih, 2008). The study's use of geographic diversity as the measurement for a firm's efforts in international diversification could however be affected by firm's major buyer configuration.

2.3.4 Corporate Social Responsibility and organizational performance

Manyasi and Masinde (2014) investigated corporate social responsibility towards employees and business performance of sugar Manufacturing firms in Kenya. The study employed descriptive causal survey research design. The study targeted a total of 2450 employees with a sample size consisting of 245 employees. The 245 employees were selected through simple random while purposive sampling techniques was used to select the 10 NGOs, 15 departmental heads and 5 members of NEMA. The findings of the research were that there is a positive statistically significant linear correlation between practicing employee oriented activities and business performance of sugar manufacturing firms in Kenya. It further recommended that managers, investors of sugar manufacturing firms as well as the interested parties in sugar firms should proactively participate in employee oriented activities since it has a positive significance towards the performance of sugar firms (Manyasi & Masinde, 2014).

In exploring corporate communal accountability towards the populace and whether it aimed at increasing solvency of sugar manufacturing firms in Kenya, Masinde and Makori (2014) used a sample of two hundred and forty five employees from sugar manufacturing firms. The study specifically investigated effect of sugar firms participating in construction of community roads, sponsoring of needy students and construction of school on their solvency. To achieve this, both primary and secondary data collection instruments were used. Suitable descriptive and inferential

statistical tools like mean standard deviation, ANOVA, Pearson correlation done at 95% confidence level were used in the study. The findings showed that firms with high profitability participated in socially responsible activities while those with low profitability did not participate in socially responsible activities. On the basis of these findings, the study recommended that shareholders and investors of sugar manufacturing firms as well as the interested parties in sugar firms should stress on the need for sugar firms to have adopt social responsibility as a primary objective in the course of business (Masinde & Makori, 2014).

A study by Tsoutsoura, (2004), explored corporate social responsibility and financial performance. Using extensive data over a period of five years, the study explored and tested the relationship between corporate social responsibility and financial performance. Cross sectional time series regression analysis was used in hypotheses using financial performance as the dependent variable controlling for size and debt level and industry. The results indicated that the relationship is positive and statistically significant, supporting the view that socially responsible corporate performance can be associated with a series of bottom-line benefits. The study did not clear the disagreement that has existed on whether wealth maximization should be the sole goal of a corporation and further inclusion of other qualitative measures of performance needed to be enhanced. His argument was complimented by (Pavie & Filho, 2008) in his study he referred to as a meta analysis of Corporate social responsibility and financial performance. Statistical methodology of meta analysis aggregating correlations for recent empirical studies in a duration of 10 years were analysed. Results showed positive relations between the various measures analyzed of corporate social responsibility and financial performance, many of them ratifying the existing theories. However, the studies conducted to examine the relationship between corporate social responsibility and financial performance failed to reach consistent results on the subject. Poddi and Vergalli (2008), investigated on whether corporate social responsibility affects the performance of firms, found that CSR firms which are more virtuous, have better long run performance. They have some initial costs but obtain higher sales and profits due to several causes reputation effect, a reduction of long run costs and increased social responsible demand. The study

used a similar approach as Pavie and Filho, (2008) of meta analysis and variance of correlation by aggregating 112 recent empirical studies in data analysis. The study had some limitations in that it was ambiguous did not show any common connection.

A study by Pavie and Filho (2008) investigated the relation between corporate social responsibility and financial performance using the meta-analytic method developed by Hunter and Schmidt (1990). In this effort they borrowed the hypotheses formulated by Orlitzky, Schmidt and Rynes (2003), who used 52 articles published between 1968 and 1997, to see if they are still valid for the period from 1998 to 2007. Study conclusion was that there is a positive correlation between corporate social performance and financial performance; that this relation tends to be bidirectional and simultaneous; that firms' reputation is an important moderator of this relation; and that the various measures of financial performance and social performance are behind this relation (Pavie & Filho, 2008).

The field of corporate social responsibility (CSR) has grown exponentially in the last decade. Nevertheless, there remains a protracted debate about the legitimacy and value of corporate responses to CSR concerns (Tsoutsoura, 2004). There are different views of the role of the firm in society and disagreement as to whether wealth maximization should be the sole goal of a corporation. Tsoutsoura (2004) carried out a study on Corporate Social Responsibility and Financial Performance, using extensive data over a period of five years, explored and tested the relationship between corporate social responsibility and financial performance. The dataset included most of the S&P 500 firms and covered the years 1996-2000. Testing using empirical methods results indicated that the sign of the relationship was positive and statistically significant, supporting the view that socially responsible corporate performance can be associated with a series of bottom-line benefits.

According to Margolis and Walsh (2002), one hundred twenty-two published studies between 1971 and 2001 empirically examined the relationship between corporate social responsibility and financial performance. The first study was published by Narver in 1971. Empirical studies of the relationship between CSR and financial

performance comprises essentially two types. The first uses the event study methodology to assess the short-run financial impact (abnormal returns) when firms engage in either socially responsible or irresponsible acts. The results of these studies have been mixed. Wright and Ferris (1997) discovered a negative relationship; Posnikoff (1997) reported a positive relationship, while Teoh, Welch and Wazzan, (1999) found no relationship between CSR and financial performance. Other studies, discussed in McWilliams and Siegel (2001), are similarly inconsistent concerning the relationship between CSR and short run financial returns.

The second type of study examines the relationship between some measure of corporate social performance (CSP) and measures of long term financial performance, by using accounting or financial measures of profitability. The studies that explore the relationship between social responsibility and accounting-based performance measures have also produced mixed results. Cochran and Wood (1984) located a positive correlation between social responsibility and accounting performance after controlling for the age of assets. Aupperle, Carroll, and Hatfield (1985) detected no significant relation between CSP and a firm's risk adjusted return on assets. In contrast, Waddock and Graves (1997) found significant positive relationships between an index of CSP and performance measures, such as ROA in the following year.

Studies using measures of return based on the stock market also indicate diverse results. Vance (1975) refutes previous research by Moskowitz by extending the time period for analysis from 6 months to 3 years, thereby producing results which contradict Moskowitz and which indicate a negative CSP/CFP relationship. However, Alexander, Rogene and Buchholz (1978) improved on Vance's analysis by evaluating stock market performance of an identical group of stocks on a risk adjusted basis, yielding an inconclusive result.

Over decades, the pressure on firms to engage in corporate social responsibility (CSR) has increased. Many managers have responded to these pressures, but many have resisted. Those who resist typically have invoked the trade-off between socially

responsible behavior and profitability. McWilliams and Siegel (2000) responded to this by attempting to demonstrate the effect of CSR on profitability. By conducting a regression test of firm performance on corporate social performance, correlation test of CSR and R&D, estimation of CSR on performance, the results of relationship between CSR and profitability were inconclusive, reporting positive, negative, and neutral results. Their study hypothesized that this inconsistency could be due to flaws in empirical analysis. One particular flaw was econometric estimation of a mis specified model. To test their hypothesis, the study estimated two models. The first was the same specification as Waddock and Graves (1997) and the second was one in which it included R&D intensity. The results confirmed that CSP and R&D are highly correlated, and that, when R&D intensity is included in the equation, CSP is shown to have a neutral effect on profitability (McWilliams & Siegel, 2000). The study was however mainly confined on financial performance and therefore posing a challenge on correlations of other qualitative performance parameters.

A study by Kaufmann and Olaru (2012) examined the question of measurability of the impact of Corporate Social Responsibility on Business Performance. The study was basically empirical literature review described newer trends of measuring business performance, showing that one can observe a shift from the classical short-term analysis with particular focus on indicators like shareholder value, revenue and market share toward taking also into account soft indicators, such as employee and customer satisfaction, that contribute to the long-term success of a company (McWilliams & Siegel, 2000). This approach was shown based on the European Foundation of Quality Management (EFQM) criteria. The study went on to give an overview of latest trends in the field of Corporate Social Responsibility and then offered a possible way to measure its impact on Business Performance on the basis of the stakeholder concept.

The study findings were that the impact of CSR on Business Performance can be measured. However, an indirect approach must be chosen. Although it is virtually impossible to subtract out the influence of CSR on Business Performance directly, it is possible to determine the influence of CSR on different stakeholders of the

company by using a new approach concluded the study (Kaufmann & Oлару, 2012). The study further found it necessary to measure changes in stakeholder satisfaction levels due to investments in Corporate Social Responsibility (Kaufmann & Oлару, 2012). Lack of not able to conclusively determine the level of corporate social responsibility impact on performance posed a limitation on the study.

Morrison-Paul and Siegel (2006) using empirical study reviews described some perspectives on corporate social responsibility (CSR), in order to provide a context for considering the strategic motivations and implications of CSR. The study provided an important foundation for economic CSR analysis by showing how one might evaluate the costs and benefits of CSR activities in the context of productivity and cost efficiency. The study documents that CSR activities may affect the productive impacts of efficiency, technical change and scale economies, as well as increase input costs and composition (potentially increasing outsourcing and reducing investment and employment). The findings also indicate that these impacts are dependent on firm characteristics such as the motivations for socially responsible actions, tax laws, location, and plant age and innovation activities. These results provide provocative insights, therefore, regarding how CSR must be balanced by benefits or regulations (implied social benefits) to motivate firms to carry out such activities (Morrison-Paul & Siegel, 2006). The study's limitation emerged in the consideration of firm characteristics as a dependant variable other than economic performance.

Examining whether corporate social responsibility (CSR) towards primary stakeholders influences the financial and the non-financial performance (NFP) of Indian firms a study was conducted by Mishra and Suar (2010). Perceptual data on CSR and NFP were collected from 150 senior-level Indian managers including CEOs through questionnaire survey. Hard data on financial performance (FP) of the companies were obtained from secondary sources. The study used a questionnaire for assessing CSR developed with respect to six stakeholder groups – employees, customers, investors, community, natural environment, and suppliers. A composite measure of CSR was obtained by aggregating the six dimensions. Findings indicated

that stock-listed firms showed responsible business practices and better FP than the non-stock-listed firms. Controlling confounding effects of stock-listing, ownership, and firm size, a favorable perception of managers towards CSR is found to be associated with increase in FP and NFP of firms. Such findings hold good when CSR is assessed for the six stakeholder groups in aggregate and for each stakeholder group in segregate. Findings suggest that responsible business practices towards primary stakeholders can be profitable and beneficial to Indian firms (Mishra & Suar, 2010). The study was however limited to Indian companies whose outcome cannot be generalized to both highly developed or less developed nations.

The effect of corporate social responsibility (CSR) on financial performance was examined by Flammer (2013). The study used secondary data from risk metrics and fact set with a sample 102 CSR-related proposals. A cross sectional analysis conducted regressing CSR on marginal returns (performance). Specifically, the study analyzed the effect of CSR-related shareholder proposals that pass or fail by a small margin of votes. The passage of such “close-call” proposals is akin to a random assignment of CSR to companies and hence provides a clean causal estimate. Consistent with the view that CSR is a valuable resource; the study found that adopting a CSR-related proposal leads to superior financial performance. The effect is weaker for companies with higher levels of CSR, suggesting that CSR is a resource with decreasing marginal returns. Finally, consistent with institutional theory, the study found that the effect is stronger for companies operating in industries where institutional norms of CSR are higher (Flammer, 2013). The study’s limitation emerged by considering performance in terms of financial measures whereas qualitative performance would have been necessary to give an overall performance.

2.3.5 Macro Environment, strategic choice and organizational performance

Management politics in Kenya's Sugar Industry towards an Effective Framework Wanyande (2001) examined the management practice in the industry, prevailing production arrangements and the problems associated with it, focusing on the politics that pervades the entire system. Data for this report was obtained from both

secondary and primary sources. Primary sources were derived from interviews conducted among twenty farmers in Muhoroni and fifteen farmers in Chemelil sugarcane growing areas. The study findings showed that the problems in the sugar industry are mainly due to government policies and interference, which does not favour efficient performance. This has led to management inefficiencies of the factories with the belief that the government will always bail them out of their financial difficulties. Efficient management of the sugar factories is the key to the success of the sugar industry (Wanyande, 2001).

Prompted by the continued deficit in national sugar production occasioned by the inability of the industry to consistently produce sugar at the factory rated capacities, Mwanaongoro and Imbambi (2014) conducted an assessment of relationship between plant and equipment maintenance strategies and factory performance of the Kenya sugar firms. The researchers used survey research design with a sample of sixty respondents composed of ten respondents from Mumias, Chemelil, Muhoroni, Nzoia, South Nyanza and West Kenya Sugar Companies. Using Likert-scale weighted average in the data analysis, findings showed that management policies in the companies greatly influenced the way maintenance of plant and equipment is carried out and its effects on factory performance. The study established that robust plant and equipment maintenance strategies play a key role in the factory performance. Maintenance leadership was the most influential intervening variable to the way plant and equipment maintenance is managed (Mwanaongoro & Imbambi, 2014).

Politicizing structural adjustment policies in Kenya's Sugar Industry and Effects on pro-poor development outcomes was a study investigated by Ogolla (2012). In questioning the outcome of these policies the study examined the relevance of Kenya's political economy and the role it plays. Through a comparative case study of smallholder farmers in the sugar belt region, the study focused on investigating the relevance of neo-patrimonialism in determining the outcome of these policies and to what extent they inform pro-poor development. Methodologically, the study employed an exploratory and inductive case study analysis within Western Kenya, a region well known for sugarcane farming. This will be done by questioning contract

farming as an institutional linkage that is present in both sets of farmers. The research adopts a descriptive approach in initially understanding the progress that has taken place over the years in sugarcane production and distribution. Therefore using a combination of secondary and primary data the research aimed to achieve its objective. Findings from the field work revealed that the relevance of neo-patrimonialism in the implementation of SAPs is difficult to ignore as it intricately defines development outcomes for smallholder farmers in the sugar-subsector (Ogolla, 2012).

Moderating role of environmental dynamism on the influence of innovation strategy and firm performance study was done by Ting, Wang and Wang (2012) to understand the association between innovation strategy and firm performance. The study sample was drawn from a database with frequency analysis, mean scores and inferential statistics for quantitative data. Their findings were that environmental concerns appear to have a substantial impact on innovation strategy and performance. The study was confined in high-tech industries only which could not be generalized to other sectors of the economy. Purkayastha (2013) investigated the impact of Macro-economic Environment on Diversification-performance relationship in India and Japan. The study sample size was 65 in India and 101 from china with a response rate of 35% and 65% respectively. The study found that while the impact of diversification on performance changes from positive to negative when the macro environment changes from munificent to scarce, the moderating influence of business group affiliation remains constant, irrespective of the macro-environment.

A study by Purkayastha (2013) confirmed lack of consensus on the outcome of performance where the independent variable is strategic choice while macro environment is the moderating variable. Rasheed (2004), explored on foreign entry mode and performance, the moderating effects of environment. Data was collected from 123 publicly held manufacturing SME's in USA while moderated hierarchical regression variance was adopted in the analysis. Results indicated that firms will have a higher rate of international revenue growth using non-equity based (exporting) foreign market entry modes in growing domestic environments. The

findings further supported the basic contingency theory that it is the interaction between contingent environmental variables and foreign entry mode has significant implications in predicting the rate of international growth. The study was limited in consideration of performance measurement where only revenue growth was determined excluding qualitative approaches of performance.

Belief control practices and organizational performances survey of sugar industry in Kenya study was done by Ojera, et. al., (2011). Adopting the Simons' Levers of Control framework, this study sought to establish the relationship between belief control practices and organizational performance in the sugar industry in Kenya. The study used a census survey of the 45 firms in the sugar industry value-chain in western Kenya registered by the Kenya Sugar Board as at 1st January 2008. The data was collected through self administered questionnaires sent to chief executive officers, finance managers and marketing officers of the target companies. The main finding of the study was that belief control systems are moderately prevalent in firms in the sugar industry and that belief control has a significant positive relationship with organizational performance. The findings of the study underscored the need of management to incorporate employees in the company core values and design of strategic control systems to cope with changing internal and external operating business environments (Ojera, et. al., 2011).

Integrating the impact of resources and institutional factors, a study by Purkayastha (2013) compares and contrasts the dynamic relationships between product diversification, business group affiliation and firm performance in two major economies in Asia. India and Japan were chosen as they represent different macroeconomic conditions in which firms operate. Research following Rumelt (1974) implicitly assumed that the diversification-performance relationship is consistent, regardless of the macro-economic context. This study questioned this assumption by examining the relationship among firms operating in two different macroeconomic environments. Further, studies linking diversification with firm performance have been carried out mainly in relatively stable environments (Purkayastha, 2013). This study examined the impact of diversification on firm

performance in contrasting macroeconomic conditions in India and Japan during periods of scarcity. The study also examined the moderating influence of group affiliation on the diversification-performance relationship during conditions of scarcity. The study found that while the impact of diversification on performance changes from positive to negative when the macro environment changes from munificent to scarce, the moderating influence of business group affiliation remains constant, irrespective of the macro-environment (Purkayastha, 2013).

Investigating on the impact of Political, Economic, Social and Technological macro environmental forces Mashhadi and Rehman (2012), focused on Pizza fast food industry in Rawalpindi / Islamabad. Target population was in the fast food industry, convenience sampling technique was applied. Sample size of 35, data was collected by “self report questionnaire” and analysis done by correlation and regression. The study paper provided empirical data to identify those factors that play key role in improvement of performance. Findings showed that the four factors P, E, S, and T are the key factors that can determine the performance of the fast food industry. The results further showed that the P is somewhat insignificant but the other three factors gave significant results (Mashhadi & Rehman, 2012). Study limitation was mainly both food industry and geographical scope where the study considered only Pakistan.

A study was conducted by Adeoye and Elegunde (2012) on the impact of external business environment on organisational performance in the food and beverage industry in Nigeria. The study investigated the influence of economic and political environment on organisational performance. Instruments of data collection were questionnaires with a sample size of 150 companies. Response rate was 84% while data analysis was done by multiple regression rate. The findings of the study reflect that external business environment has an impact on organisational performance (Adeoye & Elegunde, 2012). Hence, the external business environment of Nigerian organisation impinges upon the operations of a business other than the availability of capital and the ability of the manager or businessman himself. The study also revealed that all things being equal, controlling of the external business environment can be done to some extent. This entails and calls for constant

monitoring and conducting environmental scanning always. The findings further showed that the external business environment (political, economic, socio-cultural, technological) impact on organisational performance (effectiveness, efficiency, increase in sales, achievement of corporate goals (Adeoye & Elegunde, 2012).The frontier of this study could be expanded by using other environmental variables and combining other sectors of the economy.

Investigation by Vijfvinkel, Bouman and Hessels (2011) on the relationship between environmental sustainability and the financial performance of SMEs in terms of profit development and revenue development yielded substantial findings. Using a unique dataset of 337 Dutch and Chinese firms analysed through binary logistic regression method and found a significant positive association between environmental sustainability and firm performance. The study however, showed that different indicators of environmental sustainability display a distinct relationship with the two performance measures. When firms have a policy on the re-usage of materials they perform significantly better in terms of profit development and when firms have a policy on the reduction of pollution they perform significantly better in terms of revenue development (Vijfvinkel, Bouman & Hessels, 2011). Furthermore, the study found that firms that communicate to their employees about their sustainability efforts perform better in terms of profit development. The study observed that weak support is found for a moderating effect of communication to employees on the positive relationship between sustainability and profit development (Vijfvinkel, Bouman & Hessels, 2011).The results of the study may not be consistent across multiple country contexts and therefore further study could explore the degree of sustainability of firms, performance of firms and firm specific characteristics.

Effects of Albanian external environment on the construction industry Studies by Pulaj and Kume (2013) have proven that organizations in order to be vital, economically valuable and profitable in the market have to adapt to the external environment. The success and the failure of many companies depend on the factors which affect their activities. Without taking into account the impact of environmental factors, it is not possible to formulate a good strategy or to conduct profitable

business (Pulaj & Kume, 2013). This environment refers to the factors that are outside the influence and control of the organization. It should be an important part of the decision making process and developing process of competitive strategies. The intensive changes of business conditions are an important fact that the organization does not operate in a vacuum. It operates as an open system, located in a certain field and connected directly with the influence of factors that compose this environment. Pulaj and Kume (2013) study serves to provide a picture of the external environment as a tool of refining and focusing for the industry in which each company operates.

Recommendations by Pulaj and Kume (2013) regarding the activities and business operations, it is important to monitor changes occurring in the external environment, considering that these environmental factors significantly affect business performance. Despite the development of Albania as a post communist country, with a long transition period, it seemed that the current situation of these indicators are not very favorable, and this is evident from the presence of any threats in our research environment. Consequently, it is necessary to take measures in order to minimize the impact of threats and create a favorable business climate to increase profits and longevity in the market by the companies. The study which was empirical literature review limited itself in both industry and geographical scope.

Kakazoukis (2011), studied on how macro environmental forces affected business buying behavior after a recession. The need for the study was due to the fact that the financial crisis has had a deep impact on businesses all around the world. This had affected purchases, both as retailers and as customers. The study sought to investigate how the buying behavior had changed, before, during and after the financial crisis with focus on the second hand truck business. The study further investigated which macro environmental factors had affected the buying behavior. Data was collected through face to face interviews and secondary data from secondary source. Conclusions drawn from the findings were that the macro environmental forces with strong impact on the buying behavior after the financial crisis were political, economical and legal forces.

2.3.6 Critique of the Existing Literature

Brazilian manufacturing firms study by Goedhuys and Veugelers (2008) on innovation strategies of firms and its successful process and product failed to link up the element of performance as a resultant effect. Wamalwa, Onkware and Musiega (2014) while exploring lean manufacturing technology strategy implementation on sugar companies, considered performance only in terms of factory time efficiency. The study did not however state the level in which the practice supports overall company business strategy. Haeussler (2008) while exploring the moderating effect of technological capabilities on product development in high technology new firms, the study limited itself to only one construct of moderating effect ie. technological abilities. Gatignon and Xuereb (1997) study seeking to understand three strategic orientations of firms appropriateness in the context of developing product innovation failed to evaluate the reasons for the part of variance thus remaining unexplained. Cusumano and Noboeka (1991) empirical research on product development in the automobile industry failed to indicate the precise relationships between development productivity and quality or economic returns.

Study on competition in the regional sugar sector by Chisanga et al. (2014) showed that firms have strategically positioned themselves in markets but failed to state other factors that affect the competitive outcomes apart from protectionalism. Kumar and Petersen (2005) while reviewing theoretical and empirical evidence on using customer level marketing strategies to enhance performance failed to analyze how practical these strategies give variance in business types and product offerings. Ge and Ding (2005) investigated mediating efforts of a firm's competitive strategy in market orientations – performance relationships but relied only on a single informant which would have resulted to halo effect or common method variance. Zott and Amit (2007) while examining the fit between firm's product-market strategy and its business model were limited in addressing how business models evolve with the product-market strategy of the firm.

A study by Awino et al. (2009) on challenges facing implementation of differentiation strategy in Mumias sugar study, failed to explore other porters

strategies like focus or low cost for comparison. Pandya and Rao (1998) study on the level of diversification impact on performance failed to address the question whether investor portfolios outperform diversified firms. Marienelli (2011) used longitudinal studies to assess the relationship between diversified and firms performance but failed to consider complete models including firm's performance and management skills. Santarelli and Tran (2013) while investigating firm diversification in a transition country where three interrelated and consecutive stages (decision, degree and outcome) were considered. Findings were however not clear on what factors determine firm's decision to diversify and to what degree. Similarly Afza, Slahudin and Nazir (2008) in their study on the relationship between diversification and firm performance in Pakistan left many doors open like the influence of group size on diversification, nature of corporate diversification whether related or unrelated. Ojo (2009) study on corporate diversification on firm performance suffers from being associated with single country and single industry categorizing analysis.

Manyasi and Masinde (2014) investigated CSR towards employees and business performance in sugar manufacturing firms were limited in measuring performance only in terms of human resource aspect. Tsoutsoura (2004) explored CSR on financial performance in their study but encountered limitations due to their study's ambiguity by failing to show common connection. Pavie and Filho (2008) investigated the relationship between CSR and financial performance using meta-analytic method failed to consider performance outside financial measures. Studies by Margolis and Walsh (2002), McWilliams and Siegel (2001) on the relationship between CSR and financial performance resulted to inconsistent results. Kaufman and Olaru (2012) similarly examined the question of measurability of the impact of CSR on business performance but could not conclusively determine the level of CSR impact on performance. Mishra and Suar (2010) while examining whether CSR influences financial and non financial performance of Indian firms, findings could not be generalised to both highly developed or less developed nations, while Flammer (2013) study on effect of CSR on financial performance failed to incorporate qualitative performance measures other than financial.

Management politics in Kenya's sugar industry study by Wanyande (2001) on was limited to one aspect of macro environment ie. Political, while Mwanangoro and Imbambi (2014) on deficit in sugar production, considered only plant and equipment maintenance strategies while such deficits could be associated to other factors. Ting, Wang and Wang (2012) study on moderating role of environmental dynamism on innovation strategy and firm performance association, were limited in considering of performance measure only in terms of revenue growth excluding qualitative approaches of performance. Purkayastha (2013) compared and contrasted relationships between product diversification and performance in two economies Indian and Japan. Their findings could however not be generalized due to their context which was manly of stable environments. Mashhadi and Rehman (2012) investigated the impact of macro environment on Pizza fast food industry but failed to generalize to other industries other than food industry. Similarly Adeoye and Elegunde (2012) study on impact of external business environment on performance was mainly in food and beverage industry, Vijfvinkel, Bourman and Hessels (2011) on relationship between environmental sustainability and financial performance results may not be consistent across multiple country contexts.

2.4 Research gaps

Whilst this study wishes to fill the gaps identified, the scope and context of this study may not have addressed all gaps. This is due to the wide ranging nature of the gaps that cut across different industries and geographical scopes, however the following gaps emerging from empirical studies reviewed have been addressed.

