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Abstract

This study establishes the moderating effect of macro environment on the relationship between competitive strategy drivers and the performance of small and medium enterprises (SMEs) in the manufacturing sector in Nairobi City County in Kenya. SMEs are the backbone of many economies through creation of employment opportunities as well as wealth creation for entrepreneurs. Strong competitive strategy drivers have been found to enable SMEs achieve favorable performance and remain competitive in their own markets. The macro environment could have a significant moderating effect in the relationship between competitive strategy drivers and firm performance. This study was based on Resource-Based theory which was augmented by the open systems theory, combining to provide a framework for examining the moderating effect of macro environment on the relationship between strategy drivers and performance of manufacturing SMEs in Nairobi County, Nairobi. For the methodology, a cross-sectional survey was done covering 334 manufacturing small and medium enterprises in Nairobi County, Kenya. Structured questionnaires were used for data collection with a response rate of 89.6%. Various descriptive statistics were used to project the demographic characteristics of the association and the respondents. Inferential statistics was used to build up the connection between the factors and test the model. The results of the study on the moderating effect of macro environment on the relationship between competitive drivers and firm performance showed a very strong relationship, implying that the competitive strategy drivers depend on macro environment in determining the performance of manufacturing SMEs and consequently supporting the formulated hypothesis. The results suggest that manufacturing SMEs need to edge their operations by considering macro environment dynamics as they undertake their service and product development. The findings in this research will have implications on business management practices as well as be beneficial to business owners by way of improving their management practice, for instance on the importance by manufacturing SMEs to scan their political, economic, social, technological, ecological environment as they adopt various competitive strategy drivers so as to enhance their performance. The researcher recommends similar research to be undertaken in other SMEs and also have more managers respond to the