On exploration of the moderating effect of technological capabilities in product development by Haeussler's (2008) left a gap on exploration of moderating effects of other macro environmental factors other than technology. This study has therefore used four factors of macro environment to explore their moderating effects in strategy-performance relationship. Cusumano and Noboeka (1991) research on effects of strategy and structure on performance of product development in automobile industry left a gap by not relating strategy with performance which this study has sought to address. Chisanga et al. (2014) study on competition in regional

sugar sector markets failed to relate marketing strategy to performance in the sector which has been addressed in this study. Ge and Ding (2005) investigation on mediating effects of the relationship between market orientations and performance relied on single informant to draw their conclusions leaving a gap on the resultant outcome if respondents from across sugar companies considered which has been pursued by this study for a more comprehensive conclusion.

A study by Awino et al. (2009) studied challenges of differentiation strategy which was confined in one sugar company and one strategy. This study has therefore created a gap for the entire sugar industry to be investigated in addition to other strategies affecting the industry. Marienalli (2011) conducted a longitudinal study on diversification strategy and performance leaving a gap for this study to investigate cross-sectional study on the same relationship in sugar industry. Manyasi and Masinde (2014) have explored CSR against employee performance, while this study has addressed CSR as a strategy in relation to the overall performance in sugar industry. Mishra and Suar (2010); Flammer (2013); McWilliams and Siegel (2001); Margolis and Walsh (2002) have presented inconsistent results on the relationship between CSR and performance in different contexts of their studies while this study has found a consistent relationship. Wanyande (2001) looked at one factor of macro environment as moderating effect leaving a gap for other factors that constitute macro environment to be investigated as moderating variables. Mashhadi and Rehman (2012); Adeoye and Elegunde (2012); Vijfvinkel, Bourman and Hessels (2011) have investigated macro environment as moderating factors in the SME sector while this study has explored macro environment in sugar industry moderating choice of strategy and performance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter describes the research methodology that was adopted in carrying out the study. It discusses the research design, target population, sample size and sampling procedure, research instruments, data collection procedures, data analysis techniques and ethical issues in research.

3.2 Research Design

Research philosophy relates to the development of knowledge and the nature of that knowledge, and contains important assumptions about the way in which researchers view the world (Saunders, Lewis & Thornhill, 2007). A crucial question in any field of study concerns what constitutes acceptable knowledge in that field which is the focus of epistemology. Positivism and Phenomenology are two main research philosophies that underpin research in social sciences. Positivism is a philosophy of science that seeks facts of social phenomena with little regard to subjective status of individuals. Although the term 'positivism' had been used earlier by Saint Simon (1760-1825), it is usually attributed to the French philosopher Auguste Comte (1798-1857). It is objective in nature and believes that the researcher is independent from that which is being researched. Positivists believe that only phenomena, which are observable and measurable, can be validly regarded as knowledge. Positivism in the social sciences is usually characterized by quantitative approaches and the proposition of quasi-absolute laws. According to Patton (2002), positivism is concerned with correspondence with the real world, the truth as an objective reality, impartiality, confirmability, consistency, dependability and the explanation of regularities. Consequently, existing theory is used to develop hypotheses which are tested and confirmed, in whole or part, or refuted, leading to further development of theory which then may be tested by further researcher.

Phenomenology refers to the way in which we humans make sense of the world around us. It is a philosophy of science that focuses on immediate experience, open and unstructured interviews and introspective reports where the researcher is part and

parcel of the phenomena (Saunders et al., 2007). Phenomenology was not founded; it grew, its fountainhead was Husserl, who wrote (The Idea of Phenomenology) in 1906, and described its position as "descriptive psychology". It is essentially the study of experience from the perspective of the individual, taken for granted assumptions and usual ways of perceiving. He argued that epistemology, phenomenological approaches are based in a paradigm of personal perspective and interpretation. Pure phenomenological research seeks essentially to describe rather than explain, and to start from a perspective free from hypotheses or preconceptions (Husserl, 1970).

The two research philosophies; Positivism and Phenomenology have greatly guided most social science research. The extent to which a research is guided by a particular research philosophy is a function of state of knowledge and theory development in a particular field and the researcher's view of the world. The current study which involves both descriptive and quantitative is guided by positivistic and phenomenology research philosophies. The current study involves objective testing of empirical hypotheses that was formulated as predictions of objectively observed phenomena. Hypothesis testing was undertaken with the intent of either rejecting or failing to reject the null hypotheses. Consequently, the approach allows for the operationalization of the various hypothetical concepts as well as generalization of the results.

A research design should provide confidence to the scientific community that the findings derived capture the reality and possess high levels of reliability and validity (Kerlinger, 2007). A cross-sectional and correlational survey descriptive research design was used in carrying out the study. Cross sectional survey was appropriate because the information about subjects that is gathered represents what is going on at one point in time. It offered the researcher an opportunity to collect data across different firms while correlational was due to the fact that the researcher tested relationships between one set of variable against another. Both cross sectional and correlational approaches offered the researcher the opportunity to capture a population's characteristics and test hypothesis quantitatively. This study was also

descriptive because it is concerned with finding out what, when, and how much phenomena (Cooper & Schindler, 2003). The researcher considered this design as appropriate because of the purpose of the study, topical scope, researcher involvement, time period over which the data was collected, nature of data that was collected and the type of analysis to be performed.

Further, it was found to be appropriate because the researcher intended to collect descriptive data that will be accorded statistical treatment to allow for hypothesis testing and come up with objective conclusions (Cooper & Schindler, 2003). This design was used by Tan and Litschert (1994), Aosa (1992) among other researchers and enabled them test hypotheses and draw plausible conclusions.

3.3 Target Population

The target population of the research entailed eight sugar companies in Kenya. The industry is a sub-sector within the larger agriculture sector in Kenya. The population of this study comprised of both parastatal and private companies in the sugar industry in Kenya totaling to eight companies by 2014. All the eight companies were contacted to participate in the study, out of the eight sugar companies in Kenya, five are parastatal companies while three are private companies. Target population were fifteen senior managers who include heads of departments and sections whose portfolio held a crucial role in developing strategic measures in the targeted companies. At least 120 respondents were targeted to fill the questionnaire and one for interview questions. In total the study aimed at reaching all the respondents representing the eight companies.

3.4 Sampling techniques and illustrations

This section describes the sample size and sampling procedures used in the study.

3.4.1 Sample Size

The sample size for this study is 120 respondents drawn from the target population of 500 managers using a sample theory of Krejcie and Morgan (1970). The targeted companies for the study consisted of five parastatal sugar companies and three

private companies forming a total of eight companies. These companies diversity formed a good representative in terms of size in production and capacity, age in terms of years of operation, location among others. The targeted respondents were departmental and sectional whose portfolios were involved strategy formulation and decision making and were relevant in shaping the direction and making key decisions on the companies affairs.

3.4.2 Sampling

Sampling is an important process in research because it is often not possible to gather data from all the relevant members within a population (Baines & Chansarkar, 2002). Though the study targeted all the eight sugar companies in Kenya, for the purposes of selecting respondents a sampling procedure was deemed necessary. The current research required that non-probability sampling approaches be used and in particular purposive sampling. According to Leedy and Ormrod (2005) purposive sampling is meant for a particular purpose, where people are chosen who are relevant to the research topic and who the researcher believes can provide the best information to achieve the objectives of the study (Kumar, 1996). The study in its choice of respondents targeted members of senior management who bore the greatest responsibility in decision making and strategy formulation.

3.5 Data Collection Instruments

The study used survey method, Surveys are useful methods for obtaining substantial quantities of data from respondents (McDaniel, Lamb & Hair, 2008) either by means of interview surveys or self-completion questionnaires (as the current research adopted). The study used a set of questionnaires (Appendix I), face to face interview and secondary data. The questionnaire methods are effective in addition to being more affordable and faster. It further eliminates biases and undue pressures on respondents by allowing them time to fill the items using records and files at their conveniences while they remain anonymous. Furthermore, the questionnaire system is devoid of translation biases and guess work common. A set of questionnaires were designed to generate responses on study items covering company general characteristics, strategic choices, macro environment factors and performance

dimensions developed in a pattern earlier used by Jauch, Osborn and Glueck (1980). This was administered to the 120 managers of eight sugar companies in western Kenya. Face to face interviews to the respondents were conducted to supplement the information collected through the questionnaires. Secondary data covered resources in strategy to performance on variables such as profits, total output turnover, sales volume and capacity utilization covering a period between years 2009-2013.

The study questionnaire was semi structured, meaning a mix of both structured and unstructured questions were included. In unstructured questionnaires, respondents are asked open-ended questions and their responses are thus not limited or predetermined (Baines & Chansarkar, 2002). The instrument was designed in four main parts; Part I which is partly structured collected data on general company and respondent profile data. Part II of the questionnaire collected data in the order of the first four main themes of the study. The first theme on product development strategy and performance sought information on how independent indicators (i) new products and services, (ii) development of improved procedures for services impacted on dimensions of performance. The second study theme on market development strategy and performance, obtained data on how independent indicators (i) developing new market segments, (ii) extensions to geographical regions affected performance qualitatively and quantitatively. Third study theme on diversification and performance sought information on independent variables (i) related production activities and services diversification and (ii) unrelated diversification on products and services effects on indicators of performance. Fourth theme on corporate social responsibility and performance sought data on how economical, ethical, legal and philanthropic responsibilities affected performance dimensions. Part III of the questionnaire sought information on the fourth study theme on effect macro environment indicators (i) political factors, (ii) economic factors, (iii) social-cultural factors, (iv) technological factors on strategy performance while the fifth theme was the moderating effects between strategy/performance relationship. The final part IV of the questionnaire sought information of company performance which was collected from both primary and secondary sources since it entailed profits, sales volume, total turnover and capacity utilization. The Secondary data was collected

through published information like company annual reports for the period covering 2009 – 2013. Face to face interview which aimed at collecting information at least from one respondent per company supplemented information on the questionnaires and guide questions as outlined in Parts I to IV and any other relevant information that emerged in seeking clarity on responses given.

3.5.1 Pilot Testing

Pilot testing for this study was done to test the research instruments by collecting data from managers of sugar companies not participating in the main study. Pilot testing employed convenience sampling to achieve sample of two sugar companies. This two included Transmara and Butali sugar companies and seven respondents to fill in questionnaires. A total of 14 managers from the two companies were used to test the reliability and the validity of the questionnaires approximately 12% of the main study sample. Cooper and Schindler (2008) assert that 10% of the main sample should constitute the pilot test. The pilot test for this study was within the recommendation. Convenience sampling used respondents who were voluntarily available (Leedy & Ormrod 2005) and therefore the method was found appropriate due to distance constraints considering the location of the companies. An advantage of this sampling method was a good number of respondents could be interviewed in a relatively short time (Hair, Bush & Ortinau, 2000) and was least expensive method. Collection of the data was done through questionnaires to supplement and enhance clarity of information provided, interviews were also conducted which consisted of two respondents from the two piloted companies. Pilot testing addressed one, the content of the questions in the questionnaire, topics not covered by the questions that were crucial to the study. Two, Pilot testing checked whether there were errors in the instrument, whether the tools provided information that was suitable and reliable for analysis and if there was need to revise the tool. The pilot testing was conducted by the researcher prior to the current study commencement.

3.5.2 Validity of the Instruments

Thietart (2001) define validity as the accuracy and meaningfulness of the inferences, which are based on the research results. It is the degree to which results obtained

from the analysis of the data actually represent the phenomena under study. Sekaran (2003) contends that the validity of the questionnaire data depends on a crucial way on the ability and willingness of the respondents to provide the information requested. The type of validity considered was construct validity, which refer to the extent to which operationalization of a construct (that is; practical tests developed from a theory) do actually measure what the theory says they do. Construct validity evidence involves the empirical and theoretical support for the interpretation of the construct.

The other validity was content validity which involved the degree to which the content of the test matches a content domain associated with the construct. A test has content validity built into it by careful selection of which items to include (Anastasi & Urbina, 1997). Items are chosen so that they comply with the test specification which is drawn up through a thorough examination of the subject domain. Bailey (1994) notes that by using a panel of experts to review the test specifications and the selection of item, content validity of a test can be improved. This study used the expertise of other researchers.

3.5.3 Reliability of the Instruments

The reliability of a research instrument concerns the extent to which the instrument yields the same results on repeated trials. Data reliability which is a measure of internal consistency and average correlation was measured using Cronbach's alpha coefficient which ranges between 0 and 1 (Kipkebut, 2010). Higher alpha coefficient values means that scales are more reliable. As a rule of thumb, acceptable alpha should be at least 0.70 or above. Cronbach's alpha is a general form of the Kuder-Richardson (K – R) 20 formula. Considering a pilot test aimed at two sugar companies, the study instruments for the current study were deemed reliable as indicated later in chapter four.

3.6 Data Collection Procedures

Data required for this study was both primary through questionnaires supplemented by interviews and secondary data from documents, records and reports. The

researcher personally administered the questionnaires to the respondents and collected them on the agreed time with the respondents. The researcher administered the interviews in person and was further responsible in collecting secondary data from documents in form of records, reports relevant to the study. Interviews were recorded in form of notes for reference during entry into data base.

The researcher officially sought permission and consent from respondents through researcher's letter (Appendix III). A university letter of introduction (Appendix IV) was availed to indicate the institution's support on the exercise. Consultation with Sugar board office gave assurance that collection of data from sugar companies was possible without any other approval letter and therefore the researcher proceeded with data collection. The targeted respondents were departmental and sectional heads participating in their companies strategic planning and key decision making. Data collection was done during daytime and presumably within normal working hours within the company premises or any other convenient venue. After data collection the questionnaires, interview notes and other records and reports were collected by the researcher within an agreed duration between the researcher and the respondents and stored for the next stage of data processing and analysis.

3.7 Data Analysis and Presentation

Data was analyzed using a combination of both descriptive and inferential statistics. Descriptive statistics to analyze qualitative data where all the questionnaires received were referenced and items in the questionnaire coded to facilitate data entry. After data cleaning which entailed checking for errors in entry, descriptive statistics and frequencies were estimated for all variables and information presented in form of frequency tables. Descriptive statistics were used because they enable the researcher to meaningfully describe distribution of scores or measurements using a few indices (Saunders, Lewis & Thornhill, 2009). Data frequency distribution and cross tabulation was used in describing and explaining the situation as it is in the companies. Descriptive statistics was further used to provide a profile of company demographics. In this respect, fundamental statistical measures (averages, frequencies, percentages) were used.

Since the primary research question is to investigate the effect of one set of two or more variables (performance indicators) can be predicted or ‘explained’ by another set of two or more variables (product development, market development, diversification and corporate social responsibilities), multiple correlation analysis (Models outlined in the Appendix XIII) was used as the statistical tool to analyze the multivariate relationships between strategic choices and performance, between macro environment and performance. This analytical tool was used by Tan and Litschert (1994) in a study which involved multivariate relationships. In order to predict performance implications of impact of macro environment on the relationship of strategic choice and performance, it was necessary to examine how strategic choice variables affect a single dependent variable, that is, each indicator of company performance.

In order to test the hypotheses, multiple regression analysis was conducted using performance as the dependent variable and strategic choice indicators as predicting variables. Regression analysis beta (β) equivalent to the Karl Pearson Correlation Coefficient (r) (Sekaram, 2003) was used to determine the effect of the independent variable and the moderating variable on the dependent variable. The hypothesis was tested at 0.05% significance level, with 95% confidence, which is acceptable in non-clinical research works and was used to establish the relationship among the study variables and to test the formulated hypotheses. The multiple regression model for this study takes the form:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where Y = dependent variable (Company performance)

β_0 = Constant or intercept which is the value of dependent variable when all the independent variables are zero.

β_{1-n} = Regression Coefficient for each independent variable

ε = Stochastic or disturbance term or error term

X_{1-n} = Independent variable indicators

The test criteria was set such that the study rejects the null hypotheses H_0 if $\beta \neq 0$, otherwise the study will fail to reject H_0 if $\beta = 0$. To test the hypotheses, mean of Company performance was correlated with mean of strategic choices. The correlation(r) was calculated to determine strength of the relationship between the dependent variable and independent variable. Adjusted R^2 indicated percentage of variation in which independent variable (strategic choice indicators) explain dependent variables (performance). The t-test statistic indicated significance of variables where P-value will show significance how independent variables (strategic choices) determine dependent variable (performance) eg. P-value less than alpha, assumed to be 0.05 in this case would indicate significance. Standardized coefficients assessed the contribution of each independent variable towards the prediction of the dependent, since they had been converted to the same scale to show comparison. Beta coefficients were to establish by how much a unit increase in independent variable would increase dependent variable. Over and above the direct effect that macro environment may have on company performance their moderating effect on the relationship between strategic choice and performance was also tested. The change in the explanatory power (R^2) upon introduction of macro environment variables in the regression analysis of the strategic choice variables and each measure of company performance indicated its moderating effect. Further, the statistical significance of the moderating effect was indicated by F-values for all performance indicators.

To establish the moderating effect of macro environment (z) on relationship between independent variable (strategy choice) and dependent variable (performance). The statistical model used for analysis was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_1 X_1 + \beta_z Z + \beta_1 X_1 Z + \beta_2 X_2 Z + \beta_3 X_3 Z + \beta_4 X_4 Z + \epsilon$$

Where Y = dependent variable (Company performance)

β_0 = Constant

β_i = is the coefficient of X_i for $i = 1, 2, 3, 4$,

β_i = is the coefficient of $X_i * Z$ the interaction term between macro environment and each of the dependent variables for $i = 1, 2, 3, 4$

X_{i-n} = Independent variables

Z = The hypothesized moderator (macro environment)

ε = error term

The null hypothesis for interaction is $\beta_0: \beta_i = 0$. Rejecting the null hypothesis that the coefficient of the product term $\beta_i = 0$ indicates the presence of a moderating or interaction effect.

3.8 Measurement of Variables

Product development strategy: This is an independent variable and was measured using two dimensions. Number of new products introduced and number of existing products improved. The two dimensions were categorised using three point scale described as; no new products/improved existing products introduced, two products introduced/improved existing products, multiple products/improved existing products introduced to capture the extent to which product development strategy was applied in the companies' operations. This was measured in PART II of the questionnaire.

Market development strategy: This was an independent variable that was measured using two dimensions. Number of new market segments and number of new geographical areas / regions accessed. Three point scale was used to describe the two dimensions; no new market segments/geographical areas, two market segments/geographical areas, multiple market segments/geographical areas to explain the extent to which market development strategy choice was considered in the companies' operations. This was measured in PART II of the questionnaire.

Diversification strategy: An independent variable that was measured using two dimensions. Number of production activities/products related to the current company operations and production activities/products unrelated to the current company operations. Three point scale was used to categorize the responses in order to

measure the extent to which diversification was a choice strategy in the companies' operations. This was measured in PART II of the questionnaire.

CSR: An independent variable that was measured using four dimensions on the extent to which respondents companies' fulfilled economic, ethical, legal, philanthropic responsibilities. The study used four point scale to capture the level at which the strategy was applied. The scale was described as; no fulfillment at all, poorly fulfilled, fairly fulfilled, highly fulfilled. This was measured in PART II of the questionnaire. Similar measurement approach was successfully used by Nesvadbova (2010).

Macro environment: A moderating variable that was measured using four dimensions described as the extent to which political, economical, social/cultural, technological factors were considered in strategic decision making. In the measurement of the four dimensions the researcher used four items scale to capture the respondents views which included; No consideration at all, poorly considered, moderately considered, highly considered. This was measured in PART III of the questionnaire. Similar measurement approach was successfully used earlier by Purkayastha (2013).

Performance: The dependent variable that was measured using four dimensions. First dimension was on how respondents rated the performance of their company in terms of total turnover which used further four point scale described as; no change in turnover, total turnover has been deteriorating, total turnover has experienced fluctuations, total turnover has constantly improved. This was measured in PART IV of the questionnaire.

The second performance dimension was on how respondents rated the performance of their company in terms of profitability using four point scale presented as; profitability has not changed, there has been constant losses, profitability has been fluctuating, profitability has constantly been raising. This was measured in PART IV of the questionnaire.

Third performance dimension was on how respondents rated performance of their company in terms of Sales volume using four point scale indicated as; Sales have not changed at all, Sales volume have deteriorated, Sales have been fluctuating, Sales have constantly been improving. This was measured in PART IV of the questionnaire.

The fourth and final performance dimension was on how respondents rated the performance of their company in terms of capacity utilization. Using four point scale described as; CU has not changed at all, CU has experienced downward trend, CU has been fluctuating, CU has been improving constantly. This was measured in PART IV of the questionnaire.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

This chapter presents the study findings which have been discussed in line with themes and sub thematic areas based on the study objectives. The main themes include questionnaire response rate, company profiles, product development strategy and performance of sugar companies, market development strategy and performance of companies, diversification strategy and performance of companies, corporate social responsibility and performance of companies and finally macro environment moderating strategy choice and performance of companies.

Reliability measurement on the research instruments was done by Crobach Alpha testing for both consistency and stability. Descriptive statistical analysis was carried out in accordance with the study objectives. Diagnostic tests were done prior to regression tests to determine whether the data could be subjected to further tests. T-test of significance was used to test whether the change of the independent variables were statistically significant at 95% confidence level. The study used regression analysis to test the statistical significance of the various independent variables on the dependent variable company performance. Analysis of variance (ANOVA) consisted of calculations that provided information about levels of variability within a regression model and formed basis for test of significance. The Pearson Bivariate correlation coefficient was used to test the strength of the relationship between independent and dependent variables.

4.2 Questionnaire Response Rate

A total of 120 managers in sugar companies in both public and private were targeted and to this effect 120 questionnaires were issued. Out of these 72 usable questionnaires were received back giving a return rate of 60%. The return rate in the current study is justified by Richardson (2005) who cited Babbie (1973) and Kidder (1981) when he stated that 50% is regarded as an acceptable response rate in social research surveys. Nachmias and Nachmias (2006) considered a response rate of at least 51% in an open study to be adequate while Baruch (1999) further researched

the return rates reported by 141 published studies and 175 surveys in five top management journals and found that the overall average return rate was 55.6%. Others like Cooper and Schindler (2003) argued that a response rate exceeding 30% of the total sample size provides enough data that can be used to generalize characteristics while Sekaran (2000) advanced 40% response rate to be acceptable.

Table 4.1: Response Rate

Company	Questionnaires Issued	Number Returned	% Return Rate
Nzoia	15	14	93.3
Sony	15	10	66.7
Muhoroni	15	13	86.7
Chemelil	15	14	93.3
Mumias	15	13	86.7
West Kenya	15	8	53.3
Butali	15	0	0
Kibos & Allied	15	0	0
Total		72	60

4.3 Respondents and Company Profiles

The study was designed to gather information from both respondents and company profiles which are indicative of the state of both at the time of data collection. These are explained in the following sub-thematic areas addressing the two prime profiles and their implications in terms of performance in sugar companies. These included; respondents profile, title of the respondents, length of service in the company, roles in the company's strategic process, companies profiles, age of the companies, scope of operations, ownership structure of the companies, size of the companies, product/service offerings.

4.3.1 Respondents Profile

The study found it crucial to ascertain the broad information of the respondents since it plays a great role in determining the nature of information provided in terms of accuracy. The analysis relied on the information of the respondents to classify the different results according to their knowledge and responses. The demographic data

consisted of title of the interviewee, their service duration with the company in years and their role in the company’s strategic planning process. A comprehensive summary is outlined in table 4.2 and subsequent discussion of individual profile data.

4.3.2 Title of the Respondent

The question sought to find out the positions held by the respondents in the company. This was to shed light on the management structure and the crucial role played in the strategic planning, execution and monitoring processes. Two main categories identified to be participants in company strategic process filled in the questionnaires, among them out of 72 respondents who participated in the study 34 (47.2%) were departmental heads while 38 (52.8%) were sectional heads. Table 4.3 below represents number of respondents and their frequency percentage according to positions held in the companies. The choice of respondents agree with Ballesteros et al, (2013) who asserted that top managers across the globe have a role on corporate strategy.

Table 4.2: Title of the Respondents

Positions of the Respondents	Number of Respondents (n)	Percentage (%)
Departmental Heads	34	47.2
Sectional Heads	38	52.8
Total	72	100

4.3.3 Length of the service in the company

The respondents at target sugar companies were asked to state the length of time in years they had been with the company. Results are presented in Table 4.3, 12.5% of respondents had worked for 1-10 years, 40.3% had worked for 11-20 years, while 47.2% had worked for over 20 years. Higher percentage in the category with over 20 year service is an indicative of low turnover in human resource, stability and experience which would translate to stability in performance due to low labour transitions. However, the category may equally impact negatively to the company performance due to the perception that long serving employees tend to be rigid and resistant to change while falling short in acquisition of new and modern skills. The findings further indicate that despite the low percentage on category on 1 – 10 year

service, Table 4.3 shows fair representation in other categories which is an indication of diversity in age and talent and positively impact on continuity in the company activities. The findings corroborate the work of scholars like Thompson and Strickland (2007), Pearce and Robinson (2004) and Letting (2009) who found the need for employees with enough experience to achieve effective performance and implementation of strategies.

Table 4.3: Length of the Service in the Company

Years of Service	Frequencies (f)	Percentage (%)
1 – 10 years	9	12.5
11 – 20 years	29	40.3
21 & above years	34	47.2
Total	72	100

4.3.4 Role in the Company’s Strategic process

The role of respondents from target companies in strategic process is summarized in Table 4.4. the findings show that majority of them at 47.2% are involved in the implementation part of a strategic process which from the responses involved activities like value addition, asset management, recruitment and retention. Respondents in monitoring and evaluation were 37.5% while planning, formulation stood at a minimum of 15.3%. The findings were partially as expected in that strategy implementers need to be more in percentage with planners being fewer. The unexpected outcome is the slightly higher percentage in monitoring and evaluation category. Successful implementation and performance of companies depend largely on how activities and outputs are effectively monitored and evaluated. One crucial role of evaluators is mediating between process planners and executors, while also enabling the company to take necessary timely corrective measures. Previous evaluations and monitoring could have misled the company decisions and subsequent poor performance and this could inform the higher percentage on the category.

Table 4.4: Role in the Company's Strategic process

Role in Strategic Process	Frequencies	
	(f)	Percentage (%)
Planning, formulation and Effective		
Training	11	15.3
Implementation	34	47.2
Monitoring and Evaluation	27	37.5
Total	72	100

4.3.5 Companies Profiles

Different aspects to describe targeted companies were used. These include age (indicated by the year of incorporation), country of incorporation, ownership structure, scope of operation and the nature of market offering (tangible and intangible products). Each of these aspects has implications on the way the organizations conduct their business. For instance, age indicates an organization's stage of development and experience, while ownership structure and country of incorporation have implications on the power and control as well as the political context in which decision making takes place. Individual company profiles are summarized in Appendix VI.

4.3.6 Age of the Companies

Age indicates a company's stage of development and experience, Table 4.5 represents the age of the company indicated by the year of incorporation.

Table 4.5: Age of the Companies

Year of Incorporation	Number of Companies	Percentage (%)
Between 1960 – 1980	5	62.5
Between 1980 – 2000	1	12.5
Between 2000 – beyond	2	25
Total	8	100

The age of the companies that participated in this study was measured as the number of years an organization has been operation. Five companies representing 62.5% of

the targeted were incorporated between 1960 and 1980, after which the rate of incorporating sugar companies appeared to slacken with only one company (12.5%) was incorporated between 1980 and 2000. From the year 2000 the rate of incorporation appear to pick up with two companies (25%) being incorporated. The increase in number of sugar companies between 1960 – 1980 can be traced to the many changes that took place as country was establishing its agriculture sector after independence while the recent establishment of new companies mainly private could be attributed to the competitive environment in the industry which has seen the collapse of some government owned sugar companies.

Study findings support consideration of age of a company as a factor that may affect the company's survival and growth and/or decline and death. Age of a company depicts among others establishment in infrastructure and networks which signify experience and approaches in handling in procedures with subsequent positive outcome in performance. However, the current situation in sugar companies may not be supported by the argument due the state of dilapidated and outdated equipments with frequent breakdowns resulting to low capacity performance. Study records indicate that some of the earliest companies to be incorporated in Kenya even with established infrastructure do not necessarily present favourable performance measures incomparison with the recently incorporated (Appendix VII).

4.3.7 Scope of Operation

Scope of operation for sugar companies shows the presence of their products geographically either regionally, nationally or internationally as indicated in Appendix V column five. Determining the level of company's operations shows the level at which they have grown their markets either regionally, nationally or globally which is an indicator of performance in terms of the level of at which the products are availed to potential consumers. With regard to the organizations' scope of operation, the respondents were asked to choose appropriately the category indicating that all companies operate within the confines of a national scope though previously a few of the sugar companies exported their surplus products. The findings show sugar companies' main market to be national (Appendix VI) and

therefore it can be concluded that there is sufficient availability of their products locally. Further, there is availability of growth opportunities for the companies given the country requirements for sugar is more than the production (KSB Strategic Plan 2010 – 2014). Thirdly, Sugar companies are underutilizing their production capacity, with statistics from Kenya Sugar Board indicating that collectively operational capacity is under 60%. Fourthly, there is need for strategic change for performance to be realized within competitive regional environment (Appendix VII).

4.3.8 Ownership Structure of the Companies

Ownership structure indicates the level of partnership and shareholding which show the level at which key decisions are made and which subsequently affect performance. Appendix VI column 4 summarises ownership structure showing the percentage shareholding between the government, local and foreign investors. Respondents on target companies indicated that four (4) companies were fully owned by the government with two at 100% and the other two at 98%. A fifth company is shared owned by local corporates (44.9%), local individuals (50.5%) and foreign investors (4.6%). The remaining three companies are full privately owned with little information given on the details of their shareholding. The findings are well summarised in Appendix VI. Ownership has implications on the level of control, decision making organs, operation within in the environment of both local and national politics. Whilst privately owned companies are well coordinated with less political interference, less wastage of resources and fairly good conditioned equipments with better capacity performance, the government controlled companies have encountered challenges in through both politics and bureaucracy. According annual reports from Kenya sugar board mainly Government companies are experiencing losses and receivership measures in their operations and this has led to less capacity utilization (KSB, 2014). Given that most of the companies who participated in the were government owned or parastatals and considering performance measures as indicated in Appendix V, poor performance could only be associated with unfavourable decisions resultant from government ownership and therefore would partially lead to generalization to include private companies since they all operate in similar environments.

4.3.9 Size of the Companies

In this company profile, the study sought to establish the number of employees in the target companies to give an estimate of the work force. The size of the participating companies was measured as the number of full time employees working in the companies. The findings of this study (see Appendix VI) indicated that six of eight sugar companies targeted had more than 600 fulltime employees while the two private companies could not disclose due to policy constraints.

This company profile was deemed important since certain level of performance according to Leting (2009) are only possible with an adequate workforce. It is evident that there is no ideal number considered adequate enough to translate to good performance, the findings could be interpreted to imply that sugar companies do not have inadequacy of workforce. Further low numbers in workforce could affect implementation of strategic plans and performance due to poor human resource capacity. High numbers in workforce could also be interpreted to mean wide ranging activities in the company and larger market share of the company's products. Bigger companies in size tend also to approach their activities formally including assessing their progress and satisfying stakeholders. NSE handbook (2013) reported that listed companies that are big tend to publish their reports hence investors use these reports to judge which firm to invest in. finally the larger the company the more probable it is in terms of survival than their smaller counterparts and also have the benefit of experience, access, links, reputation and legitimacy leading to unlimited access to external resources (McKee, Varadaran & Pride, 2009).

4.3.10 Product/Service Offerings

The study also sought to know the types of products offered by the target companies in the market. To determine company's performance, it was necessary to know what it offers to the market and therefore knowledge of companies' products or services was considered inevitable. The summary in Appendix VII indicates that sugar is the outright product offered by all the companies with some like Mumias, Chemelil, Muhoroni and Sony companies offering both white and brown sugar. All parastatal companies indicated through respondents that they produce molasses and bagasse

and all have plans underway to cogenerate electricity through bagasse and ethanol by use of molasses with the exception of Mumias which is already producing the products. Filter cake as an additional product was reported in Chemelil sugar company. The products offered by the target companies have implications in the supplies to the local demand market and competition within the industry on raw material which is sugarcane. Currently according to Kenya sugar board annual reports (KSB 2014) there is a deficit of over 200,000 tonnes of sugar in the local market. Further implications of the findings show that due challenges in the industry in terms of costs in production, companies are opting to diversify into ethanol, electricity cogeneration, water bottling which will improve in their capacity utilization and in profit margin. Diversification within the sugar companies also implied exploiting the use of sugarcane by-products which would otherwise have gone to waste. Further implications of diversification show sugar companies capitalizing on resources like extra capacity and idle machinery. Production of diverse products translates in improvement in capacity utilization which is a positive performance measure.

4.4 Correlation analysis

The researcher used correlation analysis to determine the relationship between independent variables, between independent and the dependent variables. Pearson's correlation coefficient was used for this analysis and the results are indicated in tables 4.6 & 4.7

Table 4.6: Correlations between Independent Variables

	NPS	IPS	DNMS	ETR	ORPA	OUNPA	ECR	ETHR	LR	PR
NPS	1									
IPS	.269	1								
DNMS	.246	.517**	1							
ETR	.238	.375	.344	1						
ORPA	.386	.427	.498**	.470	1					
OUNPA	.384	.338	.329	.395*	.559	1				
ECR	.309	.302	.325	.473**	.361	.494	1			
ETHR	.430**	.341*	.436	.393	.436	.390*	.363	1		
LR	.395	.312	.523	.361	.387	.377	.412	.306	1	
PR	.427	.347	.415	.494**	.334	.462	.493	.422	.329	1

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.001 level (2-tailed).

Key

NPS	New product/services
IPS	Improved products/Services
DNMS	Development of new market segments
ETR	Extending to new regions
ORPA	Offering related production activities
OUNPA	Offering unrelated production activities
ECR	Economic Responsibilities
ETHR	Ethical Responsibilities
LR	Legal Responsibilities
PR	Philanthropic Responsibilities

Pearson correlation coefficients between independent variables ranged between (r=0.238 to r=0.559). The higher correlations were found to be between development of new market segments and legal responsibilities (r=0.523) at p<0.001 and offering unrelated production activities and offering related activities both

indicators of diversification strategy ($r= 0.559$) at $P<0.001$. It can be concluded that correlations between independent variables are significant since p value is less 0.001. The correlations are lower than 0.05 and therefore implying that each variable is measuring a different aspect from the other (Table 4.7)

Correlations between independent, moderating and dependent variables presented higher correlation coefficients upto 0.67 $p<0.0001$. Political factors of macro environment correlated highly with performance measured as profitability ($r= 0.67$ $p<0.0001$) meaning that there is fairly strong relationship between them and that political factors could determine profitability in a company. Offering related production activities correlated with performance found $r=0.595$ when performance was measured as sales volume implying that diversification strategy (related production) has a strong relation with sales volume. It can further be concluded that companies engaging in diversification into related products or services are bound to increase their sales volume and its resultant performance growth. Offering unrelated production activities correlated with operational efficiency scored a correlation coefficient of $r=0.548$, $p<0.0001$ implying that when companies introduce products or services not related with their current offerings they stand a better position to improve on their efficiency. This could further be explained as a way of exploiting the extra production capacities for production of unrelated products. Other strong correlations between independent variables and dependent variables included offering both related and unrelated production activities against sales volume with correlation coefficients of $r=0.595$ and $r=0.577$, $p<0.0001$ respectively. The correlations (Table 4.8) were strong enough to probe further statistical analysis.

Table 4.7: Correlations between Independent Variables, Moderating and Dependant Variables

	NPS	IPS	DNMS	ETR	ORPA	OUNPA	ECR	ETHR	LR	PR	Mac-P	Mac-E	Mac-S	Mac-T	TT	Prf..	Sales.	OE
NPS	1																	
IPS	.269	1																
DNMS	.246	.517*	1															
ETR	.238	.375	.344	1														
ORPA	.386	.427*	.498**	.370	1													
OUNPA	.384	.338	.329	.395	.559	1												
EC	.309	.302	.325	.473	.361	.494*	1											
ETHR	.430	.341	.436	.393	.436	.390	.363	1										
LR	.395	.312	.523	.361**	.387	.377	.412	.306	1									
PR	.427	.347	.415	.494	.334	.462	.493**	.422	.329	1								
Mac-P	.341	.443	.354	.460*	.514	.351	.314	.302	.580	.478	1							
Mac-E	.441	.303	.339	.300	.342	.368	.326	.370	.532**	.390	.513	1						
Mac-S	.313	.362	.358	.475**	.585	.443	.436	.450	.469	.408	.407	.397	1					
Mac-T	.375	.368	.375	.472	.368	.361	.362	.338	.343	.329	.301	.504*	.354	1				
TT	.338	.330	.430	.502	.435	.428	.386	.419*	.325	.412	.307	.305	.379	.407	1			
Prf.	.349	.411	.334	.437	.329	.493	.320	.383	.536	.483	.670**	.619**	.390	.496	.446	1		
Sales.	.392	.469	.486	.536	.595	.577**	.508	.324	.508	.300	.463	.447	.308	.362	.321	.590	1	
OE	.581	.431	.433	.350	.445	.548	.459	.457	.353	.356	.395	.303	.334	.374	.463	.454	.556	1

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.001 level (2-tailed).

KEY

- NPS New product/services
- IPS Improved products/Services
- DNMS Development of new market segments
- ETR Extending to new regions
- ORPA Offering related productions activities

OUNPA	Offering unrelated production activities
ECR	Economic Responsibilities
ETHR	Ethical Responsibilities
LR	Legal Responsibilities
PR	Philanthropic Responsibilities
Mac -P, E, S, T	Macro environmental factors (Political, Economic, Social Cultural & Technology)
Performance	Total turnover, Profit after tax, Sales volume, Operational efficiency

4.5 Diagnostic tests

4.5.1 Reliability Tests

From the pilot study, reliability test using Cronbach's Alpha Coefficient was carried out on the tool to ensure it gave reliable results. A total of 72 questionnaires were obtained and reliability tests were conducted (Table 4.9). The results showed a Cronbach-alpha coefficient of greater than 0.70, which is used to indicate a factor as reliable (Suhr & Shay, 2009). A summary of Cronbach-alphas for each factor is given in table 4.9.

Amongst all the variables the lowest alpha coefficient was 0.721 while the highest was 0.789. Reliability test results indicate that the individual components and overall coefficient are above 0.7. Cooper and Schindler (2008) affirm that a Cronbach's alpha coefficient of 0.7 is adequate for a newly developed tool. Therefore based on this recommendation the study questionnaire had adequate internal consistency and was reliable for the study.

Table 4.8: Reliability Test

Variable		Number of Items	Cronbach's Alpha
Strategy choice	Product dev. Strategy Market dev. Strategy Diversification Strategy Corporate Social Responsibility	10	0.789
Macro environment	Political factors Economic factors Social cultural factors Technological factors	9	0.75
Performance	Total turnover Profitability after tax Sales volume Capacity utilization	4	0.82

4.5.2 Normality

Normality can be defined as the shape of the data distribution for an individual metric variable and its correspondence to the normal distribution, the benchmark for statistical

methods (Hair *et al.*, 2010). Normality is one of three assumptions for multivariate analysis. Regression assumes normality between the variables under analysis (Hair *et al.*, 2010). Skewness and kurtosis measures of the distributions should be calculated (Tabachnick & Fidell, 2007).

Where skewness describes how symmetrical the distribution is around the centre, kurtosis describes how flat or peaked the distribution is (Cohen *et al.*, 2003). A variable with perfect normal distribution has zero skewness and kurtosis (Hair *et al.*, 2010). To assess how far the value of skewness and kurtosis depart from normality, a rule of thumb suggests that the value for skewness and kurtosis should be between ± 1 . Table 4.10 shows all variables with corresponding skewness and kurtosis values. Clearly, most of the variables did not violate (or are at least close enough to) the assumption of normality based on the rule of ± 1 statistics threshold (Aluja, Blanca & Garcia, 2005).

Table 4.9: Skewness and Kurtosis Scores

Variables	N	Skewness		Kurtosis	
		Statistic	Std. Error	Statistic	Std. Error
Product development Str.	72	-.216	.198	.187	.394
Market development Str.	72	-.638	.198	.683	.394
Diversification Str.	72	-.425	.199	.425	.395
CSR	72	-.318	.198	-.563	.394
Macro Environment	72	-.523	.198	.615	.394
Company Performance	72	.256	.199	.344	.395

4.5.3 Multicollinearity test

The test was done to determine the viability of using all the independent variables for further regression analysis. This is a statistical situation where some independent variables in a multiple regression model are highly correlated. It is important to undertake the test to help reduce the variables that measure the same things (Robert, 2007). When multicollinearity occurs the correlated predictors provide redundant information about the responses (Lauridsen & Mur, 2005). To measure multicollinearity

VIF exceeding 10 are signs of a multicollinearity problem. A measure showed VIF to range between 4.56 and 8.95.

Table 4.10: Multicollinearity test

Variable	VIF
Product development strategy	5.68
Market development strategy	8.95
Diversification strategy	6.07
Corporate social responsibility	4.56

4.5.4 Analysis of overall variance Test (ANOVA)

The results of ANOVA tests in which F-test was carried out using the Analysis of Variance (ANOVA) to determine whether the regression model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$ where; X_1 – product development strategy, X_2 – market development strategy, X_3 – diversification strategy, X_4 –corporate social responsibility(independent variables) can reliably predict company performance (dependent variable).

Table 4.11: Analysis of overall variance test (ANOVA) on multiple regression model

Predictors	R ²	F value	Sig.
(X ₁ , X ₂ , X ₃ , X ₄)	0.755	27.241	0.006

Dependent Variable (Y): Company performance

Where X₁, X₂, X₃, X₄ were independent variables

Table 4.12: Analysis of overall variance test (ANOVA) on moderated multiple regression Model

Predictors	R ²	F value	Sig.
(X ₁ , X ₂ , X ₃ , X ₄ , M, N, P, Q)	0.869	21.596	0.006

Dependent Variable (Y): Company performance

Where X_1, X_2, X_3, X_4 were independent variables

N, M, P, Q were moderating variables

Table 4.11 and Table 4.12 indicate the linear regression F test results showing both multiple regression and moderated multiple regression models to be statistically significant (p value $0.006 < 0.05$). The F tests findings can be concluded that the study on independent variables as group can reliably predict company performance measured in terms of total turnover, profitability, sales volume and capacity utilization both with a p -values less than alpha (0.05) before moderation.

The research used multiple linear regression analysis to determine the linear statistical relationship between the independent, moderating and dependent variables for this study. All the five null hypotheses were tested using the multiple regression models. The aim of multiple regression analysis was to identify these variables simultaneously associated with a dependent variable and to estimate the separate and distinct influence of each variable on the dependent variable. Multiple regression analysis explained and predicted variation in a dependent variable because of independent variable which was assessed using coefficient of determination (R^2). Beta coefficients (β) for each variable allowed the researcher to compare relative importance of each independent variable. For each hypothesis, the regression equations were first obtained using the beta coefficients on the line of best fit. The decision rule was to reject $H_0: \beta_i = 0$ if the regression coefficients are significantly different from zero and consequently accept the alternate hypothesis $H_a: \beta_i \neq 0$.

4.6 Product development Strategy of Sugar Companies

One of the objectives that the study wanted to achieve was to determine the extent to which product development strategy affects performance of sugar companies. Product development strategy is a choice strategy in companies which indicates are either developed or existing ones improved in order to achieve superior performance in a

competitive environment. In this thematic area performance in product development was assessed in terms of new products developed and improved existing products. These are further discussed in the following sub-thematic areas.

4.6.1 New products introduced

Introduction of new products is an element of growth as advanced by Ansoff (1985). New product strategy has been operationalized as new products developed by a firm that denotes the innovativeness of the new products (Barczak 1995). Respondents were asked to state the extent in which new products were developed in terms of the number of new products introduced within their company operations. The findings are summarized in Table 4.13.

Table 4.13: The number of new products introduced by sugar companies collectively. Introduction of new products has been categorized into a scale three categories.

New Products & Services Introduced	Respondents Frequency (f)	Percentage (%)
No new product introduced	8	11.1
Single product introduced	19	26.4
Multiple products introduced	45	62.5
Total	72	100.0

The results show that majority of respondents indicated their companies to have introduced multiple products with at 62.5% within the period 2009 to 2013. 11.1% respondents indicated that no products had been introduced while 26.4% showed that only a single product was introduced. The new products introduced were mainly byproducts of sugarcane which included molasses, baggasse, cogeneration of electricity and ethanol production as indicated earlier in Table 4.5. Kotabe (1990) in his study found a direct relation to new product performance and better performance while Liu, Lin & Huang (2014) found successful product development to enhance operating

performance in textile industry. In auto industry, Cusumano and Nobeoka (1991) linked product development strategy with project structure to improve on project performance. This study findings that new product is expected to have a positive effect on organizational performance reaffirms that sugar companies cannot depend on their current product offering only to meet their sales and profit objectives. However important, still some new products do not succeed in the market according to (Hultink, Himmelberg & Palia, 1998).The study therefore concluded that while new product introduction is an expected indicator of growth, Table 4.16 below show sugar companies minimal performance in terms of sales volume and capacity utilization therefore leads to the conclusion that there are other factors necessary to improve their performance other introducing new products.

4.6.2 Improved existing Products

Improvement of existing products is an indication of adopting technology to pursue quality products (IMA, 2000).The respondents were required to state the number of such improved products adopted by the company operations. The findings are summarized in Table 4.14.

Table 4.14: Offering of Improved existing Products

Introduced Improvements	Respondents Frequency (f)	Percentage (%)
No Products improvement	6	8.3
Single improvement	12	16.7
Multiple improvements	54	75
Total	72	100.0

The findings in Table 4.14 shows clearly that out of 72 respondent managers who participated in the study, 54(75%) indicated that their companies had made multiple improvements in their existing products, 12(16.7%) had made single improvement on their products to improve performance while 6(8.3%) had done no improvements in their

products. This clearly shows or implies that (91.7%) of the companies' products have been improved to conform to the demand in the market and therefore the companies in the sugar industry in western region are expected to perform in the market. Given that 91.7% of the companies' products in the market had been improved to conform with competition using new technology and demand driven, the companies are expected to perform better. Hopkins (1981), points out that successful improvement of products through new processes is an important factor in the survival of the most companies. Organizations depend on such improvements for long-term growth and survival. Contrary to the researcher's expectation, improvement of existing products presented a weak performance improvement in terms of sales volume and capacity utilization which are not statistically significant (Table 4.16) and therefore concluded that there other determinants of performance other than product improvements.

4.6.3 Hypothesis 1 (H₀): There is no significant relationship between product development strategy and performance of sugar companies

The results of ANOVA tests in which F-test was carried out using the Analysis of Variance (ANOVA) to determine whether the regression model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$ where; X_1 – development of new products, X_2 – improvement of existing products was significant. Table 4.36 indicates the linear regression F test results where the tabulated $F_{0.05}(2,69)=3.07$ is less than the computed F-value of 13.482 hence conclude that with 95% confidence product development strategy has explanatory power on company performance.

A regression model containing two indicators of product development strategy (development of new products and improvement of existing products) was run to predict company performance. This enabled to check whether both constructs should be retained in model and how each construct contributes towards different measures of performance. The regression model for this hypothesis was:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon \dots \dots \dots \text{model (i)}$$

Where; Y= dependent variable (company performance)

β_0 =constant or intercept which is the value of dependent variable when all the independent variables are zero

β_i is the coefficient for X_i ($i=1,2$)

Independent variables are:

X_1 – Development of new products

X_2 – Improvement of existing products

ϵ = error term

Table 4.15: Regression Results on the Relationship between product development strategy and company performance

			Total Turnover (Kshs.)	Profit after Tax (Kshs.)	Sugar Sales in (Tonnes)	Capacity Utilization (%)
Product Development Strategy	New Products Introduced	Beta	0.216	-0.220	0.281	0.520
		t-value	2.128	-2.166	2.720	4.691
		Sig.	0.001	0.000	0.005	0.001
	Offering of Improved existing Products/Procedures	Beta	-0.119	0.189	0.474	0.109
		t-value	-1.149	1.735	2.193	-1.091
		Sig.	0.001	0.001	0.000	0.005
Adjusted R²			0.220	0.214	0.239	0.292

P<0.05

From the table 4.15 above coefficient of determination (R^2) indicates that product development strategy can predict 23.9% of company performance when measured in terms of sales volume 29.2% is the predictive power when performance is measured in terms of capacity utilization. From the table 4.16 it is evident that though the relationship between independent variable and measures of performance are statistically significant (p value is < 0.05). Among the two constructs of product development strategy, introduction of new products is the greatest contributor towards performance when measured as capacity utilization ($\beta = 0.520$) since for every unit change in Introduction of new products, there is a 0.520 unit change in capacity utilization when all other factors are held constant. It can therefore be concluded that product

development strategy has significant predictive influence on performance in terms of capacity utilization specifically when developing new products.

From multiple regression analysis

Predictors	β	Std. Error	t	Sig.
Product development strategy (X ₁)	0.420	0.158	2.645	0.009

Dependent Variable: Company performance

Product development strategy is significant in influencing company performance (t value 2.645 at p value 0.009 < 0.05). It can be concluded that the influence is significantly different from zero and therefore fail to confirm null hypothesis 1 that product development strategy has no significant effect on company performance. This implies that Introduction of new products can enhance capacity utilization which is a measure of performance. Idle factory machinery is a common trend in most sugar factories which reduces efficiency in operations. While this can partially be justified by the need for maintenance, development of new products could improve efficiency through making use of unnecessary idle factory times and as result enhance performance. The findings are in agreement with studies by Liu, Lin and Huang (2014) in textile industry where they found product development to better enhance operating performance and organizational effectiveness. Wang (2011) further confirm the findings of this study when they concluded that product based strategies impact positively on performance when they considered innovativeness of product against performance. The results further partially confirm previous findings of Hooper and Reilly (1984) who associated strong sales with new product introductions in car industry. Udegbe and Udegbe (2013) findings show innovation process on products to exert positive influence on organizational performance. Innovativeness in development of new products or improvement of existing ones is further supported by resource based theory where new organisational resources are found to benefit from new opportunities and eventually

boosting performance (Rangone, 1999). Resource based theory also finds potential for value generation through innovative products as resources allowing the firm to achieve the maximum value in a sustainable way (Grant, 1991; Barney, 1986).

4.7 Market development Strategy of Sugar Companies

The second objective of the study was aimed at determining the extent to which market development strategy affects performance of sugar companies. Market development strategy is a choice strategy in companies which indicates the level at which products and services are extended to new geographical areas or developing of new market segments through conversion of non users to users. Ansoff, (1985) cited market development strategy in his product/market matrix as an approach of organizational growth. This was determined by citing the number of such new regions reached and also new market segments achieved. The results are further presented in the following sub-thematic areas.

4.7.1 Adoption of new market segments

The sub theme means converting previously non users to users achieved by succeeding in accessing consumers either previously not using your product or consumers using alternative products. The respondents were asked to state the number of such new market segments achieved with in the past five years and the results were presented in table 4.16.

Table 4.16: Developing new market segments

New market segments	Respondents Frequency (f)	Percentage (%)
No new market segment	10	13.9
Single market segment	26	36.1
Multiple market segments	36	50
Total	72	100.0

Out of 72 respondents who participated in the study 36(50%) of respondents reported that their companies had developed new market segments for their companies, 26(36.1%) reported to have developed at least a single new market segment for their companies, while 10(13.9%) had not developed any new market segment for their companies other than the existing ones. This implies that 86.1% of the respondents agree that their companies have been fully involved in development of new markets. Given this situation, it is expected that the companies to perform better, however regression tests indicate market development strategy to have a significant effect only in terms of sales volume while insignificant to profitability and capacity utilization. This could imply that while the strategy contributes significantly to one aspect of performance, its effect on other measures is poor and therefore conclude that there could be other determinants of performance. Accessing new market segments or conversions of nonusers to users indicate that an organization is tapping into either competitors market or untapped segment of the market and therefore a significant growth dimension though the finding contradicts the outcome of the study by Langerak, Hultink and Robben (2004) who concluded that such market orientation has no direct relationship to organizational performance.

From the interview the respondents stated “Majority of the previous non users were low income earners who could not afford the highly packaged quantities like 1kg or 2kg and therefore had opted to do without. With the introduction of smaller quantity packages of less than 1kg packages more consumers were achieved while still maintaining the higher quantity packaging to keep the existing users of the product.”

4.7.2 Extensions to New Regions

Extensions to new geographical regions is a sub theme of market development strategy meant to determine the level at which the companies have managed to access new regions with their products and services. To assess new geographical regions, the

respondents were asked to indicate the nature of extensions their companies' products have been extended to in the last five years. The results are summarized in table 4.17.

Table 4.17: Extensions to New regions

Nature of geographical Extension	Respondents Frequency (f)	Percentage (%)
No new regions reached	9	12.5
New regions nationally	63	87.5
New regions internationally	0	0
Total	72	100.0

Out of 72 respondents who participated in the study, overwhelming majority of respondents 63 (87.5%) indicated that their companies had extended their products and services to multiple regions within the country while only 9 (12.5%) of the respondents considered their companies not to have reached any extra new region at all. This gave an implication that implies that 100% of the respondents agreed that their companies extended their markets fully within regional and national scope which should translate to the companies performing. Ojo (2009) asserted that companies should engage in geographical market extensions which he found to impact performance positively. Investment in market orientation improves organizational performance through launch activities according to (Langerak, Hultink, and Robben, 2004) while a study by Hassan, et. al., (2013) on impact of marketing strategy creativity found that marketing strategy effectiveness affects performance positively and significantly in manufacturing sector of Pakistan.

Further findings quoted through interview;

“New geographical areas have been achieved through opening up more distribution channels through agencies and promotions and this has contributed in extending new markets regions to the companies' products”.

4.7.3 Hypothesis 2 (H₀): There is no significant relationship between market development strategy and performance of sugar companies

The model was tested to find out it was valid in predicting determinants of company performance (dependent variable). The results of ANOVA tests in which F-test was carried out using the Analysis of Variance (ANOVA) to determine whether the regression model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$ where; X_1 – new market segments, X_2 – ext. to market regions were significant. Linear regression F test results show the tabulated $F_{0.05,(2,69)}=3.07$ is less than the computed F-value of 13.622 hence conclude that with 95% confidence market development strategy has explanatory power on company performance.

Table 4.18: Regression Results on the Relationship between market development strategy and company performance

			Total Turnover (Kshs.)	Profit after Tax (Kshs.)	Sugar Sales in (Tonnes)	Capacity Utilization (%)
Market Development Strategy	Developing new market segments	Beta	0.355	-0.263	0.293	0.326
		t-value	1.128	-0.475	0.769	0.985
		Sig.	0.001	0.000	0.001	0.000
	Extensions to New regions	Beta	-0.407	0.263	0.482	-0.209
		t-value	-3.611	2.506	4.486	-2.070
		Sig.	0.001	0.000	0.005	0.001
Adjusted R²			0.156	0.121	0.186	0.120

P<0.05

From the table 4.18 above coefficient of determination (R^2) indicates that market development strategy can predict 18.6% of company performance when measured in terms of sales volume 12.0% is the predictive power when performance is measured in terms of capacity utilization. 15.6% variances in company turnover can be explained by market development (R^2). Though predictive power was different, statistically reliable relationship was found between all the relationships (p value < 0.05). The results further show that for every unit change in extensions to market regions, there is a 0.482 (β value) unit change in sales volume when all other factors are held constant. It can therefore be concluded that extensions to new market regions is the highest contributor

towards performance when measured in sales volume since other measures of performance like capacity utilization and total turnover though statically significant reflect low contributive values (β values).

From multiple regression analysis

Predictors	β	Std. Error	t	Sig.
Market development strategy (X ₂)	0.441	0.138	3.185	0.003

Dependent Variable: Company performance

Market development strategy is significant in influencing company performance (t value 3.185 at p value $0.003 < 0.05$). Since with a 2-tailed test and a p value (0.003) less than alpha of 0.05, the coefficient of market development strategy is not equal to zero, therefore we reject the null hypothesis 2 that null hypothesis that market development strategy has no significant effect on company performance and conclude that the variable market development strategy contributes significantly to the company performance.

The findings can draw conclusions that extensions to new market segments which involve capturing consumers not previously using the product and also reaching out to new geographical areas can influence companies' total turnover by 18.6% and sales volume by 15.6%. The level of influence is low and therefore market development strategy alone cannot be the only determinant to performance in sugar companies and therefore implying other factors need to be considered. This study therefore partially agrees with some previous studies which have linked market strategy strongly with organizational performance like Langerak, Hultink, Robben (2004) who found market orientation to have strong product performance while Kohli & Jawoeski (1990) avered market oriented culture to enhance performance. The findings contradict the findings of Dekker, Groot and Schoute (2006) in studies that market development through customer quality are closely associated with cost efficiency performance. Gado's (2013) studies

indicated a robust correlation between market innovativeness and performance levels though their study considered both market innovativeness in addition to relevant resources. The study out rightly differed with the findings of Gima, Li and Luca (2006) which indicated market dynamism to have hindered financial relationships and technology dynamism. The study result is supported by industrial organization theory as advanced by Ramsey (2001) who pointed that there is a “causal link between the structure of a market in which a company operates, the organizational conduct and in turn the organizational performance in terms of profitability. Tirole, (1988) also arguing on the basis of Industrial organization theory pointed out that the structure of market has an influence on the strategy and decision making of a company further confirming Ramsey’s views on market and performance.

4.8 Diversification Strategy of Sugar Companies

The third study objective assessed the extent to which diversification strategy has been adopted by sugar companies. Diversification strategy has been cited by Rogers (2001); Purkayastha (2013), Jiatao (1995) as a strategy in which companies pursue growth by engaging in activities similar to the current operations (related) or different (unrelated) to their current activities. The results are further presented in the following sub-thematic areas.

4.8.1 Related products and services

Related products and services in this subtheme refers to a situation where a company expands its activities into product lines that are similar to those it currently offers. In sugar industry could refer to products that can be produced as result of byproducts of sugar such as ethanol, spirits, filter cake, brown sugar etc. efficient diversification builds a competitive advantage, to achieve economies of scale or scope. The respondents were asked to state the number of such related products and services and the results were presented in table 4.19.

Table 4.19: Offering other related production activities

Products developed	Respondents Frequency (f)	Percentage (%)
No related products developed	25	34.7
Single related product developed	45	62.5
Multiple related products developed	2	2.8
Total	72	100.0

Out of 72 respondents who participated in the study 45(62.5%) of respondents reported that their companies had developed at least a single related product or service, 25(34.7%) reported not to have developed any related product or service for their companies, while a minimum of 2(2.8%) had developed multiple related products and services for their companies in addition to the existing ones. This implies that 65.3% of the respondents agree that their companies have been involved in development related products and services. Given this finding, the companies are expected to a superior performance and if not then there is something different that affect their performance. From the regression tests, performance is significant only on sales volume indicating that since other measures of performance are not significant, diversifying on related products does have an effect on performance.

Previous findings show little has been done in sugar industry in diversification into related products and this is confirmed by Kegode (2005) in his study on economic governance reform in the sugar subsector found that the challenger of increasing competitiveness and profitability in Kenya sugar industry can be addressed in diversifying its operations from white sugar mill. Kegode equally had earlier noted that little progress had been done. Kegode's assertions are contradicted by Afza, Slahudin and Nazir (2008) whose findings show that non diversified firms performed better than diversified firms due to high return of non-diversified firms is accompanied by low risk in Pakistan. Oyedijo (2012) study findings presented a high and positive correlation between financial performance and related diversification. The above findings do not

present a positive performance for the Kenya sugar situation whose low diversification into related products could be due to sugar being a unique product with minimal substitutes and therefore does not present a favourable opportunity to manufacture similar or related products using the available capacity.

4.8.2 Unrelated products and services

Unrelated diversification strategy is a subtheme represented a situation where a company adds new, or unrelated, product lines or markets where there is no direct fit to the existing business. Unrelated diversification is considered necessary due to cost efficiencies with high potential for return. The respondents were asked to state the number of such unrelated products and services to the core products offered within the past five years and the results were presented in table 4.20.

Table 4.20: Offering other unrelated production activities

Unrelated products/services	Respondents Frequency	
	(f)	Percentage (%)
No unrelated products developed	15	20.8
Single unrelated products developed	45	62.5
Multiple unrelated products developed	12	16.7
Total	72	100.0

The findings in Table 4.20 shows that out of 72 respondent managers who participated in the study, 45(62.5%) had single product developed to their existing products, 15(20.8%) had not introduced any unrelated product to improve performance while 12(16.7%) had developed multiple products. This clearly shows or implies that (79.2%) of the companies' had developed at least unrelated product and therefore the companies in the sugar industry in western region are expected to improve on their returns and performance in the market. Given that outcome the companies are expected to have an improved performance, however from regression tests, diversification into unrelated

products no significant performance contrary to the researcher's expectation and therefore conclude that there other significant contributors of performance.

The findings are further elaborated by quoted interview;

“There are number of sugar companies introducing products processed from molasses and bagasse which are totally unrelated to the core product the sugar. Mumias sugar company is already producing ethanol and cogeneration of electricity while Chemelil sugar company is producing filter cake usable as fertilizer while other companies' similar plans are underway towards unrelated diversification.”

Previous studies findings are supported by this study where performance has been found to be as a result of unrelated product diversification. Marinelli, (2011) study found that there was higher performance associated with unrelated portfolio of business segments. Positive relationship between diversification and performance was also found by Pandya and Rao (1998) that diversified firms show better performance compared to undiversified and that managers should it as strategic option to improve their firm's performance. The sentiments are equally concluded by Santarelli and Tran (2013) that firm profitability is determined by its degree of diversification. However, Asrarhaghi, et. al., (2013) presented a different view that studies of diversification and performance are inconclusive and therefore no determinations should be made on whether a diversified company is performing or not.

4.8.3 Hypothesis 3 (H₀): There is no significant relationship between Diversification strategy and performance of sugar companies

Diversification strategy was operationalized as offering of related production activities and offering of unrelated production of activities. The results of ANOVA tests in which F-test was carried out using the Analysis of Variance (ANOVA) to determine whether there is a regression model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$ where; X_1 – related production activities, X_2 – offering of unrelated production of activities could predict company

performance. Linear regression F test results show the tabulated $F_{0.05, (2,69)}=3.07$ is less than the computed F-value of 15.155 hence conclude that with 95% confidence diversification strategy has explanatory power on company performance.

Table 4.21: Regression Results on the Relationship between Diversification strategy and company performance

			Total Turnover (Kshs.)	Profit after Tax (Kshs.)	Sugar Sales in (Tonnes)	Capacity Utilization (%)
Diversification Strategy	Offering other related production activities	Beta	-0.355	-0.245	0.413	-0.209
		t-value	-4.143	-3.342	4.787	-3.070
		Sig.	0.001	0.005	0.000	0.001
	Offering other unrelated production activities	Beta	0.245	0.460	-0.413	0.445
		t-value	3.330	-4.997	-4.789	-4.937
		Sig.	0.001	0.001	0.000	0.005
Adjusted R²			0.127	0.144	0.230	0.169

P<0.05

From the table 4.21 above coefficient of determination (R^2) indicates that diversification strategy can explain variances in company performance upto 23.0% when measured in terms of sales volume. Statistically reliable relationship was found between the relationships (p value < 0.05). The results further show that for every unit change in unrelated production activities, there is a 0.460 (β value) unit change in profitability when all other factors are held constant. This implies that unrelated productions activities contributes most on performance profitability ($\beta = 0.460$). The above findings leads to the conclusion that diversification strategy has significant predictive influence on performance in terms of profitability specifically when companies are involved more in activities unrelated or not similar to their current ones. In other words when sugar companies produce unrelated products to their current product which is sugar they are bound to perform better through increasing their sales volume. Related production activities equally had statistical significant influence on performance in terms of sugar sales though with fairly low β values.

From multiple regression analysis

Predictors	β	Std. Error	t	Sig.
Diversification Strategy (X ₃)	0.551	0.149	3.698	0.002

Dependent Variable: Company performance

Since results on multiple regression analysis show $t = 3.698$ where (p-value $0.002 < 0.05$), it can be concluded that diversification strategy coefficient is significantly different from zero and has a significant effect on company performance and therefore reject null hypothesis 3 that diversification strategy has no significant effect on company performance. The findings of the study partially support the findings of Rogers (2001) who asserted that diversified firms tend to have a lower performance especially profitability. He further stated that measures of diversification have no significant association with market value. This study partially agrees with Purkayastha (2013) whose study on the relationship between diversification and performance drew conclusions that there was no outright verdict on whether adoption of diversification strategy leads to increased performance but concluded that the relationship depends on macroeconomic factors like munificence and scarcity in the context of assessment. Jiatao (1995) findings are supported by this current having stated that strategic choices and performance in international markets resulted to positive outcome if diversification is chosen for an existing market. He however concluded that adoption diversification strategy on green fields markets may result to a negative outcome less likely to survive.

4.9 Corporate Social Responsibility and Sugar Companies

The study's fourth objective was determining the extent to which CSR as a strategy has been adopted by sugar companies. Studies have been done on CSR on different performance measures in terms of profitability to stakeholders (Mishra & Suar, 2010), superior financial performance (Flammer, 2013; Tsoutsoura, 2004), favourable community initiatives (Brugmann & Prahalad, 2007). This study has considered CSR

activities through its indicators to the level in which companies engage in economic, legal, ethical and philanthropic responsibilities. Corporate social responsibility (CSR) can help you cut costs and boost sales while other significant benefits include improved reputation, stronger customer loyalty and motivated employees. The level in which a company engages any of the CSR activities shows the level in which the company is progressing in fulfilling its CSR mandate which in turn boosts its image to stakeholders. The results are further presented in the following sub-themes.

4.9.1 Economic Responsibilities

The sub theme means companies fulfill their economic activities in their administrative systems. Economic aspect of CSR has been expressed in terms of fulfilling stakeholders interests (Mishra & Suar, 2010). The respondents were asked to state the extent to which their company fulfilled their economic aspect mandate of corporate social responsibility. The responses were summarized into following four point scale and presented in table 4.22.

Table 4.22: Extent to which companies fulfill their economic responsibilities

Responses	Frequency (f)	Percentage (%)
Not fulfillment at all	0	0
Poorly fulfilled	7	9.7
Fairly well fulfilled	8	11.1
Highly fulfilled	57	79.2
Total	72	100.0

The findings in Table 4.22 shows clearly that out of 72 respondent managers who participated in the study, 57(79.2%) had their companies highly fulfill their economic responsibilities as a corporate social responsibility mandate, 8(11.1%) fairly well fulfilled economic responsibilities, 7(9.7%) had their companies poorly fulfilled

economic responsibilities while no company that did not fulfill their economic responsibility at all. This implies that all the companies 72(100%) fulfilled economic responsibilities in one way or another while (90.3%) of the companies fulfilled their economic responsibility well. Given that 90.3% of the sugar companies in western Kenya fulfilled their economic mandate well, it is expected that the companies would improve in performance. Contrary to that expectation Table 4.27 shows that CSR does not have significant effects on almost all measures of performance and therefore can be concluded that increase in CSR activities does not necessarily improve performance significantly. The study fails to confirm conclusion earlier drawn by Morrison and Siegel (2006) that economic activities of CSR affects productive impacts of efficiency, technical change and sales economies as well as increase input costs and composition. Further Pavie and Filho (2008) showed positive relations between the various measures of CSR and financial performance.

From interviews, on how their companies fulfilled the economic responsibilities, the respondents were quoted; “Fair pricing of products and remuneration for employees motivates them and this eventually impacts on fulfilling organizational performance through achieving organizational goals”.

4.9.2 Ethical Responsibilities

Ethical responsibilities mean companies engage in ethical activities in their administrative systems. The respondents were asked to state the extent to which their company fulfilled their ethical responsibility mandate within the company operations. The responses were categorized in a four point scale, summarized and presented in Table 4.23.

Table 4.23: Extent to which companies fulfill their ethical responsibilities

Responses	Frequency (f)	Percentage (%)
Not fulfillment at all	0	0
Poorly fulfilled	5	6.9
Fairly well fulfilled	23	31.9
Highly fulfilled	44	61.0
Total	72	100.0

The findings in Table 4.23 shows clearly that out of 72 respondents who participated in the study, 44(61%) indicated that their companies highly fulfilled ethical responsibilities, 23(31.9%) had fairly well fulfilled ethical responsibilities, a minimum of 5(6.9%) had ethical responsibilities poorly fulfilled with none of the companies failing to fulfill at all. The above findings imply that (92.9%) of the companies in sugar industry in western Kenya fulfilled their ethical responsibilities at least fairly well and therefore companies who have pursued the strategy should perform well. Regression tests show lack of significant effect on performance and therefore it can be concluded for the sugar companies in western Kenya there seems to be other factors which the companies need to adopt to improve their performance. The findings are contrary to those of Mishra and Suar (2010) who suggested that responsible business practices towards primary stakeholders can be profitable and beneficial to Indian firms.

Respondents interviews on how their companies fulfilled their ethical responsibility had this to say; “Ethical activities are mainly achieved through considering the needs of gender/physically challenged, product quality considerations, through employee safety measures and training, embracing ethics in company activities, good waste disposal, provision of water boreholes for the communities around and enhanced complaint/arbitration initiatives.”

Another respondent quoted said;

“Ethical responsibilities include reduction of complain activities and anti corruption campaigns, carbon credit, strengthening of security services, fair pricing and prompt payments.”

4.9.3 Legal Responsibilities

Fulfillment of legal responsibilities means that companies have a responsibility to comply to industry, government, sugar board requirements in their business operations. Company compliance with legal requirements is doing business by playing by the rules which enables companies to be less affected by consequences on non compliance like penalties, deregistration, legal courts battles eventually affecting their core business and subsequent performance. Any measure that enables a company not to side track could be interpreted to signify focus and progress. The respondents were asked to state the extent to which their company fulfilled their legal mandate. The results are presented in table 4.24.

Table 4.24: Extent to which companies fulfill their legal responsibilities

Responses	Frequency (f)	Percentage (%)
Not fulfillment at all	0	0
Poorly fulfilled	5	6.9
Fairly well fulfilled	15	20.8
Highly fulfilled	52	72.3
Total	72	100.0

The findings in Table 4.24 shows clearly that out of 72 respondent managers who participated in the study, 52(72.3%) had their companies highly fulfilling the legal responsibility mandate, 15(20.8%) had their companies fulfilling their ethical responsibilities fairly well while 5(6.9%) indicated that their companies poorly fulfilled their ethical responsibilities. From the table findings no company failed to at least fulfill

their ethical responsibility at all. Implications to these findings show that (93.1%) of the companies fulfilled their ethical mandate well and therefore expected to have an improved performance. The expectation of an improved performance is partially supported in regression tests where fulfillment of legal activities have a slight significant effect on sales volume. The findings support partially Flammer (2013) assertions that adopting the legal aspects of CSR related requirements leads to performance. The effect is stronger for companies operating in industries where institutional norms of CSR are higher. Further, CSR activities of companies have been found to be those that exceed compliance with respect to for example environmental or social regulations in order to create the perception or reality that these firms are advancing a social goal (Morrison and Siegel. 2006).

On how sugar companies fulfilled their ethical responsibilities respondents were quoted saying; “legal activities are manifested through industry, statutory and legal compliance, pursuit of anti poaching by laws with Government and forensic legal audit.”

4.9.4 Philanthropic Responsibilities

Philanthropic responsibilities indicate that companies’ direct their resources to support a worthy cause or address a societal need. Philanthropic actions and activities positively affect the environment, society, consumers, employees, communities, and other stakeholders. The respondents were asked to state the extent to which their company was engaged in philanthropic activities. The results were presented in table 4.25.

Table 4.25: Extent to which companies fulfill their philanthropic responsibilities

	Frequency (f)	Percentage (%)
Not fulfillment at all	0	0
Poorly fulfilled	6	8.3
Fairly well fulfilled	6	8.3
Highly fulfilled	60	83.4
Total	72	100.0

The findings in Table 4.25 shows that out of 72 respondent managers who participated in the study, 60(83.4%) had highly fulfilled the philanthropic responsibilities, 6(8.3%) had their companies either fairly well fulfilled or poorly fulfilled philanthropic responsibilities. No company in sugar industry in western Kenya that did not fulfill their philanthropic mandate at all. This clearly shows or implies that (91.7%) of the companies fulfilled their philanthropic responsibilities well and this should have resulted to a positive impact on their efforts to support social causes. However, regression tests shows absence of statistically significant results on relationship between philanthropic responsibilities and any performance measure considered in this study.

While philanthropic activities have viewed negatively on short term basis by Wright and Ferris (1999), there is evidence of their value in improvement of performance of companies (Poddi and Vergalli, 2008) especially on a long run performance.

Response through interview on how philanthropic responsibility were fulfilled were quoted as “Philanthropic activities are manifested through construction of amenities like schools and medical facilities, donations to the needy, educational funds and bursaries, enhancing local talent through sporting activities like football clubs.”

Another respondent said;

“Philanthropic activities involved tree planting exercise and conducting of jigger eradication campaign.”

4.9.5 Hypothesis 4 (H₀): There is no significant relationship between corporate social responsibility and performance of sugar companies

Corporate social responsibility (CSR) was operationalized in terms of economic, ethical, legal and philanthropic responsibilities. The results of ANOVA tests in which F-test was carried out using the Analysis of Variance (ANOVA) to determine whether there is a regression model $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$ where; X₁– economic responsibilities, X₂– ethical responsibilities, X₃– legal responsibilities, X₄– philanthropic responsibilities could reliably predict company performance. Linear regression F test results show the tabulated $F_{0.05,(2,69)}=3.07$ is more than the computed F-value of 11.465 hence conclude that with 95% confidence CSR has explanatory power on sales volume.

Table 4.26: Regression Results on the Relationship between Corporate social responsibility factors and company performance

			Total Turnover (Kshs.)	Profit after Tax (Kshs.)	Sugar Sales in (Tonnes)	Capacity Utilization (%)
Corporate Social Responsibilit y	Extent to which companies fulfill their economic responsibilities	Beta	0.263	0.344	-0.370	-0.324
		t-value	3.496	4.179	-4.518	-4.043
		Sig.	0.001	0.005	0.020	0.010
	Extent to which companies fulfill their ethical responsibilities	Beta	0.294	-0.335	0.228	0.376
		t-value	3.737	-4.098	-3.249	4.474
		Sig.	0.001	0.005	0.000	0.002
	Extent to which companies fulfill their legal responsibilities	Beta	-0.220	0.437	0.366	-0.244
		t-value	-3.154	4.867	4.430	-3.356
		Sig.	0.000	0.015	0.000	0.001
	Extent to which companies fulfill their philanthropic responsibilities	Beta	0.325	0.458	0.271	-0.222
		t-value	3.943	5.027	3.607	-3.176
		Sig.	0.001	0.000	0.005	0.001
Adjusted R²			0.138	0.203	0.180	0.160

P<0.05

From the table 4.26 above coefficient of determination (R²) indicates that CSR can explain variances in company performance from 18% in sales volume, 16% in capacity utilization to 20.3% in profitability after tax and 13.8% on total turnover. Statistically

reliable relationships were found between the relationships (p values < 0.05). The results further show that for every unit change in fulfillment of philanthropic responsibilities, there is a 0.458 (β value) unit change in profitability after tax when all other factors are held constant. Similarly the results show that for every unit change in fulfillment of legal responsibilities, there is a 0.437 (β value) unit change in profitability after tax when all other factors are held constant.

Results show that though all the relationships are significant (p vales < 0.05), it is fulfillment of philanthropic responsibilities that contribute most to performance when performance is measured in terms of profitability ($\beta = 0.458$), closely followed by legal responsibilities at ($\beta = 0.437$). It can be concluded that corporate social responsibility has significant predictive influence on performance.

From multiple regression analysis

Predictors	β	Std. Error	t	Sig.
Corporate Social Responsibility (X ₄)	0.823	0.191	4.313	0.007

Dependent Variable: Company performance

From the results of multiple regression analysis Since t is 4.313 where p value (0.007) are less than alpha 0.05, it could be concluded that coefficients of CSR are not equal to zero and therefore reject null hypothesis 4 that CSR has no significant effect on sugar company performance. This study therefore agrees with previous studies whose findings indicate outright positive relationship between CSR and performance, while partially supporting studies by Mbalwa et. al. (2014). Mbalwa et. al. (2014) findings concluded presence of weak relationship between corporate governance practices and performance of sugar manufacturing firms. The findings of Mishra & Suar (2010) though done in a different context held a similar opinion to the findings of this study when they concluded responsible business practices to result in profitable and beneficial outcomes to Indian

firms. The findings also support the findings of Tsoutsoura (2004) that held a positive and statistically significant view that socially responsible corporate actions can be associated with bottomline benefits. The results of this study further agree with Flammer's (2013) findings that CSR related proposals leads to financial performance and that CSR is a resource with decreasing marginal returns partially supporting the findings this study. Stakeholder theory as advanced by Heugens and Van Oosterhout (2002) is instrumental to this study in identifying connections that exist between the corporate social responsibilities towards stakeholders groups and the achievement of corporate goals.

4.10 Macro Environment and Sugar Companies

Another key component of this study was the macro environment in which sugar companies operate. Macro environment determines both opportunities and threats facing the companies and in this study it was operationalized along political, economical, socio cultural and technological factors as previous studies (Adeoye & Elegunde, 2012; Mashhadi & Rehman, 2012; Kakazouki's, 2011).

4.10.1 Political factors

Political factors refer to the stability of the political environment and the attitudes of political parties or movements. This may manifest in government influence on tax policies, or government involvement in trading agreements. Political factors are inevitably entwined with Legal factors such as national employment laws, international trade regulations and restrictions, monopolies and mergers' rules, and consumer protection. The respondents were asked the extent to which political factors were considered in strategic decision making in their companies and their views on subsequent impact on performance. The findings are summarized in table 4.27.

Table 4.27: Extent to which political factors are considered in company’s strategic decision making

Responses	Frequency (f)	Percentage (%)
Not consideration at all	8	11.1
Poorly considered	12	16.7
Considered moderately	16	22.2
Highly considered	36	50.0
Total	72	100.0

Findings from the table 4.27 shows that out 72 respondents who participated in the study a half 36 (50%) indicated that political factors were highly considered, almost a quarter 16 (22.2%) indicated that they were moderately considered, 12 (16.7%) were poorly considered while 8 (11.1%) did not consider political factors at all in their company’s decision making. Given that 72.2% consider political factors in decision making implies that sugar companies consider tax policies, government involvement in trading agreements, international trade regulations and protection of consumers to have a strong bearing their performance.

Political decisions have been known to impact in many vital areas of business as discovered by Pulaj & Kume (2013) on how the albanian external environment affect the construction industry. Kakazoukis (2011) asserted that political changes greatly affect import legislations in his study on how macro environmental forces affect business buying behavior after a recession. The findings are supported by other studies by Wanyande (2001) whose findings showed that the problems in the sugar industry are mainly due to government polices and interference which does not favour efficient performance.

4.10.2 Economic factors

Economic factors represent the wider economy which includes economic growth rates, levels of employment and unemployment, costs of raw materials, interest rates and monetary policies, exchange rates and inflation rates. The respondents were asked to state the extent to which economic factors were considered in strategic decision making in their companies and their views on subsequent impact on performance. The findings are summarized in table 4.28.

Table 4.28: Extent to which economic factors are considered in company's strategic decision making

Responses	Frequency (f)	Percentage (%)
Not consideration at all	3	4.2
Poorly considered	5	6.9
Considered moderately	15	20.8
Highly considered	49	68.1
Total	72	100.0

Findings from the table 4.28 shows that out 72 respondents who participated in the study a majority 49 (68.1%) stated that economic factors were highly considered, 15 (20.8%) indicated that they were moderately considered, 5 (6.9%) were poorly considered while a minimum of 3 (4.2%) did not consider economic factors at all in their company's decision making. This implies that 68.1% highly considers the wider economy including economic growth rates, levels of employment and unemployment, costs of raw materials, interest rates and monetary policies, exchange rates and inflation rates to a key determinant of performance in the industry.

The findings on high influence of economic factors support the findings of Kakazouki's (2011) who presented economic factors of macro environment to have a strong impact on the buying behavior. The findings also confirm studies by Gillespie (2011) in his

PESTEL analysis of the macro environment who asserted that high interest rates strongly deter investment as it costs more to borrow. Kakazouki's (2011) further stated that increase in taxes which is an economic aspect on imports by government can benefit the local market with their own products. Pulaj and Kume (2013) also found a significant impact on company's strategy as it affects capital cost, purchasing power of the company and consumers of the goods and services. Voiculet, et. al. (2010) in their study on the impact of external environment on organizational development strategy found economic factors to directly affect business organizations by interest rates, fiscal policy and price fluctuations.

4.10.3 Social cultural factors

Socio-cultural factors represent the culture of the society that a company operates within. They may include demographics, age distribution, population growth rates, level of education, distribution of wealth and social classes, living conditions and lifestyle. The respondents were asked the extent to which social cultural factors were considered in strategic decision making in their companies and their views on subsequent impact on performance. The findings are summarized in table 4.29.

Table 4.29: Extent of which social cultural factors are considered in company's strategic decision making

Responses	Frequency (f)	Percentage (%)
Not consideration at all	13	18.1
Poorly considered	17	23.6
Considered moderately	20	27.8
Highly considered	22	30.6
Total	72	100.0

Findings from the table 4.29 shows that out 72 respondents who participated in the study 22 (30.6%) stated social cultural factors were highly considered, 20 (27.8%) indicated

that they were moderately considered, 17 (23.6%) were poorly considered while 13 (18.1%) did not consider social cultural factors at all in company's decision making. Given more than half of sugar companies 58.4% considered social cultural factors in their decision making shows that Sugar companies find demographics, distribution of wealth and social classes, living conditions and lifestyle as important in determining their performance.

Gillespie (2001) states that aging workforce tend to increase costs for firms who are committed to pension payments and demand for sheltered accommodation and medical attention. Kakazouki (2011) also found that changing buying habits are influenced by culture through price sensitive customers. Fahey and Narayanan (1986) stated that changes in consumer lifestyles, tastes and social conditions to have a moderate influence on organizational performance and therefore decision making.

4.10.4 Technological factors

Technological factors refer to the rate of new inventions and development, changes in information and mobile technology, changes in internet and e-commerce and spending on research. There is often a tendency to associate Technological developments on digital and internet-related areas, but it should also include materials development and new methods of manufacture, distribution and logistics. The respondents were asked the extent to which technological factors were considered in strategic decision making in their companies and their views on subsequent impact on performance. The findings are summarized in table 4.30

Table 4.30: Extent to which technological factors are considered in company's strategic decision making

Responses	Frequency (f)	Percentage (%)
No consideration at all	10	13.9
Poorly considered	17	23.6
Considered moderately	25	34.7
Highly considered	20	27.8
Total	72	100.0

From the Table 4.30 results reveal that out of the 72 respondents, 25 (34.7%) stated that companies considered technological factors in decision making moderately, 20 (27.8%) indicated that they considered technological factors, 17 (23.6%) indicated that they poorly considered while 10 (13.9%) did not consider technological factors at all. Given the findings it is clear that 62.5% considered technological factors in their decision making as key in determining performance. This could further imply that majority of sugar companies are in a position to develop new products through innovations and improve on their quality while shortening the time period between reception of raw materials and delivery of finished products.

Earlier studies by Wamalwa, Onkware and Musiega (2014) show poor use of technology where they stated that lack of holistic adoption and implementation of lean technology in Mumias sugar did not impact on the factory time efficiency. Kegode (2005) in his study on economic governance reform in the sugar sub sector submitted that low and poor yields were responsible for poor recovery rate in the sector. He stated that adoption of technology through seed variety, soil conditions of husbandry amongst other research by KESREF has shown yields could increase by over 70% and reduce maturity period from 24 months to about 16 months of first cargo and down to 14 months for successive crops. Adoption of technology through seed variety could further increase resistance to smut disease and sucrose content yields (Kegode, 2005).

4.11 Hypothesis 5 (H₀): Macro environment has no significant moderating effect on the relationship between choice of strategy and company performance of sugar companies

In order to test the hypothesis, multiple regression analysis was first conducted using company performance as the dependent variable and combined strategic choices as predicting variables prior to analyzing moderated multiple regression after inclusion of moderating variable.

4.11.1 Multiple Regression Analysis (Independent and Dependent Variables)

This was conducted on combined strategic choices on company performance. Regression analysis beta (β) was used to determine the effect of the independent variable on the dependent variable. The hypothesis was tested at 0.05% significance level, with 95% confidence, to establish the relationship between a combined strategic choices and performance measures. The multiple regression model takes the form below and subsequently table 4.31 shows the outcome of the analysis.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$$

Where Y = dependent variable (Company performance)

β_0 = Constant or intercept which is the value of dependent variable when all the independent variables are zero.

β_{1-n} = Regression Coefficient for each independent variable

ε = Stochastic or disturbance term or error term

X_{1-n} = Independent variable indicators

Table 4.31: Multiple Regression Analysis (Independent and Dependent Variables)

Predictors	β	Std. Error	t	Sig.	R^2	F value	Sig.
PDS (X ₁)	0.420	0.158	2.645	0.009	0.755	27.241	0.006
MDS (X ₂)	0.441	0.138	3.185	0.003			
DS (X ₃)	0.551	0.149	3.698	0.002			
CSR (X ₄)	0.823	0.191	4.313	0.007			

Dependent Variable: Company performance

Predictors

(X₁) - Product development strategy

(X₂) - Market development strategy

(X₃) - Diversification strategy

(X₄) - Corporate social responsibility

The results of ANOVA tests in which F-test was carried out using the Analysis of Variance (ANOVA) to determine whether there is a regression model $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon$ where; X₁– product development strategy, X₂– market development strategy, X₃– diversification strategy, X₄– corporate social responsibility. Table 4.32 indicates the linear regression F-test results where the tabulated $F_{0.05, 4, 67} = 2.45$ is less than the computed F-value of 27.24, hence concludes that with 95% confidence product development strategy, market development strategy, diversification strategy and corporate social responsibility combined have explanatory power on company performance. From the Table 4.32 it is clear that the tested overall model constituting combined independent variables on dependent variable is statistically significant with F value at 27.241 at $p = 0.006 < 0.05$. This means the regression model independent variables can predict dependent variable (company performance).

A test on the beta coefficients shows influence that each of the independent variables has on the company performance on the combined model. Unit change in product

development strategy increase company performance by a rate equivalent to 4.023, while each additional unit change in market development strategy changes company performance by a factor equivalent to 4.417. It can further be inferred that unit change in diversification strategy increased company performance 5.51 while one point increase in corporate social responsibility brings a difference in company performance equivalent to 8.237. From the findings of beta coefficients imply that out of the four predictor variables, corporate social responsibility was the most contributor towards company performance ($\beta = 8.237$). Using the standard beta coefficients on the line of best fit the regression equations was obtained as follows;

$$Y = 7.423 + 4.203X_1 + 4.417X_2 + 5.510X_3 + 8.237X_4 \text{----- (model)}$$

Where;

Y= company performance

X₁– Product development strategy

X₂– Market development strategy

X₃– Diversification strategy

X₄ – Corporate social responsibility

The summary results (Table 4.31) show that there is a relationship between combined strategic choices and company performance. The results further different choices of strategy affect company performance at different levels and therefore company choice of strategy should inform the subsequent outcome. The findings provide a strong support that company strategic behavior is effective when companies exhibit some combinations at the same time rather than at different times. The findings conclude that sugar companies’ performance can be enhanced if the companies’ strategic behavior is a combination of appropriate strategic choices. For sugar companies a blend of different strategic types have varying but positive effects on various indicators of performance. The results further reveal that a combined choices of strategy on company performance offer greater effect than sum of individual separate strategies of the same variables. From Table 4.32 it is evident that the combined independent variables have a predictive

power of 75.5% ($R^2 = 0.755$) confirming that combined strategies will explain variations in company performance by a great margin.

4.11.2 Moderated Regression Analysis (Macro Environment factors Moderating Independent and Dependent Variables Relationship)

To estimate the effect of a moderator variables M(political factors), N(economic factors), P(social cultural factors), Q(technological factors), on the $X_1, X_2, X_3, X_4 - Y$ relationship involves a regression equation that includes Y as a criterion and $X_1, X_2, X_3, X_4, M, N, P$ and Q as the predictors. A regression model containing the reconfiguration macro environmental factors was run to determine the relationship between combined strategic choices (independent variables) and performance. Over and above the direct effect that macro environment factors may have on company performance their moderating effect on the relationship between strategic choice and performance was tested. The change in the explanatory power (R^2) upon introduction of macro environment variables in the regression analysis of the combined strategic choice and company performance indicated its moderating effect. Further, the statistical significance of the moderating effect was indicated by F-values for company performance.

To establish the moderating effect of macro environment factors (M, N, P, Q) on relationship between independent variable (combined strategy choices) and dependent variable (performance) statistical model used for analysis was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 M + \beta_4 N + \beta_5 P + \beta_6 Q + \epsilon \text{-----eqn}$$

Where; Y= company performance

Independent variables are:

X_1 – product development strategy

X_2 - market development strategy,

X_3 – diversification strategy

X_4 - corporate social responsibility,

M – Political factors

N – Economic factors

P - Social cultural factors

Q - Technological factors

ϵ = error term

Table 4.32: Moderated Multiple Regression Analysis (Macro Environment factors Moderating Independent and Dependent Variables Relationship)

Predictors	β	Std.		t	Sig.	R ²	F value	Sig.
		Error						
PDS (X ₁)	0.106	0.066		1.609	0.009	0.869	21.596	0.006
MDS (X ₂)	0.558	0.091		6.117	0.001			
DS (X ₃)	0.687	0.118		5.827	0.009			
CSR (X ₄)	0.917	0.261		3.514	0.002			
PF (M)	0.243	0.071		3.407	0.004			
EF (N)	0.236	0.100		2.367	0.004			
SCF (P)	0.513	0.067		7.598	0.000			
TF (Q)	0.316	0.074		4.247	0.003			

Dependent Variable: Company performance

Predictors

(X₁) - Product development strategy

(X₂) - Market development strategy

(X₃) - Diversification strategy

(X₄) - Corporate social responsibility

M – Political factors

N – Economic factors

P - Social cultural factors

Q - Technological factors

ϵ = error term

The table 4.32 shows moderated multiple regression model to be significant statistically with p values significant at 0.006, 0.001, 0.003, 0.001, 0.003 ($P < 0.05$) with F value ($F = 21.596$) therefore the model can reliably predict each of the independent variable. Further results of the moderated multiple regression analysis show positive contribution of each predictor variable. Change in predictive power (R^2) of combined independent variables (strategic choices) before and after inclusion of moderating factors were determined in terms of the change of % variation on how independent variables explained dependent variable. Results have indicated that macro environment factors can moderate positively the combined independent variables relationship with company performance. Change of predictive power was realized in combined strategic choices on company performance by 11.4% ($R^2 = 0.755$ before inclusion of moderator and after inclusion $R^2 = 0.869$). Out of the four moderating factors, social cultural was found to have a more contributing effect ($\beta = 0.513$) closely followed by technological factors ($\beta = 0.316$). This implies that demographic issues within the Kenyan sugar belt bear the greatest effect and therefore conclude that choice of strategy to achieve a significant performance can positively be influenced if demographic factors are equally incorporated. Further technology factors which include adoption of modern milling equipment, choice of seed variety will have an impact on company performance in addition to the right choice of strategy. The results further show statistical significance in all the moderating models with p-values 0.006, 0.001, 0.003, 0.001, 0.003 < alpha value 0.05 implying that they are significantly different from zero and therefore fail to confirm null hypothesis 5 that macro environment has no moderating effects on the relationship between choice of strategy and performance. The findings imply that sugar companies wishing to increase their performance need to engage in constant scanning macro environmental factors and align them to their choices of strategy to realize significant performance.

Previous studies present conclusions on the role played by macro environment both as a moderator and also with individual effects on performance. Neill & Rose (2006) while studying on effective marketing strategy and superior performance found environmental demands to be a key moderating factor, pointing out that organizations should be able to understand diverse, interrelated and often dialectical aspects of environment and match them with effective strategy. Similarly, significant moderating effects by macro environment have found by Pulaj and Kume (2013) where they concluded that “in order to be vital, economically valuable and profitable in the market, organizations have to adapt to external environment”. They further stated that without taking into account the impact of environmental forces, it is not possible to formulate a good strategy or conduct a profitable business. Kakazoukis (2011) study on the influence of macro environmental forces on the changes in buying behaviours in truck business is an additional evidence that even other business sectors are influenced by effects of macro environmental.

Other previous studies have presented diverse conclusions on individual effects of macro environmental factors. Mashhadi and Rehman (2012) found political factors to be insignificant while social, economical and technological were found to possess significant effects towards performance in fast food industry. The current study partially agrees with Mashhadi and Rehman’s (2012) study on the fact that political factors have been found to have positive and significant effects. Kakazoukis (2011) finding that political and economical forces bear strong and significant impacts on business buying behaviours is supported also supported by the current study where similar finding that the two factors were both positive and significant. Further, on individual macro environment factors effects, the study supports Ogolla (2012) finding that political factors through politicizing structural adjustment policies in kenya’s sugar industry present significant effects in development outcomes. Ogolla (2012) also asserts that relevance of Kenya’s political economy and the role it plays influences even economic factors through liberalization and privatization and social factors through interpersonal, kinship and ethnic ties.

Other sectors of the business economy other than manufacturing are equally supported by the findings of this study. Adeoye and Elegunde (2012) established that economic factors of macro environment bear 93% on performance in food and beverage industry, while political factors influence upto 68% which are both significant and positive. Mashhadi and Rehman (2012) concluded that technological factors contributed upto 40% towards performance in a related pizza fast food industry. Both studies are confirmed by this study that influence of macro environment is both positive and significant and cuts across industries. Pulaj and Kume (2013 depicted political factors to be very dynamic and steady, economical factors to have direct influence on business conditions and economic performance, social factors to have uncontrollable and demographic pressures. Such assertions are supported by the current study that political factors include overcoming institutional weaknesses and technological factors influence performance.

Purkayastha (2013), assertion that macro environment has a moderating effects on diversification – performance relationship is supported by the findings of this study though they further added that moderating effect changes from munificence to scarce resulting to change of performance from negative to positive which is not within this study's scope. The core purpose of testing the moderating influence between strategy performance relationship can be viewed in terms of dynamic capability theory as advanced by Protogerou, Caloghirou, and Lioukas (2008) which explains the capacity of an organization to purposefully create, extend or modify its resource base which refers to the choice of strategy an organization adopts to achieve its goals.

Overall, it can be concluded that the four components of company's macro environment manifest and affect strategy-performance relationship in varying degrees. The findings imply that companies are environment dependent and to manage this company-environment interface, an appropriate strategy choice is necessary. The study also

presents a clear link between environment-strategy-performance such that managers of such companies should consider to enhance company survival and growth.

4.12 Performance of Sugar Companies

The study further sought to determine different performance measures from respondents in addition to industry records in Appendix VII. The measures assessed included total turnover, sugar sales, profit after tax, capacity utilization. The respondents were asked how they would rate their companies performance within the period from 2009 to 2013.

4.12.1 Total turnover and performance of sugar companies

Turnover represents the value of goods and services provided to customers during a specified time period. Company profit will derive depending upon the cost of operations, where the higher the turnover and lesser the cost or expenses and the better the performance of the company. Table 4.33 gives the respondents responses.

Table 4.33: How do you rate your company’s product total turnover between 2009 - 2013?

Responses	Frequency (f)	Percentage (%)
No change in total turnover	0	0
Total turnover has been deteriorating	0	0
Total turnover has experienced fluctuations	16	22.2
Total turnover has constantly improved	56	77.8
Total	72	100.0

Findings from the table 4.33 shows that out 72 respondents who participated in the study 56 (77.8%) stated that total output has constantly improved, 16 (22.2%) indicated that total turnover has experienced fluctuations with 0% responses showing that turnover did not experience deterioration or failure to change. Given that 77.8% of the respondents affirm that turnover has been improving and only 22.2% has experienced fluctuations

means that more sugar companies have been able to provide value of goods and services and eventually reducing production costs and expenses. The finding is quite similar to Park & Shaw (2012) studies who used turnover rates to determine performance a meta-analysis on turnover rates and performance.

4.12.2 Profitability and performance of sugar companies

Profitability is the ability of a business to earn a profit. A profit is what is left of the revenue a business generates after it pays all expenses directly related to the generation of the revenue, such as producing a product, and other expenses related to the conduct of the business activities. The more a company is able to generate revenue compared to the amount of expenses it incurs the better the performance of the company. Table 4.34 gives performance of sugar companies in terms of profitability after tax.

Table 4.34: How do you rate your company’s profitability after tax between 2009 - 2013?

Responses	Frequency (f)	Percentage (%)
Profitability has not changed	6	8.3
There has been constant losses	10	13.9
Profitability has been fluctuating	46	63.9
Profitability has constantly been raising	10	13.9
Total	72	100.0

Findings from the table 4.34 shows that out 72 respondents who participated in the study 46 (63.9%) stated that profitability has been fluctuating, 10 (13.9%) of the respondents stated that their companies either encountered losses or their profitability constantly kept on rising while 6 (8.3%) indicated that profitability did not change at all. Given that 86.1% of the companies have been experiencing difficulty in making profits, this has impacted negatively to the companies’ performance leading to some being put under receivership. This has fairly presented unpredictable future of the sugar industry in

general and also drawn attention from the government for direction. Industry records in Appendix VI also confirm the findings that in 2009, the industry experienced profitability, in 2010 losses were incurred while both 2011 and 2012 there was profitability before the industry again resulted to losses in 2013. Profitability is one of the widely used measures of performance in empirical studies which include Pignanelli & Csillag (2008) who conducted an empirical study on impact of quality management impact on profitability, Phusavat (2006) on impacts of productivity on profitability and Selladurai (2002) where compared organizational productivity and profitability.

4.12.3 Sales volume and performance of sugar companies

Sales volume is the quantity or number of products sold or services provided by a company in a particular period of time. Steadily increasing sales volume indicates increased product demand and better fortunes for the company. Table 4.35 shows performance in terms of sales volume for the sugar companies.

Table 4.35: How do you rate your company’s sales in volume level between 2009 - 2013?

Responses	Frequency (f)	Percentage (%)
Sales have not changed at all	6	8.3
Sales volume have deteriorated	10	13.9
Sales have been fluctuating	50	69.4
Sales have constantly been improving	6	8.3
Total	72	100.0

From table 4.35 it shows that out of 72 respondents who participated in the study 6 (8.3%) stated that sales have not changed, 10 (13.9%) indicated that sales have deteriorated, 50 (69.4%) indicated that sales have been fluctuating while 6 (8.3%) indicated that sales have been improving. Sugar as the main product during the period under consideration experienced fluctuating times in its sales volume as indicated in industry records (Kenya sugar board) in Appendix VI with improvement evident in 2009

(548,370 MT) to 2010 (550,116MT) but dropping in 2011(490,152 MT) and 2012 (494,162 MT) and later picking up sales volume in 2013 (585,748 MT). Empirical studies have assessed company performance through sales as a measure like Amue, Asiegbu and Chukwu (2012) who explored improvement of motivation strategies in pharmaceutical firms in Nigeria while Majid and Khoo (2009) used sales performance in examining the Impact of Competitive Advantage on Organizational Performance in Pakistan.

4.12.4 Capacity utilization and performance of sugar companies

Capacity utilization is the extent to which an enterprise or a company actually uses its installed productive capacity. It is the relationship between output that is actually produced with the installed equipment, and the potential output which could be produced with it, if capacity was fully used. Higher percentage of capacity utilization indicates better use of company potential. Table 4.36 summarizes capacity utilization in sugar companies.

Table 4.36: How do you rate your company’s capacity utilization between 2009 - 2013?

Responses	Frequency (f)	Percentage (%)
CU has not changed at all	2	2.8
CU has experienced downward trend	6	8.3
CU has been fluctuating	31	43.1
CU has been improving constantly	33	45.8
Total	72	100.0

Table 4.36 it shows that out of 72 respondents who participated in the study 63 (45.8%) stated that capacity utilization has been improving constantly, 31 (43.1%) indicated that capacity utilization has been fluctuating, 6 (8.3%) stated that capacity utilization has been experiencing downward trend while a minimum of 2 (2.8%) indicated that capacity utilization has not experienced change at all. Given that the respondents affirm that only 45.8% of companies are constantly utilizing their potential shows majority are

underutilizing their capacity an indication deteriorating performance in sugar companies. Industry records in (Appendix VII) indicated some constant improvement between 2009 and 2012 with a slight drop in 2013. Nyaoga, Wang and Magutu (2015) found a significant connection between capacity utilization as a measure of performance in terms of maintenance of competitive advantage in tea industry. Morrison (2000) found capacity utilization as driving force to be considered in enhancing fisheries' performance and therefore this study confirms choice capacity utilization as crucial measure of assessing company performance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary, conclusions, recommendations and areas for further research. Chapter also contains a section on what the study has contributed to the body of knowledge.

5.2 Summary of Findings

This section presents the summary of findings based on the following thematic areas: product development strategy and performance of sugar companies, market development strategy, diversification strategy, corporate social responsibility and moderating effects of macro environment on the relationship between choice of strategy and performance in sugar companies.

5.2.1 Product Development Strategy and performance of sugar companies

The results show that majority of respondents 89% indicated their companies had introduced at least a new product while 91.7% of the companies' products had been

improved to conform to the demand in the market and therefore the companies in the sugar industry in western region. Given the results, it was expected the companies had improved to conform with competition using new technology and demand driven, and therefore expected to perform better. The results show a significant predictive influence of product development strategy on performance (R^2 0.292) when performance is measured in capacity utilization and (R^2 0.239) when performance is measured in sales volume. Statistically reliable relationship was evident in both constructs development of new products and improvement of existing ones (p values $<$ alpha 0.05). Overall the results verified that there was a positive relationship between product development strategy and company performance. The overall model showed that the product development strategy was statistically significant to predict performance with F statistic 13.482 being $>$ $F_{0.05}(2,69) = 3.07$ which implied that the multiple linear regression model was good fit for the data. The finding that new product has a higher positive effect on organizational performance reaffirms that sugar companies cannot depend on their current product offering only to meet their sales and profit objectives.

5.2.2 Market Development Strategy and performance of sugar companies

The study findings indicated that 86.1% of the respondents agree that their companies had been fully involved in development of new markets, it further showed that 100% of the respondents agreed that their companies extended their markets fully within regional and national scope. Given this situation, it was researcher's expectation that the companies would perform better. The findings revealed that market development strategy could explain variations in sales volume by 18.6% (R^2 0.186), in capacity utilization by 12% (R^2 0.120) and in total turnover by 15.6% (R^2 0.156). Though predictive powers were different, statistically reliable relationships were found between all the construct relationships (p value $<$ 0.05). The results further showed that for every unit change in extensions to new market regions, there was a 0.282 (β value) unit change in sales volume when all other factors were held constant. This implied that while the strategy contributes significantly to one aspect of performance, its effect on other

measures is fairly low and therefore conclude that there could be other determinants of performance. The model was found to be statistically significant to predict performance with F statistic 13.266 being $> F_{0.05} (2,69) = 3.07$. The results imply that market dynamism whether through reaching new regions geographically or accessing untapped market segments does promote performance with resultant effects in capacity utilization. Opening up more distribution channels through agencies and promotions has been found to contribute in extending new markets regions to the companies' products.

5.2.3 Diversification Strategy and performance of sugar companies

Findings show that 65.3% of the respondents agree that their companies have been involved in development of related products and services while 79.2% of the companies' had developed at least unrelated product and therefore the companies in the sugar industry in western region are expected to improve on their returns and performance in the market. Contrary to that expectation, performance was evident only on one aspect of performance indicating that, diversifying on related products does have an effect on performance. Coefficient of determination (R^2) indicates that diversification strategy can explain variances in company performance upto 23.0% when measured in terms of sales volume. Statistically reliable relationship was found between the construct relationships (p values < 0.05). The results further show that for every unit change in unrelated production activities, there is a 0.460 (β value) unit change in profitability when all other factors are held constant. This implies that unrelated productions activities contributes most on performance profitability ($\beta = 0.460$). The study further found the model to be valid in testing diversification strategy as a predicting determinant of company performance with F statistic 15.155 being $> F_{0.05} (2,69) = 3.07$ with 95% confidence. Descriptive results present a positive performance for the Kenya sugar situation whose low diversification into related products could be due to sugar considered a unique product with minimal substitutes and therefore does not present a favourable opportunity to manufacture similar or related products using the available capacity. Results also indicate both related and unrelated indicators of diversification strategy to have closely

similar contribution towards performance in terms of sales volume. Implications could be drawn to show that sugar companies' choice of adopting production of similar products to sugar which is their core product and other products which do not relate to sugar enhances more sales volume. Profitability was found to present a negative outcome though statistically significant when companies offer related products. However, there was significant positive capacity utilization implying that inclusion of more product production whether related or unrelated has an impact in utilization excess or idle capacity which would otherwise go to waste. The level of innovation would as well affect profitability albeit a small margin through technological factors of macro environment.

5.2.4 Corporate Social Responsibility and performance of sugar companies

The study findings show that all the companies 72 (100%) fulfilled economic responsibilities in one way or another, 92.9% of the companies in sugar industry in western Kenya fulfilled their ethical responsibilities at least fairly well and that 93.1% of the companies fulfilled their ethical mandate. 91.7% of the companies fulfilled their philanthropic responsibilities well and this should have resulted the companies' more effort to support social causes. The study findings indicated that corporate social responsibility has a predictive power in that it could explain variations in company performance. Ability to explain variations in company performance was realized through sales volume by 18% ($R^2 = 0.180$), capacity utilization by 16% ($R^2 = 0.160$) while profitability after tax by 20.3% ($R^2 = 0.203$). Results also show legal and philanthropic responsibilities to present a higher contribution towards profitability (β values 0.458 and 0.437 respectively) than other CSR responsibilities. This implies that for every unit change in fulfillment of philanthropic responsibilities, there is a 0.458 (β value) unit change in profitability after tax when all other factors are held constant. Similarly the results show that for every unit change in fulfillment of legal responsibilities, there is a

0.437 (β value) unit change in profitability after tax when all other factors are held constant. Findings of CSR performance results show that though CSR activities have been viewed to contradict companies' ultimate mandate of profit making and sidetracking organization core activities, statistical results from this study shows positive performance outcomes especially profitability. This may be attributed to positive company image and brand as a result of CSR activities.

5.2.5 Moderating effect of macro environment on the relationship between strategic choice and performance of sugar companies

The findings of the overall general model constituting combined independent variables on company performance were statistically significant. This means combined independent variables in the model can predict dependent variable (company performance). From the findings it is clear that the tested overall model constituting combined independent variables on dependent variable with tabulated $F_{0.05}(4,67) = 2.45 < F$ computed 27.24 at $p = 0.006 < 0.05$. This means the regression model independent variables can predict dependent variable (company performance). A test on the beta coefficients shows influence that each of the independent variables has on the company performance on the combined model. A unit change in product development strategy increased company performance by a rate equivalent to 4.023, market development strategy changes company performance by a factor equivalent to 4.417. Further, a unit change in diversification strategy increased company performance 5.51 while a unit corporate social responsibility brings a difference in company performance equivalent to 8.237. From the findings of beta coefficients imply that out of the four predictor variables, corporate social responsibility was the most contributor towards company performance ($\beta = 8.237$).

Over and above the direct effect that moderating factors (macro environment factors) may have on company performance their moderating effects on the relationship between strategic choice and performance were tested. The change in the explanatory power (R^2)

upon introduction of macro environment variables in the regression analysis of the combined strategic choice and company performance indicated its moderating effect. Statistical significance of the moderating effect was indicated by F-values for company performance where moderated multiple regression model was found to be significant statistically with p values significant at 0.006, 0.001, 0.003, 0.001, 0.003 ($P < 0.05$) with F value ($F = 21.596$) therefore the model could reliably predict the dependent variable. Further results of the moderated multiple regression analysis show positive contribution of each predictor variable. Change in predictive power (R^2) of combined independent variables (strategic choices) before and after inclusion of moderating factors were determined in terms of the change of % variation on how independent variables explained dependent variable. Results have indicated that macro environment factors can moderate positively the combined independent variables relationship with company performance. Overall, out of the four moderating factors, social cultural was found to have a more contributing effect ($\beta = 0.513$) closely followed by technological factors ($\beta = 0.316$). Change of predictive power was realized in combined strategic choices on company performance by 11.4% ($R^2 = 0.755$ before inclusion of moderator and after inclusion $R^2 = 0.869$). The results further show statistical significance in all the moderating models with p-values 0.006, 0.001, 0.003, 0.001, 0.003 $<$ alpha value 0.05.

5.3 Conclusions

The main objective of this study was to explore the effects of macro environment on the relationship between choice of strategy and performance in sugar companies in western Kenya. The study first looked at the effects of each of the strategic choices on performance, where different levels of influence were realized on when performance was measured in terms of profitability and sales volume. Conclusions were drawn from the analyzed results both descriptively and statistically presented in the preceding paragraphs.

This study determined that new product and improvement of existing products which constitute product development strategy were realized. Though new products introduction was more significant in contribution towards performance, this was mainly achieved through introduction of brown sugar, while improvement was realized in packaging and branding of existing products. From the results it can be concluded that product development strategy enhances performance through capacity utilization while sales volume, profitability and total turnover do show any progress. This explains why sugar companies have not experienced an upward growth in end of year turnovers and profitability even though efforts to improve existing products and attempts to introduce new products have been evident. According to this study choice of product development strategy can only significantly address capacity utilization and solve perennial problem of idle factory machinery which is a common trend in most sugar factories which reduces efficiency in operations. While this can partially be justified by the obvious need for maintenance, development of new products could improve efficiency through making use of unnecessary idle factory times. Poor capacity utilization in sugar companies can further be confirmed existing industry records which project majority of sugar companies to be operating below 60% of their available capacities. Therefore this study concludes that sugar companies can improve efficiency through capacity utilization by developing new products compatible with their current systems of production and engaging in improving the already existing products through values addition. The study further reaffirms that sugar companies cannot depend on introducing new product offering only to meet their sales and profit objectives, more importantly still some new products do not succeed in the market.

Market development strategy was operationalized as extensions of markets into new geographical regions and developments new market segments by targeting previous non users of the product. The findings draw conclusions that extensions to new market segments which involve capturing consumers not previously using the product and also reaching out to new geographical areas can influence companies' sales volume by 18.6%

and total turnover by 15.6%. The study verified that use of distribution channels through agencies and promotions has proved to be the current approach in acquiring new market regions without necessarily opening company outlet stores. Repackaging of products into different quantities was found to enhance access of new segments by meeting the needs of consumers in different economical brackets. Statistically market development was found to influence sales volume by 18.6% ($R^2 = 0.186$) explained by tapping into either competitors market or untapped segment of the market. The findings of the study could not find a strong link to profitability and this explains why sugar companies even though they have adopted the strategy have not posted strong annual profit records. The study therefore concludes that while the market for sugar product is becoming competitive and it is readily available with industry records showing that production is less than consumption (KSB, 2014). This further shows that market development strategy when adopted may solely not achieve performance in terms profitability and therefore need to consider other strategies. Even with availability of market for sugar product, market prices could affect realization of profitability due to entry of cheap foreign sugar into the market, making local sugar companies to sell off their products at lower prices without realizing profitable returns.

On effects of diversification strategy on performance, study findings leads to the conclusion that diversification strategy has significant predictive influence on performance in most performance measures except total turnover. Findings clearly show significant increase in profitability and capacity utilization through companies' involvement in unrelated production activities while sales volume increases through related production activities. Specifically when sugar companies produce unrelated products to their current product which is sugar are bound to perform better through increasing their profitability and capacity utilization. The study therefore concludes that though diversification strategy contributes significantly to sugar companies profitability, ironically this is not realized yet due to the fact that introduction of unrelated products is still at initial and trial stages with majority companies except Mumias company being

the only one fully in production of ethanol, water bottling. Over and above profitability, diversification strategy is further attributed to higher sales volume through related production activities implying that any related product introduced there is increased sales volume. Current effort for sugar companies to diversify could be attributed to the threats to single product or limited products due to increasing competitive environment and unpredictable economic future the world is experiencing. Business companies worldwide are countering threats from local competitiveness by exploring new ways of matching competitive environment. It can further be concluded that while Kenyan governance on reform in the sugar subsector is a challenge due to increasing competitiveness, this can be addressed in Kenyan companies diversifying their operations from white sugar mill.

The core business company goal is considered to be profitability and wealth maximization yet companies are adopting corporate social responsibility which is viewed in some studies as derailing pursuit of company objectives. This study concludes that adoption of corporate social responsibility (CSR) through philanthropic responsibilities has been realized in sugar companies resulting to cutting costs and boost sales with other significant benefits including improved reputation, stronger customer loyalty and motivated employees. The study found fulfillment of CSR mandate through legal responsibilities to have significant relationship to profitability and this could lead to conclusion that compliance to government, business regulators and industry requirements impacts positively by reduction of expenses associated with legal processes and penalties, poor image due bad publicity caused by lack of compliance eventually raising profitability margin and winning confidence from stakeholders. The study also concludes that though responsible business practices could result in profitable and beneficial outcomes, overstretched use of CSR as a strategy of enhancing performance could compromise the company financial gains.

The findings above led to the conclusion that for sugar companies to increase their capacity utilization, product development strategy is the best choice specifically through introducing new products. Further, for the companies to achieve high sugar sales volume, market development was found to be the ideal choice by way of opening up extensions in new regions. Increasing profitability, sugar companies ought to adopt diversification strategy and corporate social responsibility. Diversification strategy approach should be achieved through offering production activities not related to the current products and therefore enabling the companies to exploit other markets. Corporate social responsibility approach is more favourable by fulfillment of philanthropic responsibilities. It is further concluded that sugar companies wishing to increase their profitability need to engage in constant scanning macro environmental factors and align them to their choices of strategy to realize significant performance. The results further show that policies governing the sugar industry, political interference in terms of appointments of key managers in the companies and western region political affiliation. The level of in which the government in place bails out ailing companies has political implications especially in a region with prominent opposition presence.

Combined independent variables were found to have a predictive effect of 75.5% on performance. This projected a clear indication that all the strategies (product development strategy, market development, diversification strategy and corporate social responsibility) considered in this study contribute potentially at different levels to company performance. Performance was measured in four constructs (total turnover, profitability, sales volume and capacity utilization) and as earlier discussed each strategy portrayed different performance outcome. The study further indicated that while combined strategies lead to 75.5% prediction ability towards performance inclusion of moderating variables (macro environment factors) further increase prediction to 86.9%, presenting a moderating effect of 11.4%. This gives companies an extra task to consider macro environmental factors when choosing strategy for significant performance. While it is evident from the findings all the moderating factors had an effect, the study

narrowed down to two with the most effective ability to determine better performance. Social cultural factors bore the highest effect on moderation of choice of strategy and performance implying that demographic issues within the Kenyan sugar belt bear a significant effect. The study also found technology factors to present a significant effect for consideration while choosing strategy for better performance implying choice of seed to suit sugar belt climatic conditions, adopting modern machinery and modern procedures as determinants.

5.4 Recommendations

The state of sugar industry is in a poor state. While some companies are on receivership, others are seeking bail out from the Government to either pay debts like farmers unpaid dues or expand their operations. The study recommends that sugar companies should expand product base, one sugar company has already devised ways of using the already existing infrastructure to add water bottling and production of ethanol in the product bracket. Further with improved procedures aiming at effective and efficient operations, it is evident that same products can be manufactured with minimum costs and thereby improvement on the returns.

Most of the sugar companies' operations are confined within the country's borders. While it is necessary to help in mitigating the sugar deficit in the country's demand, under COMESA regulations there is room to export within the regulations laid down. This can only be possible if capacity utilization is fully achieved within the factory operations.

Diversification approach that has been achieved within majority of sugar companies are related to bagging, packaging and rebranding the same product. This has only managed to reach particular market segment, as earlier discussed majority of sugar companies are either on trial or initial stages of diversifying to other unrelated products. It is a recommendation that companies explore unrelated products as it is happening in

Mumias sugar company to exploit idle capacity increase sustainability, manage competition and boost returns. This study's outcome has shown that related and unrelated products can be produced concurrently without compromising each other.

Corporate social responsibility has been controversially portrayed as a diversionary tactic by companies keen on delivering on their mandate. It is this study's recommendation that CSR need to be viewed as a marketing strategy due to its consciousness on society's needs. However, while core activities need to remain a priority in the company's operations and budgetary planning, CSR need to be adopted to help the company build a strong image and brand for society's expectations and as a marketing strategy to stakeholders.

Macro environment could be said to immensely contribute to the current sugar industry woes in Kenya. The interests of the sugar company's interests seem to be determined on the political, economical, social cultural or technological arena. While recommendations have previously suggested that privatization of sugar companies is the only option, legislating the necessary laws has taken a political showdown while sugar cartels have taken advantage of the stalemate. Policies to handle mismanagement of the companies seem either not to be applying or to be done selectively. Most of the companies are operating under well-articulated strategic plans, however, implementation has been a common challenge. The dynamism in the business macro environment not only in the sugar industry but also in agriculture sends signals on the adjustments necessary to be done in companies' strategic plans to accommodate the changes witnessed. This study attributes, in addition to other factors, poor performance to be enhanced by failure to consider demographic issues such as aging workforce, population dynamics on sugar belt areas leading to less land availability for sugarcane growing, lifestyle diseases and farmers' concerns. Further, outdated technology including use of old machinery, poor choice of variety seed to be a major setback on performance if not considered in context. The study recommends that sugar companies wishing to increase their performance need to engage in constant scanning of macro environmental factors and align them to their choices of

strategy to realize significant performance. Good will from the political class is ultimately be necessary both to correct past mismanagement in the companies while spearheading rescue measures in the already ailing industry. Further, organizations should be able to understand diverse, interrelated and often dialectical aspects of macro environment and match them with effective strategy.

5.5 Contribution to the Body of Knowledge

Objective	Contribution to Knowledge
To determine the extent to which product development strategy affects performance of sugar companies in Western Kenya.	It was established that product development strategy contributes between 21.4% and 29.2% on different performance measures in sugar industry. This implies that product development strategy is a critical component in determining company performance and that there are other determinants and also provides support for resource based and capabilities theories. The study contributes to the general body knowledge in further development of theory in particular product development constructs and performance measures.
To assess how market development strategy affects performance of sugar companies in Western Kenya.	Market development strategy contributes between 12% and 18.6% on different measures of performance. This shows how Segmentation of markets and geographical market orientations play a crucial role on performance measures. This implies that there could other important determinants of company performance. This provides basis for advancing the frontiers of knowledge in the exploration of other possible determinants.

To establish how Diversification strategy contributes between 12.7% and diversification strategy 23% on different measures of performance. This is a affects performance of sugar significant contribution to knowledge on the critical role companies in Western played by both constructs of diversification and also Kenya presence of other determinants of company performance.

To determine the extent to Corporate social responsibility contribution towards which Corporate Social performance ranges between 13.8% and 20.3%. This Responsibility affects provides evidence of the pivotal role CSR plays in a performance of sugar company in determining company performance and companies in Western subsequently provides support for stakeholder theory. Kenya.

To establish the moderating The study has found evidence of moderating effect of effect of macro environment macro environment in determining how strategy and on the relationship between company performance relate. The study found that macro strategic choice and environment enhances the relationship by accounting for performance of sugar relatively higher explanatory power and that macro companies in Western environment manifest affect strategy-performance in Kenya. varying degrees. This provides support for open system theory and a basis for further exploration on other possible relationships in terms of research and theory development where macro environment can play a significant role.

5.6 Areas for Further Research

The study used macro environment variables which are largely external to moderate strategy performance relationship. Internal variables could be explored in moderating a similar relationship in future studies. Secondly, the study explored four strategic choices, other strategic choices could be studied in relation to performance variables. Thirdly, private companies in sugar industry have posed a reluctant attitude towards research

majorly due to suspicion on the motive behind the study. There is a possibility that with time private companies in sugar industry will open up and this could give an opportunity for a study in to what extent private and public relate towards strategy and performance. Finally, most of the sugar companies are in western Kenya and currently a new company is coming up at the coast which intends to employ irrigation. Future studies will have an opportunity to explore whether the new strategies engaged at the coast will have substantial outcome worthy extending to other regions. Similar studies could as well be extended to other sectors of the economy.

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APPENDICES

Appendix I: Research Questionnaire for the Senior Management

This questionnaire is designed to collect data from sugar companies in Western Kenya strategic choice and company performance. The data shall be used for academic purposes only and will be treated with strict confidence. Your participation in facilitating the study is highly appreciated.

Part I: Organizational and Respondent Profile

1. Year of incorporation _____

2. Scope of operation (Tick as appropriate)
 - i. National (within Kenya)
 - ii. Regional (within East Africa)
 - iii. Continental (within Africa)
 - iv. Global (within Africa and beyond)

3. Ownership structure (Tick as appropriate)
 - i. Fully Locally owned
 - ii. Fully Foreign owned
 - iii. Both Locally and Foreign ownedPercentage of ownership: Local____%; Foreign____%

4. Size of organization (number of employees) (Tick as appropriate)

Below 200	[]	Between 402 - 600	[]
Between 201 - 400	[]	601 and above	[]

5. Names (Types) of products/services offered to the market

6. Title of interviewee _____

7. How long have you been with the company? _____ Years

8. What is your role in the company's strategic planning process?

Part II: Strategic Choice

Another aspect of this study is strategic choice. For purposes of this study, choice of strategies is represented by the Product development, Market development, Diversification and Social corporate Responsibility adopted. Please use such decisions your company has made in the last five years as the frame of reference when answering the questions in this section.

Product development strategy

- Q. 9 (i) How many new products have been introduced in your company in the last five years?
(ii) How many existing products have been improved / modified in your company in the last five years?

Explain the nature of the new products introduced / existing products improved.....
.....
.....

Market development strategy

- Q. 10 (i) How many new market segments (category of consumers previously not using your product) has your company accessed/developed in the last five years?
(ii) How many new geographical areas / regions has your company managed to access in the last five years?

Explain the nature of the new market segment and geographical areas.....
.....

Diversification strategy

- Q. 11 (i) How many production activities/products related to the current company operations has your company adopted in the last five years?
(ii) How many production activities/products unrelated to the current company operations has your company adopted in the last five years?

Explain the nature of the production activities or the products produced.....
.....
.....

Corporate Social Responsibility

- Q.12 (i) To what extent has your company fulfilled economic responsibilities (stakeholders interests) given the options below.

- No fulfillment at all
- Poorly fulfilled
- Fairly fulfilled
- Highly fulfilled

- (ii) To what extent has your company fulfilled ethical responsibilities given the options below.

- No fulfillment at all
- Poorly fulfilled
- Fairly fulfilled
- Highly fulfilled

(iii) To what extent has your company fulfilled legal responsibilities given the options below.

- No fulfillment at all
- Poorly fulfilled
- Fairly fulfilled
- Highly fulfilled

(iv) To what extent has your company fulfilled philanthropic responsibilities given the options below.

- No fulfillment at all
- Poorly fulfilled
- Fairly fulfilled
- Highly fulfilled

(v) In what ways has the above responsibilities been achieved in your company

.....

.....

.....

.....

Part III

Macro Environment

Q.5 (i) Does your company regularly collect information on its macro environment?

Yes No

(ii) How has the exercise been conducted?.....

(iii) How can you describe the nature of the macro environment to which your company operates?
(turbulence, hostility, predictable etc)

Q.6 (i) To what extent have political factors being considered in strategic decision making?

- No consideration at all
- Poorly considered
- Moderately considered
- Highly considered

(ii) To what extent have economic factors being considered in strategic decision making?

- No consideration at all
- Poorly considered
- Moderately considered
- Highly considered

(iii) To what extent have social cultural factors being considered in strategic decision making?

- No consideration at all
- Poorly considered
- Moderately considered
- Highly considered

(iv) To what extent have philanthropic factors being considered in strategic decision making?

- No consideration at all
- Poorly considered
- Moderately considered
- Highly considered

(v) Explain the specific ways in which the above factors of macro environment factors have influenced decision making in determining choice if strategy.....

.....

.....

.....

Q. 7 To what extent have developments in macro environment factors been predictable?

- Unpredictable
- Poorly predictable
- Moderately predictable
- Highly predictable

Q.8 To what extent has changes been observed in the macro environment factors?

- No change
- Minimal change
- Moderate change
- Great change

Part IV

Company Performance

Q.9 (i) How do you rate performance of your company in terms of total turnover

- No change in turnover
-
-
-

Total turnover has been deteriorating

Total turnover has experienced fluctuations

Total turnover has constantly improved

(ii) How do you rate performance of your company in terms of profitability

Profitability has not changed

There has been constant losses

Profitability has been fluctuating

Profitability has constantly been raising

(iii) How do you rate performance of your company in terms of Sales volume

Sales have not changed at all

Sales volume have deteriorated

Sales have been fluctuating

Sales have constantly been improving

(iv) How do you rate performance of your company in terms of capacity utilization

CU has not changed at all

CU has experienced downward trend

CU has been fluctuating

CU has been improving constantly

Thank you for your cooperation

Appendix II: Sugar Companies in Western Kenya

Parastatal Factories

Mumias Sugar Company

Nzoia Sugar Company

Sony Sugar Company

Muhoroni Sugar Company

Chemelil Sugar Company

Private Factories

Kibos & Allied Sugar Company

Butali Sugar Company

SOIN Sugar Company

West Kenya Sugar Company

Appendix III: University Letter of Introduction



JOMO KENYATTA UNIVERSITY
OF
AGRICULTURE AND TECHNOLOGY
KISUMU CBD CAMPUS
Office of the Director

P.O. Box 3433 – 40100 KISUMU, Kenya. Tel: +254 736 693960/+254 724 333534. Fax: +254(67)52089

E-mail: kisumucbd@jkuat.ac.ke

DATE: 13th OCT, 2014

TO WHOM IT MAY CONCERN

RE: INTRODUCTION OF MR. BENSON MBITHI; REG.NO. HD433-C012-1519/2013

This is to introduce Mr. Benson Mbithi who is a PhD Business Administration Student at JKUAT Kisumu CBD Campus.

He has completed his course work and is currently doing research. The research activity involves extensive data collection among others.

We humbly request for his assistance whenever he needs it.

Yours Faithfully,

DR. JARED O. H. NDEDA, PhD
DIRECTOR, JKUAT-KISUMU CBD CAMPUS



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Appendix IV: Researcher Letter of Consent

Mbithi Benson
Jomo Kenyatta University of
Agriculture and Technology,
P.O Box 9265 - 40141
Kisumu.
Tel. 0721-394748
E-mail:
bensonmbithi@gmail.com

The Management,
Company Name.....,
P.O Box —Number—,.....Code.....,
Town/City, Kenya.

RE: REQUEST FOR ACADEMIC RESEARCH DATA

I am writing to kindly request for permission to obtain data from your organization for the above-mentioned purpose. I am a doctoral candidate at the Jomo Kenyatta University of Agriculture and Technology, School for Human Resource Development and as part of the requirements for the award of the degree I am conducting research on **Effects of Macro Environment on the relationship between Strategic Choice and Performance of Sugar Companies: A case of Western Kenya Region.**

Given that your firm is among the sugar companies in Western Kenya, you have been identified as one of the target respondents. I therefore request you allow me to collect data that are pertinent for the research. My mode of data collection is through personal interviews and administration of questionnaires. The administration of questionnaires will be preceded by a short interview of between 10-15 minutes. Consequently, I am targeting at least Two Respondents from your organization at Senior/Top Management Level: Manager in charge of Corporate Strategy/Planning and Manager in charge of Marketing.

I assure that the information collected will be used purely for this academic research and I guarantee utmost confidentiality. I have attached a letter from the University certifying my candidature, a copy of the interview guide, and a copy of the questionnaire. I intend to book appointments with the identified respondents to conduct the interviews after-which they will fill the questionnaires upon clarifying issues that may arise. A copy of the findings will be availed to you upon request.

Thank you,
Yours Faithfully

Benson Mbithi
PhD. Candidate

Appendix V: Respondent's Profile

Respondent's Company	Title of the Respondent	Length of the service in the company	Role in the Company's Strategic process			
Categories	Number Respondents/Co.	Duration	Freq.	Role	Freq.	
Nzoia	7 Departmental heads	14	1 – 10 years	2	Planning, Formulation & Training	2
	7 Sectional heads		11 – 20 years	6	Implementation	6
			21 & above years	6	Monitoring and Evaluation	6
Sony	6 Departmental Heads	10	1 – 10 years	2	Planning, Formulation & Training	2
	4 Sectional Heads		11 – 20 years	5	Implementation	5
			21 & above years	3	Monitoring and Evaluation	3
Muhoroni	6 Departmental Heads	13	1 – 10 years	1	Planning, Formulation & Training	2
	7 Sectional Heads		11 – 20 years	4	Implementation	6
			21 & above years	8	Monitoring and Evaluation	5
Chemelil	6 Departmental Heads	14	1 – 10 years	2	Planning, Formulation & Training	2
	8 Sectional Heads		11 – 20 years	5	Implementation	6
			21 & above years	7	Monitoring and Evaluation	6
Mumias	6 Departmental Heads	13	1 – 10 years	2	Planning, Formulation & Training	2
	7 Sectional Heads		11 – 20 years	6	Implementation	6
			21 & above years	5	Monitoring and Evaluation	5
West Kenya	3 Departmental Heads	8	1 – 10 years	0	Planning, Formulation & Training	1
	5 Sectional Heads		11 – 20 years	3	Implementation	5
			21 & above years	5	Monitoring and Evaluation	2
Butali	n/a	Not Responded	n/a	n/a	n/a	n/a
Kibos & Allied	n/a	Not Responded	n/a	n/a	n/a	n/a
Total	34 Departmental Heads 38 Sectional Heads	72	1 – 10 years	9	Planning, Formulation & Training	11
			11 – 20 years	29	Implementation	34
			21 & above years	34	Monitoring and Evaluation	27
			Non respondents	47	Non Respondents	47

Appendix VI: Company Profiles

Name of the Companies	Age (Year of Incorporation)	Country of Incorporation	Ownership Structure	Scope of Operation	Size of the Organization	Current Product/Service Offerings	Other Products underway plans
Nzoia	1978	Local (Kenya)	Gvt. of Kenya 98% Foreign Investors 2%	National	Over 600 Employees	Sugar Molases Bagasse	Bottled water Ethanol production Electricity generation
Sony	1976	Local (Kenya)	Gvt. of Kenya 98.8% Foreign Investors 1.2%	National	Over 600 Employees	White sugar Brown sugar Molases Bagasse	Bottled water Ethanol production Electricity generation Briquettes production
Muhoroni	1964	Local (Kenya)	Government of Kenya	National	Over 600 Employees	Brown sugar Molases Bagasse	Bottled water Ethanol production Electricity generation
Chemelil	1965	Local (Kenya)	Government of Kenya	National	Over 600 Employees	White Sugar Brown Sugar Molasses Filter Cake	Bottled water Ethanol production Electricity generation
Mumias	1971	Local (Kenya)	Local Corporates 44.9% Local Individuals 50.5% Foreign Investors 4.6%	National	Over 600 Employees	White Sugar Brown Sugar Fortified sugar Ethanol Electric Power co-gen.	Expansion through acquisitions of sugar mills
West Kenya	1981	Local (Kenya)	Privately owned	National	Not disclosed	Sugar	Information not Available
Butali	2009	Local (Kenya)	Privately owned	National	Not disclosed	Sugar	Information not Available
Kibos & Allied	2007	Local (Kenya)	Privately owned	National	Not disclosed	Sugar	Information not Available

Appendix VII: Performance Measures

Performance Measure	2009	2010	2011	2012	2013
Total turnover (Kshs.)	26,936,361	34,049,371	40,880,896	44,629,011	42,744,549
Sugar sales (tonnes)	548,370	550,116	490,152	494,162	585,748
Profit after tax (Kshs.)	786,602	(1,253,645)	4,167,748	2,321,882	(2,713,552)
Factory capacity utilization (%)	52.13	61.40	56.63	55.73	66.47

Kenya Sugar Board (KSB), 2014

Capacity Utilization % (Factory Performance)

	2009	2010	2011	2012	2013
Chemelil	40.95	42.25	28.53	29.50	38.30
Muhoroni	39.93	52.42	42.36	50.85	45.92
Mumias	7.25	71.63	64.51	63.24	55.10
Nzoia	71.31	70.29	69.67	75.78	70.11
S. Nyanza	61.28	59.22	59.71	54.42	60.35
W/ Kenya	78.56	80.89	69.97	60.50	79.96
Soin	32.30	29.99	25.61	41.41	49.54
Kibos	85.42	84.51	74.15	79.50	101.81
Butali	-	-	75.19	79.99	80.30
Sukari	-	-	-	38.68	68.24
Transmara	-	-	-	39.21	81.52
	52.13	61.40	56.63	55.73	66.47

Total turn over

	2009	2010	2011	2012	2013
Chemelil	1,682,693	1,624,766	2,463,219	1,523,700	733,243
Muhoroni	1,913,914	1,630,531	2,846,678	2,352,833	2,711,053
Mumias	11,894,420	15,697,952	15,901,533	15,675,717	12,166,745
Nzoia	3,644,044	4,451,468	4,187,494	5,549,163	4,931,073
S. Nyanza	3,127,875	3,442,726	4,931,967	5,952,050	4,160,669
W/ Kenya	3,115,288	4,852,348	5,012,502	4,338,734	6,175,036
Soin	153,269	151,321	151,321	250,135	178,283
Kibos	1,402,849	2,196,249	2,461,869	2,502,965	3,047,261
Butali	-	-	2,922,302	3,654,081	3,186,412
Sukari	-	-	-	1,465,701	2,313,899
Transmara	-	-	-	1,361,920	3,138,862
	26,936,361	34,049,371	40,880,896	44,629,011	42,744,549

Profit after tax

2009	2010	2011	2012	2013
(695,234)	(287,320)	(81,854)	(797,471)	(938,169)
(257,320)	(215,346)	351,200	8,713	(410,890)
1,609,672	1,572,383	1,933,225	2,012,679	(1,669,716)
22,817	(3,555,465)	63,058	217,000	(1,045,465)
23,860	159,120	396,492	633,555	(328,905)
232,094	961,911	965,848	-	608,549
11,347	(7,342)	(7,342)	(8,558)	(70,528)
(162,643)	116,404	51,964	(353,736)	(7,900)
-	-	493,146	575,526	477,177
-	-	-	(192,946)	402,422
-	-	-	225,108	267,860
786,602	(1,253,645)	4,167,748	2,321,882	(2,713,552)

Sugar Sales(tonne)

2009	2010	2011	2012	2013
28,944	37,116	21,605	16,197	20,519
26,690	35,269	25,017	30,377	27,829
246,578	223,082	180,056	178,631	159,694
70,745	59,864	60,795	68,394	60,556
63,745	52,572	74,446	52,952	62,352
69,462	72,740	60,979	49,010	80,904
1,865	1,442	1,211	2,050	2,064
38,332	31,104	29,115	17,567	50,550
-	34,529	34,529	42,903	43,414
-	182	182	17,328	32,770
-	206	206	16,741	43,083
548,370	550,116	490,152	494,162	585,748

Appendix VIII: Letter from Chemelil Sugar Company



P. O. Box 177, MUHORONI - 40107, Kenya or
P. O. Box 1649, KISUMU - 40100, Kenya
Phone: 020 2031883/4/5/7
GSM Lines: 0722 209798, 0710 766383, 0735 234 733
Chemelil Academy Line: 020 2031881
Fax: 020 2031886
Email: md@chemsugar.co.ke
csc@chemsugar.co.ke
Website: www.chemsugar.co.ke

Our Ref: CSCL/HRD/TR/RC/88

February 20, 2015

Mr. Benson Mbithi
P.O Box 9265 - 40141
KISUMU

Dear Sir,

RE: REQUEST TO CONDUCT ACADEMIC RESEARCH

Refer to letter from Jomo Kenyatta University of Agriculture & Technology
13th October 2014 on the above subject.

This is to inform you that your request to carry out research within the
company on the topic **“Effects of Macro Environment on the
relationship between Strategic Choice and Performance of Sugar
Companies: A case of Western Kenya Region”** has been granted.

You will be expected to surrender a copy of your final research to Training
Office for records.

Wishing you success in your research.

Yours faithfully,
For: **CHEMELIL SUGAR COMPANY LIMITED**

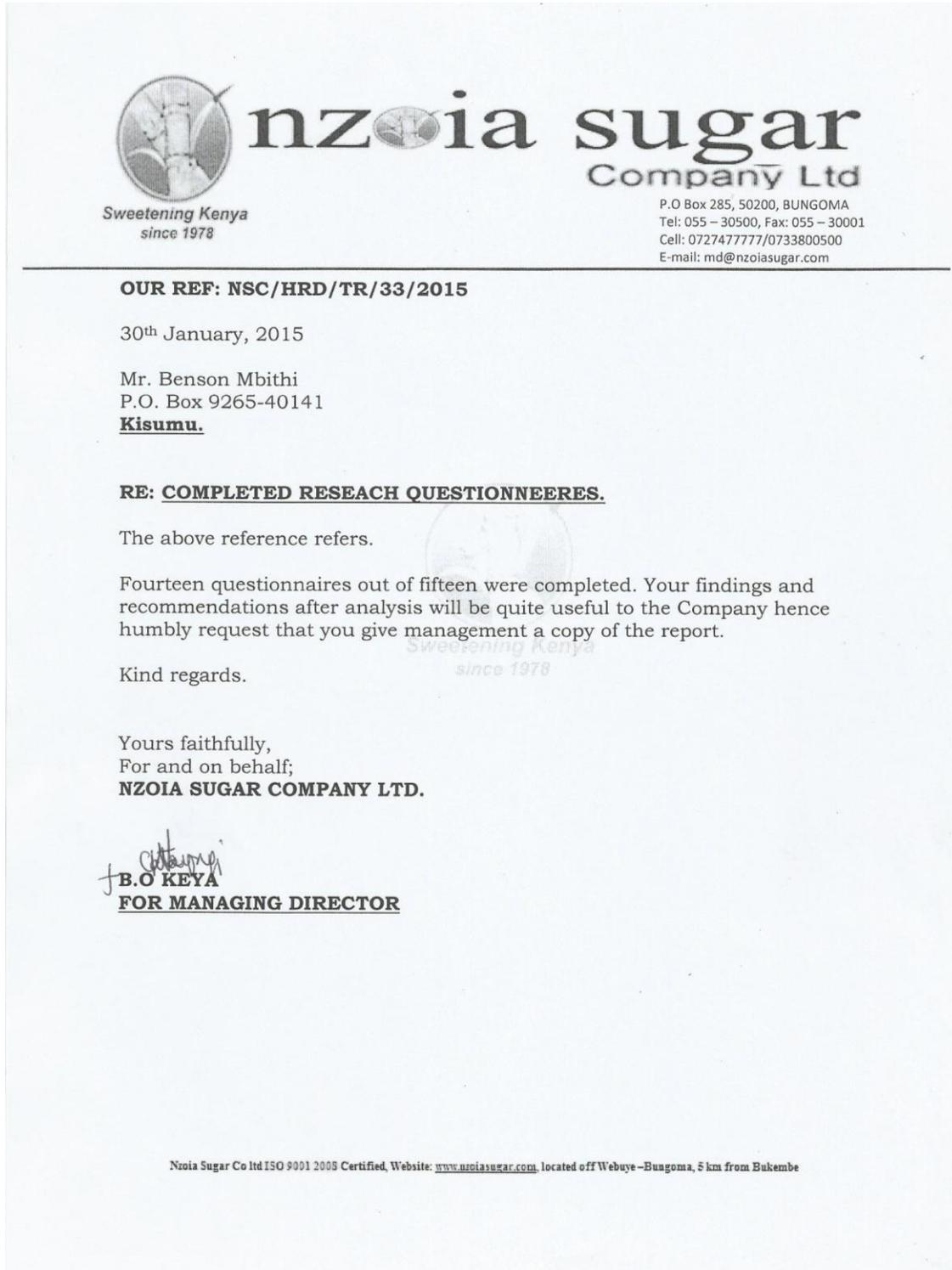

J. KIPKERING
HEAD OF HUMAN RESOURCE



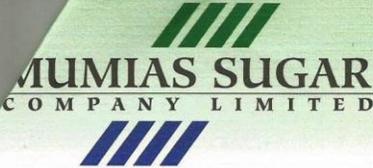
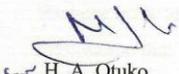
(ALL CORRESPONDENCE TO BE ADDRESSED TO THE MANAGING DIRECTOR)



Appendix IX: Letter from Nzoia Sugar Company



Appendix X: Letter from Mumias Sugar Company

	<p>MUMIAS SUGAR COMPANY LIMITED</p> <p>Head Office P.O: Private Bag Mumias, Kenya Tel: + 254 711 094 000, + 254 734 600 334/5 email: msc@mumias-sugar.com website: www.mumias-sugar.com</p>
	<p>Nairobi Office P.O: 57092 City Square 00200 Nairobi, Kenya Tel: + 254 720 140 080, +254 733 600 296 email: msc@mumias-sugar.com website: www.mumias-sugar.com</p>
<p>PER/E/12B</p>	
<p>30th January, 2015</p>	
<p>TO WHOM IT MAY CONCERN</p>	
<p><u>RE: RESEARCH</u></p>	
<p>This is to confirm that Benson Mbithi pursuing a course leading to the award of PhD-Business Administration at Jomo Kenyatta University of Agriculture & Technology (JKUAT) collected information for his research work on the topic “Effects Of Macro-Environment On The Relationship Between Strategic Choice & Performance Of Sugar Companies: A case study of Western Kenya Region” at Mumias Sugar Company Limited from 12th to 20th January, 2015.</p>	
<p>Yours faithfully, For: MUMIAS SUGAR COMPANY LIMITED</p>	
<p> H. A. Otuko <u>LEARNING & DEVELOPMENT MANAGER</u></p>	<p>MUMIAS SUGAR CO. LTD. 30 JAN 2015 TRAINING & DEVELOPMENT MANAGER TEL: 641620/21</p> <p>O.K</p>
<p>Directors: Mr. Dan Ameyo (Chairman) Mr. Edwins Mukabannah Mrs. Sarah Serem Mr. Nimrod Namenge Mrs. Elizabeth Kyengo Mr. Francis Kigen Mr. Couitts Otolo (Managing Director) Mr. James G. Chege Mr. Henry Rotich Mr. James Opindi Mrs. Nancy Kamicha</p>	

Appendix XI: Summary of Empirical studies, critique and knowledge gaps

The section covers a summary of knowledge gaps that emerge from reviewed empirical studies. Knowledge gaps have been categorized according to study themes starting with relationships between product development and performance, market development and performance, diversification and performance, corporate social responsibility and performance and finally macro environment and performance of sugar companies.

Variables	Author (s) Year	Title of the Study	Methodology	Findings	Gaps
Product Development Strategy	Cusumano, M. A. and Nobeoka, K. (1991).	Strategy, structure and performance in product development: Observations from the auto industry.	The basic framework examines variables related to product strategy, project structure or organization, and project as well as product performance.	The evidence indicates that Japanese automobile producers have demonstrated the highest levels of productivity in development as well as of overall sales growth, and have used particular structures and processes to achieve this.	The evidence does not clearly indicate what the precise relationships are between development productivity and quality or economic returns and therefore this study addresses how product development affects performance.
	Gatignon, H. & Xuereb, J. M. (1997).	Strategic orientation of the firm and New product performance	By using questionnaires to collect data from market executives, of these 239 marketing executives, 87.5% (209 managers) agreed to participate in the study. Multiple item scales were developed based on items previously proposed and used successfully in survey research studies.	The results suggest that the appropriateness of a given strategic orientation, even a customer orientation is not unconditional.	The study addresses strategic orientations on products innovations while this research pursues further the effects of the product innovations on performance.
	Anurag, S. and Nelson, L.(2004).	Strategic Alliances and Product Development in High Technology New	The study surveyed biotechnology firms in the UK and Germany, the largest and	The study found that the specialization of new firms' technological capabilities can help managers use alliances more	The reviewed study concerns product development in high

	Firms.	most developed biotech industries in Europe. Face to face Interviews were conducted with 118 British and 162 German firms. Descriptive statistics were used to determine correlations among, the study's variables.	productively when it comes to NPD.	technology firms while this study looks in the specific context of sugar companies.
Goedhuys, M. and Veugelers, R. (2008).	Innovation strategies, process and product innovations and growth: Firm-level evidence from Brazil.	Study used the World Bank's Investment Climate Survey (ICS) data collected in Brazil in 2003. The survey collected data for the period 2000, 2001 and 20025, through intensive interviews with owners and managers of firms. Analysis was done by Chi-sq test for the bivariate probit for significance in correlation.	The results indicated that innovative performance is an important driver for firm growth. It is particularly the combination of product and process innovations that significantly improves firm growth. Both innovation and growth performance are supported by access to finance.	The study reviewed specifically concerns effects of internal and external technology on product innovations while this study looks at the effects of the product innovations on company performance.
Atsango, C.M. (2012).	Strategies adopted by Kenyan sugar companies in response to globalization: A case of Mumias sugar company.	The study uses a case study research design. Data was collected using questionnaires and analyzed using descriptive and inferential statistics. The analyzed data was then presented using bar graphs, pie charts and tables.	The findings of the research show that, globalization brought about challenges and opportunities and the sugar industry was prepared for the challenges and opportunities brought about by globalization.	The reviewed study is relating strategies adopted and globalization in one company while this study relates specific strategy and overall performance in sugar industry.
Wamalwa, M. S., Onkware, K. & Musiega, D. (2014)	Effects of Lean Manufacturing technology strategy implementation on Factory Time Efficiency, a case study of Mumias Sugar Company Limited in Kakamega County, Kenya.	Purposive sampling was used to select a sample of 95 employees from Human Resources, Engineering, Production, Quality Assurance, Sales and Distribution sections. Data was collected using a structured questionnaire	Study was motivated by the financial losses made by Mumias Sugar Company limited and the contribution of sugar in the Kenyan economy. The study revealed that Mumias Sugar Company Limited has not adopted and implemented holistically lean technology. Mumias Sugar Company has only adopted practices relating to	The reviewed study looks at one performance aspect which is factory time efficiency while this study looks at performance in a wider scope including total turnover, sales volume, profitability and capacity utilization.

		consisting mainly with closed ended questions and was analyzed using descriptive and inferential statistics.	lean manufacturing and there is little impact of these practices to factory time efficiency. It was concluded that lean manufacturing technology has significant impact on Factory Time Efficiency depending on the manner of implementation of the practice.	
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Variables	Author (s) Year	Title of the Study	Methodology	Findings	Gaps
Market development strategy	Voss & Voss (2000).	Strategic Orientation and Firm Performance in an Artistic Environment	To test the hypotheses, the study conducted a series of regression analyses that substituted the various performance measures as dependent variables. For each performance measure, the study conducted a hierarchical, moderated regression analysis that tests for independent and interaction effects for the hypothesized moderator.	The results indicate that the association between strategic orientation and performance varies depending on the type of performance measure used. However, the most unambiguous result is that a customer orientation exhibits a negative association with subscriber ticket sales, total income, and net surplus/deficit.	The reviewed study looked at market aspect in terms of customer orientation limited to non profit context while this study looks at market development in wider terms including market segments and regions in relation to performance in a profit making context.
	Kumar, V. & Petersen, J. A. (2005)	A Review of Theoretical and Empirical Evidence Using a Customer-Level Marketing Strategy to Enhance Firm Performance.	Use of data sources from several B2B and B2C firms to validate some of the empirical findings in previous research.	Findings show each of these tactics has been linked directly to the firm's performance in the literature and offers firms a way to use resources efficiently and effectively to streamline their marketing efforts.	The study mainly reviews existing studies while this study is both empirical and current and specific context of manufacturing.
	Ge, G. L. & Ding, D. Z. (2005).	Market Orientation, Competitive Strategy and Firm Performance: An Empirical Study of Chinese Firms	Based on a sample of 371 manufacturing firms in China descriptive statistics, correlation coefficients and reliabilities of the constructs together with mean scores on	Evidence found showed that the three dimensions of market orientation exert different effects on competitive strategy and performance. The results of structural equation analyses indicated that the mediating effect of	The reviewed study uses competitive strategy as a mediating variable between market and performance while this study looks at market –

		the three competitive strategies were determined.	competitive strategy is mainly revealed in innovation strategy, the most vital factor in creating superior value for the company in the emerging market.	performance relationship moderated by macro environment.
Zott, C. and Amit, R. (2007)	The fit between product market strategy and business model: implications for firm performance.	Data was collected on a sample of firms that had gone public in Europe or in the United States between April 1996 and May 2000. The study randomly sampled 170 firms on their business model characteristics and product market strategies. Analysis was done through descriptive statistics, Confirmatory factor analysis and partial least squares regression.	The study manually collected dataset, and found that novelty-centered business models—coupled with product market strategies that emphasize differentiation, cost leadership, or early market entry—can enhance firm performance. Data suggested that business model and product market strategy are complements, not substitutes.	The study was limited in addressing how business models evolve and in particular how they co-evolve with the product market strategy of the firm. This study examines the resultant effects of market development strategy and performance.
Chisanga, B., Gathiaka, J., Nguruse, G., Onyancha, S., and Vilakazi, F. (2014).	Competition in the regional sugar sector: the case of Kenya, South Africa, Tanzania and Zambia.	Empirical studies reviews	Progressive liberalisation of global markets is likely to result in increased competitiveness in the regional sugar industry as firms seek to grow their capabilities in order to trade globally. The study has shown that while firms have strategically positioned themselves in markets, the competitive outcomes in the region are more likely to be affected by protectionism.	The reviewed study explores empirical studies sugar industry in other economies while this study is specific and empirical in its assessment of market development on performance in sugar industry Kenyan context.

Variables	Author (s) Year	Title of the Study	Methodology	Findings	Gaps
Diversification strategy	Pandya, A. M. and Rao, N. V. (1998)	Diversification and firm performance: an empirical evaluation	This study uses Specialization Ratio (SR) to classify 2188 firms in three groups: Single Product Firms (SR > 0.95),	The results suggested that the average performance of diversified firms (especially highly diversified ones) perform well on a risk-return basis on	The reviewed study generally explored effects of diversification on performance while this

			Moderately Diversified Firms (0.5 ≤ SR ≤ 0.95), and Highly Diversified Firms (SR < 0.5), for each of the seven years, from 1984 to 1990, for which complete segmental data was available.	accounting measures as well as market-based measures, when compared with group of firms that are not as highly diversified.	study is specific in manufacturing and further diversification is assessed both related and unrelated aspects.
Afza, T., Slahudin, C., and Nazir, M. S. (2008)	Diversification and Corporate Performance: An Evaluation of Pakistani Firms.	A sample of 65 firms was categorized as diversified and non-diversified. For these firms, the financial performance in terms of risk and return was analyzed with the return measured by Return on Assets (ROA), Return on Equity (ROE), Market Rate of Return (MKRT) and Tobin's q, and the Coefficient of variation used as the measure of risk.	The results show that the non-diversified firms performed better than the diversified firms. However, the high return of non-diversified firms is accompanied by low risk and the low return of diversified firms is more risky. But there is a contrast in results based on book values and market values.	The reviewed study looked at diversification effects on financial performance while study looks further at other aspects of performance like capacity utilization, sales volume, total turnover.	
Chia-Wen, H., Heng-Yih, L. (2008).	Corporate Diversification and Firm Performance: The Moderating Role of Contractual manufacturing Model.	The sample was derived from the companies listed in the information and electronics technologies category on the Taiwan Stock Exchange (TSE). The sample contained 124 hardware manufacturing companies in Taiwan. The study pooled regression results using the firm performance measured as the dependent variable.	Using a longitudinal data containing firm-level operation information during 1997-2002, the empirical investigation finds that product diversity and customer diversity are positively associated with firm performance, whereas geographic diversity is negatively associated with firm performance. However, contractual manufacturing model is not only positively associated with firm performance, but also acts as a moderator between product diversity and firm performance.	The reviewed study explores diversification in terms of product, customer, geographic and performance while this study consolidates diversification in terms of related and unrelated while performance is measured both quantitative and qualitative constructs.	
Awino, Z. Wamalwa, W.	Challenges facing the Implementation of	This study employs a positivist philosophical	The study shows that few differentiation strategies are carried out	The reviewed study assessed one strategy	

R. Imaita, I, K' obonyo, P. (2009)	Differentiation Strategy in the Operations of the Mumias Sugar Company Limited	orientation, The target population for the study is all departments within Mumias Sugar Company Limited (MSCL), with population estimate of 300 permanent workers. The study used primary data obtained through questionnaires with selected managers	in Mumias Sugar Company Limited. The study also found out that there are other challenges, which include inadequate interdepartmental communication. The study therefore recommends that regular staff meetings need to be put in place. Regular staff Meetings enhances team work and creativity.	specifically within one company in sugar industry while this study explores several strategies in relation to performance in a wider sugar sugar industry.
Ojo, O. (2009).	Corporate Diversification and firm Performance: an empirical study. Current economic Crisis, Manager.	Survey design was adopted in this study with the application of simple random sampling technique in selecting the case study companies as well as the respondents. Primary data were collected through questionnaire while data was analyzed through descriptive statistics and correlation and coefficient of determination were used to test the hypotheses.	It was discovered that diversification impacted performance of these companies positively and recommended that these companies should engage in geographical diversification in addition to other forms of diversification they are currently involved in for maximum performance.	The reviewed study looks at diversification in terms of corporate while this study addresses diversification in terms of both related and unrelated and its effects on different measures of performance.
Marinelli, F. (2011)	The relationship between diversification and firm's performance and whether there is really a causal relationship.	Through longitudinal studies using both accounting and market indicators. The sample includes diversified firms available from compustat's north America Industrial Annual file. Econometric's model was used to take into account three critical considerations; the existence of the time invariant firm's specific effect, to control for heteroscedasticity and the length of time series.	The study concludes that this relationship is not causal but attributable to factors other than the degree of relatedness among business units and the degree of efficiency of the internal capital market. The study further finds that some diversified firms persistently create shareholder value, beat the market index and have lower market volatility while some others persistently reach opposite results. Higher performance is associated with an unrelated portfolio of business segments.	The reviewed study establishes causal relationship between diversification and performance while this study explores effects of diversification on performance.

Santarelli, E & Tran, H. T. (2013).	Diversification Strategies and Firm Performance: A Sample Selection Approach.	Panel firm-level data from 2001 to 2006 were extracted from the GSO (General StatisticsOffice) of Vietnam's database of annual national enterprise surveys. The study took into account the sample selection and endogeneity issues from correlated disturbances by applying different advanced parametric and semiparametric estimation methods for both static and dynamic treatments of firm-level panel data.	Findings include: (i) factors stimulating firms to diversify do not necessarily encourage them to extend their diversification strategy; (ii) firms which are endowed with highly skilled human capital are likely to successfully exploit diversification as an engine of growth; (iii) while industry performance does not influence profitability of firms, it impacts their diversification decision and degree.	The study reviewed diversification longitudinally while study assessed effects of diversification on performance crosssectionally.
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Variable	Authors(s) Year	Title of the Study	Methodology	Findings	Gaps
Corporate social responsibility	McWilliams & Siegel (2000)	Corporate social responsibility and financial performance: correlation or misspecification?	Regression test of firm performance on corporate social performance Correlation test of CSR and R&D Estimation on CSR on firm performance	Demonstrated particular flaws in existing econometric studies of the relationship between social and financial performance. The results confirmed that CSP and R&D are highly correlated, and that, when R&D intensity is included in the equation, CSP is shown to have a neutral effect on profitability.	The reviewed study considered performance in terms of financial while this study seeks the effects of Corporate social responsibility in both qualitative and quantitative aspects
	Porter & Kramer (2002)	The link between Competitive Advantage and Corporate Social Responsibility		Organizations rank companies on the performance of their CSR and these rankings attract considerable publicity and a result CSR has emerged as an inescapable priority for business leaders in every country. Companies efforts have not been as productive in CSR due to; one, they pit business	The study linked competitive advantage and corporate social responsibility while this study explores the effects of CSR on company performance

			against society while the two are interdependent and secondly, they pressure companies to think of CSR in generic ways instead of in the way most appropriate to each firm's strategy.	
Tsoutsoura (2004)	Corporate Social Responsibility and Financial Performance	Cross sectional time series regression analysis used in hypotheses using financial performance as the dependent variable controlling for size, debt level and industry.	Using extensive data over a period of five years, this study explored and tested the sign of the relationship between corporate social responsibility and financial performance. The results indicated that the sign of the relationship is positive and statistically significant, supporting the view that socially responsible corporate performance can be associated with a series of bottom-line benefits.	The study reviewed CSR and financial performance while this study assesses performance both qualitatively and quantitatively.
Morrison Paul & Siegel (2006)	Corporate Social Responsibility and Economic Performance	Empirical literature review using secondary sources	The study documents that CSR activities may affect the productive impacts of efficiency, technical change and scale economies, as well as increase input costs and composition. The findings also indicate that these impacts are dependent on firm characteristics such as the motivations for socially responsible actions, tax laws, location, and plant age and innovation activities.	This study exposes company performance in wider scope where total turnover, sales volume, profitability and capacity utilization are indicators which are not addressed by the reviewed study.
Pavie & Filho (2008)	Corporate social responsibility and financial performance : a Meta-analysis	Statistical methodology of meta analysis aggregating correlations Aggregated the recent empirical studies in a duration of 10 years	Results show positive relations between the various measures analyzed of corporate social responsibility and financial performance, many of them ratifying the existing theories. Studies conducted to examine the relationship between corporate social responsibility and financial performance failed to	Study reviews meta analysis of CSR and financial performance, while this study looks at the effects of CSR (economical, ethical, legal, philanthropic responsibilities) on

			reach consistent results on the subject.	performance.
Poddi and Vergalli (2008)	Does corporate social Responsibility affect the Performance of firms	Use of meta analysis, means and variance of correlation. Analysis based on statistical methodology of meta analysis aggregating 112 recent empirical studies.	The main results seem to support the idea that CSR firms which are more virtuous, have better long run performance. They have some initial costs but obtain higher sales and profits due to several causes reputation effect, a reduction of long run costs and increased social responsible demand.	The reviewed study seeks to answer the question whether CSR affects performance generally, while this study specifically seeks to show CSR effects on total turnover, sales volume, profitability and capacity utilization
Ioannou & Serafeim (2010)	What drives corporate social performance? International evidence from social, environmental and governance scores	Secondary data used from different databases. Dataset includes 42 countries Analysis done through a summary of statistics for all variables and use of correlation matrices	Findings show that political institutions, followed by legal and labor market institutions are the most important country determinants of social and environmental performance. In contrast, legal institutions, followed by political institutions are the most important country determinants of governance. Capital market institutions appear to be less important drivers of CSP.	The reviewed study assessed the factors that drive CSR performance while this study explores effects of CSR on performance.
Mishra & Suar (2010)	Does Corporate Social responsibility Influence Firm Performance of Indian Companies?	Data collected from 150 senior level managers through questionnaire survey Hard data obtained from secondary sources Demographic details of executives collected as part of questionnaire survey Descriptive statistics and pearson correlation among	Examining whether corporate social responsibility (CSR) towards primary stakeholders influences the financial and the non-financial performance (NFP) of Indian firms. Findings indicated that stock-listed firms showed responsible business practices and better FP than the non-stock-listed firms. Findings suggest that responsible business practices towards primary stakeholders can be profitable and beneficial to Indian firms (Mishra & Suar, 2010).	The reviewed study addressed effects of CSR on performance in the Indian context while this study looked at a similar relationship in the Kenyan context.

		variables determined		
Young (2012)	Strategic Corporate Social Responsibility and Small to Medium Businesses in Australia. Strategic CSR and SMBs in Australia	Cross sectional research design	Outlines the core principles of shared value and related work around economic clusters. It then considers the role that SMBs can play in achieving sustainable outcomes and some of the potential impacts of shared value on SMBs. The paper traces the evolution of the concept of corporate social responsibility (CSR) from “defensive” to “strategic” positions.	The context of the reviewed study was in SME’s in Australia while this study addresses CSR and performance in the Kenyan sugar industry.
Kaufmann & Olaru (2012)	The impact of corporate social responsibility on business performance	Empirical literature review using secondary data	The study gives an overview of latest trends in the field of Corporate Social Responsibility and then offers a possible way to measure its impact on Business Performance on the basis of the stakeholder concept. The study findings were that the impact of CSR on Business Performance be measured, and that it is virtually impossible to subtract out the influence of CSR on Business Performance directly, though it is possible to determine the influence of CSR on different stakeholders.	Performance measure in the reviewed study is general while this study measures performance in terms of both qualitatively and quantitatively. Further Kaufmann & Olaru reviewed secondary while this study is current and empirical.
Flammer (2013)	Does Corporate Social Responsibility Lead to Superior Financial performance? A Regression Discontinuity Approach	Secondary data from risk metrics and fact set A sample of 102 CSR-related proposals was used. A cross sectional analysis regressing CSR on marginal returns (performance)	The study examined the effect of corporate social responsibility (CSR) on financial performance. Specifically, the study analyzed the effect of CSR-related shareholder proposals that pass or fail by a small margin of votes. The study found that adopting a CSR-related proposal leads to superior financial performance. Finally, consistent with institutional theory, the study found that the effect is stronger	The study under review looks at performance in terms of financial aspects while this study considers performance in wider scale including total turnover, sales volume, profitability and capacity utilization.

			for companies operating in industries where institutional norms of CSR are higher.	
Manyasi, J. N. & Masinde, S. W. (2014)	Effect of Employee Focused Corporate Social Responsibility Initiatives on Performance of Sugar Manufacturing Firms in Kenya	The study employed descriptive causal survey research design. The study targeted a total of 2450 employees. A sample of 245 employees was selected through simple random to participate in the study. The research utilized both primary and secondary data collection instruments.	The findings showed that there is a positive statistically significant linear correlation between practicing employee oriented CSR activities and business performance of sugar manufacturing firms in Kenya.	The reviewed study addresses corporate social responsibility in terms of employee orientation. This study has investigated CSR in terms of economic, ethical, legal and philanthropic responsibilities.
Masinde, S. W. & Makori, E. (2014).	Corporate communal accountability towards the populace. Is it aimed at increasing solvency of sugar manufacturing firms in Kenya?	To achieve this, both primary and secondary data collection instruments were used. Suitable descriptive and inferential statistical tools like mean standard deviation, ANOVA, Pearson correlation done at 95% confidence level were used in the study.	The findings showed that firms with high profitability participated in socially responsible activities while those with low profitability did not participate in socially responsible activities.	The study under review is assessing CSR in relation to plant solvency while this study investigates CSR in relation to four constructs of performance.

Variable	Author(s) Year	Title of the Study	Methodology	Findings	Gaps
Macro environment	Wanyande, P. (2001)	Management Politics in Kenya's Sugar Industry: Towards an Effective Framework.	Data for this report was obtained from both secondary and primary sources. Primary sources were derived from interviews conducted among twenty farmers in Muhoroni and fifteen farmers in Chemelil sugar-cane growing areas.	The study findings showed that the problems in the sugar industry are mainly due to government policies and interference, which does not favour efficient performance.	The reviewed study looks at the political aspect of the environment in relation to factors affecting sugar industry while this study investigates the four aspects of macro environment and how they moderate strategy /

					performance relationship.
Rasheed (2004)	Foreign Entry Mode and Performance: The Moderating Effects of Environment	Data collected from 123 publicly held manufacturing SME's in USA Moderated hierarchical regression variance run for the main effects of entry mode and environmental variables for performance controlling for size and firm resources	To test a contingency model that hypothesizes more of the performance variance is explained when the foreign market entry mode is strategically aligned with domestic and foreign environmental factors. The results indicate that firms will have a higher rate of international revenue growth using non-equity based (exporting) foreign market entry modes in growing domestic environments. These findings further support the basic contingency theory that it is the interaction between contingent environmental variables and foreign entry mode that has significant implications in predicting the rate of international growth.	The study under review investigates moderating effects of environment on the relationship between foreign entry strategy and performance while this study assesses moderating effects between four strategy choices and performance.	
Vijfvinkel, Bouman & Hessels (2011)	Environmental sustainability and financial performance of SMEs	Data collected from 337 Dutch and Chinese firms through questionnaires Analysis was done through binary logistic regression method applied to explore the relationship between financial development and environmental sustainability	The results suggest a significant positive association between environmental sustainability and firm performance. It appears, however, that different indicators of environmental sustainability display a distinct relationship with the two performance measures.	The reviewed study relates environment with financial performance and does not necessarily look at environment as a moderator while this study investigates the moderating effects of macro environment.	
Kakazoukis(2011)	How macro environmental forces affect business buying behavior after a recession. A case study of the second hand truck business	Primary data collected through face to face interviews. Secondary data from secondary sources	Findings show the macro environmental forces which have had a strong impact on the buying behavior after the financial crisis are the political, economical and legal forces. After the financial crisis both retailers and customers were more careful on	The reviewed study investigated effects of macro environment in the context of business buying behavior while this study explores macro environment as a	

			<p>spending their money. They were more informed about quality and their needs, to make better purchases. Retailers avoided building up stocks instead they are purchasing trucks upon requests.</p>	<p>moderator between strategy and performance. Further the context of Kakazoukis' study is in truck business while this study context is in sugar industry.</p>
<p>Ojera, Patrick B. Ogutu, Martin, Siringi, Elijah M., Othuon, Lucas A. (2011).</p>	<p>Belief Control Practices and Organizational Performances: A Survey of Sugar Industry in Kenya.</p>	<p>Using a census survey of the 45 firms in the sugar industry value-chain in western Kenya registered by the Kenya Sugar Board as at 1st January 2008, data was collected through self administered questionnaires sent to chief executive officers, finance managers and marketing officers of the target companies.</p>	<p>The main finding of the study was that belief control systems are moderately prevalent in firms in the sugar industry and that belief control has a significant positive relationship with organizational performance.</p>	<p>The study under review looks at one aspect of macro environment which is social cultural against performance while this study addresses four constructs of macro environment including economical, political, social cultural and technological.</p>
<p>Ting, Wang & Wang (2012)</p>	<p>The moderating role of environmental dynamism on the influence of innovation strategy and firm performance</p>	<p>Study was descriptive and inferential statistics.</p> <p>Frequency analysis and determination of mean scores for quantitative data.</p> <p>Sample drawn from TWSE data base.</p>	<p>The purpose of this research is to understand the association between innovation strategy and firm performance. The environmental factor also discuss about as a moderate effect between innovation strategy and firm performance relationship. Finding of this research is that environmental concerns appear to have a substantial impact on innovation strategy and performance.</p>	<p>The study investigates moderating role of environmental dynamism between innovation strategy and performance. This study establishes moderating role of macro environment between four strategic choices and performance.</p>
<p>Adeoye & Elegunde (2012)</p>	<p>Impacts of external business environment on organisational performance in the food and beverage industry in Nigeria.</p>	<p>Instrument for data collection was questionnaires.</p> <p>A sample of 3 companies with sample size of 150. Response rate was 84%</p>	<p>The findings of the analysis showed that the external business environment (political, economic, socio-cultural, technological) have impact on organisational performance (effectiveness, efficiency, increase in sales, achievement of corporate goals)</p>	<p>The context of the study under review is in food and beverage industry in Nigeria while this study context is in sugar industry even though both are investigating</p>

		Data analysed using multiple regression analysis.	and that organisations should pay more attentions to their environment by doing periodic scanning.	environmental effects.
Ogolla, G. A. (2012)	Politicizing Structural Adjustment Policies in Kenya's Sugar Industry: Effects on pro-poor development outcomes. International Political Economy and Development	Methodologically, the paper employs an exploratory and inductive case study analysis within Western Kenya, a region well known for sugarcane farming. The study used a combination of secondary and primary data the research aims to achieve its objective.	Findings from the field work reveal that the relevance of neo-patrimonialism in the implementation of SAPs is difficult to ignore as it intricately defines development outcomes for smallholder farmers in the sugar-subsector.	Environment is viewed in terms of economic and political while this study views macro environment including political, economic, social cultural, technological.
Mashhadi & Rehman (2012)	Impact of External Environment on the Performance of the Fast Food Industry in Rawalpindi / Islamabad	Target population is the fast food industry Convenience sampling technique used. Sample of size of 35. Study was cross-sectional. Data collected by "self report questionnaire. Analysis was correlation and regression	Findings show that the four factors Political, Economic, Social, and Technological are the key factors that can determine the performance of the fast food industry. The results further showed that the Political factor is less significant while the other three factors are major performance contributors.	The study considers external environment in fast food industry, while this study addresses macro environment as a moderator in sugar industry.
Purkayastha (2013)	Impact of Macro-economic Environment on Diversification-performance relationship: A Cross Country Study of India and Japan	Sample size was 65 from India (35% response rate) and 101 from china (45% response rate) OLS regression between diversity, business group affiliation and performance	This study questions this assumption by examining the relationship among firms operating in two different macroeconomic environments. The study finds that while the impact of diversification on performance changes from positive to negative when the macro environment changes from munificent to scarce, the moderating influence of business group affiliation remains constant, irrespective of the macro-environment.	Macro environment is moderating diversification and performance link in japan and india while this study explores four strategies diversification inclusive and performance in Kenya.
Pulaj and Kume,	How the Albanian external	Empirical literature review	The success and the failure of many	External environment is

(2013)	environment affect the Construction industry	using secondary data	companies depend on the factors which affect their activities. Without taking into account the impact of environmental factors, it is not possible to formulate a good strategy or to conduct profitable business.	investigated within the confines of construction industry in Albania. This study investigates macro environment within manufacturing industry ie sugar industry.
Mwanaongoro, S. & Imbambi, R. M. (2014).	Assessment of relationship between plant and equipment maintenance strategies and factory performance of the kenya sugar firms	The researchers used survey research design. A sample of sixty respondents composed of ten respondents from Mumias, Chemelil, Muhoroni, Nzoia, South Nyanza and West Kenya Sugar Companies was used to provide information for analysis. A Likert-scale weighted average was used in the data analysis.	The study established that robust plant and equipment maintenance strategies play a key role in the factory performance. Maintenance leadership was the most influential intervening variable to the way plant and equipment maintenance is managed.	Strategy in the case of the reviewed study is mainly plant and maintenance while this study looks at strategy broadly to include product development, market development, diversification and CSR.

Appendix XII: Operationalization of the Variables

Objective	Variable	Indicators	Measurement	Scale	Research Approach	Tools of Analysis	Types of data Analysis
To determine the extent to which product development strategy affects performance of sugar companies in Western Kenya.	Independent: Product development strategy	New products and services Improved procedures for services	No. of products/services No. of products/services	Ordinal	Qualitative and Quantitative	β values R^2 F-value	Descriptive and Inferential
To assess how market development strategy affects performance of sugar companies in Western Kenya.	Independent: Market development strategy	New market segments Regions extended	No. of new market segments No. of new regions extended	Ordinal	Qualitative and Quantitative	β values R^2 F-value	Descriptive and Inferential
To establish how diversification strategy affects performance of sugar companies in Western Kenya	Independent: Diversification strategy	Related Diversification Unrelated Diversification	No. of introduced related production No. of introduced unrelated production	Ordinal	Qualitative and Quantitative	β values R^2 F-value	Descriptive and Inferential
To determine the extent to which Corporate Social Responsibility affects performance of sugar companies in Western Kenya.	Independent: Corporate social responsibility	Economic Resp. Ethical Resp. Philanthropic Resp. Legal Resp.	None fulfillment to high fulfillment	Ordinal	Qualitative and Quantitative	β values R^2 F-value	Descriptive and Inferential
To establish the moderating effect of macro environment on the relationship between strategic choice and performance of sugar companies in Western Kenya.	Moderating: Macro environment Strategy-performance	Political factors Economic factors Socio-cultural Technological	Positive change, no change to negative change of R^2	Ordinal	Qualitative and Quantitative	β values R^2 F-value	Descriptive and Inferential
	Dependent Variable Performance of sugar companies	Total turnover Profitability after tax Sales volume Capacity utilization	No change to constant change	Ordinal	Qualitative and Quantitative	β values R^2 F-value	Descriptive and Inferential

Appendix XIII: Hypotheses and Corresponding Analytical Statistical Models

Hypothesis Statement	Analytical Model	Hypothesis Test	Decision rule and anticipated model
H ₀₁ : There is no significant relationship between product development(PD) strategy and performance(CP) of sugar companies in western Kenya.	Multivariate Regression Analysis: Company Performance = $f(\text{Product Development})$ $CP_n = \beta_{01} + \beta_{11}X_1 + \beta_{12}X_2 + \epsilon_1$ Where CP_n = aggregate mean score of Company performance β_{11}, β_{12} are coefficients, β_{01} = y intercept X_1 = No. of new products and services X_2 = No. of improved procedures for services ϵ_1 = error term – random variation due to other unmeasured factors	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta_{01} = 0$ $H_A: \beta_{01} \neq 0$ To conduct a t-test to determine individual significance of the relationship To conduct a F-test (ANOVA test) to assess overall robustness and significance of the simple regression model	Reject H ₀₁ if P value ≤ 0.05 Other fail to reject H ₀₁ if P value is > 0.05
H ₀₂ : There is no significant relationship between market development (MD) strategy and performance (CP) of sugar companies in western Kenya.	Multivariate Regression Analysis: Company Performance = $f(\text{Market Development})$ $CP_n = \beta_{02} + \beta_{21}M_1 + \beta_{22}M_2 + \epsilon_2$ Where CP_n = aggregate mean score of Company performance β_{21}, β_{22} are coefficients, β_{02} = y intercept M_1 = No. of conversions of non-users to users M_2 = No. of regions extended ϵ_2 = error term – random variation due to other unmeasured factors	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta_{02} = 0$ $H_A: \beta_{02} \neq 0$ To conduct a t-test to determine individual significance of the relationship To conduct a F-test (ANOVA test) to assess overall robustness and significance of the simple regression model	Reject H ₀₂ if P value ≤ 0.05 Other fail to reject H ₀₂ if P value is > 0.05
H ₀₃ : There is no significant relationship between diversification strategy (DS) and performance (CP) of sugar companies in western Kenya.	Multivariate Regression Analysis: Company Performance = $f(\text{Diversification Strategy})$ $CP_n = \beta_{03} + \beta_{31}D_1 + \beta_{32}D_2 + \epsilon_3$ Where CP_n = aggregate mean score of Company performance $\beta_{32}, \dots, \beta_{3n}$ are Coefficients, β_{03} = y intercept	Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta_{03} = 0$ $H_A: \beta_{03} \neq 0$ To conduct a t-test to determine individual significance of the relationship	Reject H ₀₃ if P value ≤ 0.05 Other fail to reject H ₀₃ if P value is > 0.05

	D_1 =Related Diversification, D_2 =Unrelated Diversification ε_3 = error term – random variation due to other unmeasured factors	To conduct a F-test (ANOVA test) to assess overall robustness and significance of the simple regression model	
H_{04} : There is no significant relationship between the CSR and performance (CP) of sugar companies in western Kenya.	<p>Multivariate Regression Analysis: Company Performance = f(Corporate Social Responsibility) $CP_n = \beta_{04} + \beta_{41} C_1 + \beta_{42} C_2 + \beta_{43} C_3 + \beta_{44} C_4 + \varepsilon_4$ Where CP_n = aggregate mean score of Company performance $\beta_{41}, \beta_{42}, \beta_{43}, \beta_{44}$ are coefficients, β_{04} = y intercept C_1 = Economic Responsibilities, C_2 =Ethical Responsibilities, C_3 =Philanthropic Responsibilities, C_4 = Legal Responsibilities ε_4 = error term – random variation due to other unmeasured factors</p>	<p>Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta_{04} = 0$ $H_A: \beta_{04} \neq 0$ To conduct a t-test to determine individual significance of the relationship</p> <p>To conduct a F-test (ANOVA test) to assess overall robustness and significance of the simple regression model</p>	<p>Reject H_{04} if P value ≤ 0.05 Other fail to reject H_{03} if P value is > 0.05</p>
H_{05} : Macro-environment has no significant effect on the relationship between strategic choice and performance of sugar companies in western Kenya.	<p>Multiple Regression Analysis: Company Performance = f(Strategic Choice + Macro-environment) $CP_n = \beta_{06} + \beta_{61} X_1 + \beta_{62} X_2 + \beta_{51} F_1 + \beta_{52} F_2 + \beta_{53} F_3 + \beta_{54} F_4 + \varepsilon_6$ Where CP_n = aggregate mean score of Company performance β_{06} = y intercept $\beta_{06}, \beta_{61}, \beta_{62}, \beta_{51}, \beta_{52}, \beta_{53}, \beta_{54}$ are coefficients, X_1, X_2, X_3, X_4 = Strategic Choice Variables F_1, F_2, F_3, F_4 = Macro-environment variables ε_6 = error term – random variation due to other unmeasured factors</p>	<p>Karl Pearson's zero order coefficient of correlation (Beta test) $H_0: \beta_{06} = 0$ $H_A: \beta_{06} \neq 0$ To conduct a t-test to determine individual significance of the relationship</p> <p>To conduct a F-test (ANOVA test) to assess overall robustness and significance of the simple regression model</p>	<p>Reject H_{06} if P value ≤ 0.05 Other fail to reject H_{06} if P value is > 0.05</p>

Appendix XIV: Hypotheses Testing and Interpretations

Hypothesis	Test	Interpretations
H ₀₁ : There is no significant relationship between product development strategy and performance of sugar companies in western Kenya.	The effect of product development strategy variables (No. of new products and services: No. of improved procedures for services) on company performance indicators (financial and non financial) using regression analysis.	F – Significance of the overall model, R – Strength of the relationship between product development strategy and performance variables. R² – Extent to which variations in company performance indicators are explained by product development strategy dimensions
H ₀₂ : There is no significant relationship between market development strategy and performance of sugar companies in western Kenya.	The effect of market development strategy variables (No. of conversions of non-users to users and No. of regions extended) on company performance indicators (financial and non financial) using regression analysis.	F – Significance of the overall model, R – Strength of the relationship between market development strategy and performance variables. R² – Extent to which variations in company performance indicators are explained by market development strategy dimensions
H ₀₃ : There is no significant relationship between diversification strategy and performance of sugar companies in western Kenya.	The effect of diversification strategy variables (related diversification and unrelated diversification) on company performance indicators (financial and non financial) using regression analysis.	F – Significance of the overall model, R – Strength of the relationship between diversification strategy and performance variables. R² – Extent to which variations in company performance indicators are explained by diversification strategy dimensions
H ₀₄ : There is no significant relationship between corporate social responsibility and performance of sugar companies in western Kenya.	The effect of corporate social responsibilities (economic responsibilities, ethical responsibilities, philanthropic responsibilities and legal responsibilities) on company performance indicators (financial and non financial) using regression analysis.	F – Significance of the overall model, R – Strength of the relationship between corporate social responsibility and performance variables. R² – Extent to which variations in company performance indicators are explained by corporate social responsibility dimensions
H ₀₅ : Macro-environment has no significant effect on the relationship between strategic choice and performance of sugar companies in western Kenya.	The moderating effect of macro-environment on the relationship between strategic choice and company performance using hierarchical regression analysis.	F – Significance of the overall model, R – Strength of the relationship between macro-environment and the effect on the relationship between strategic choice and performance variables. R² – Extent to which variations in the relationship between strategic choice and company performance is explained by macro-environment dimensions

Appendix XV: Sample Theory of Krejcie and Morgan

Table for Determining Sample Size from a Given Population

<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>	<i>N</i>	<i>S</i>
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	100000	384

Note.—*N* is population size.
S is sample size.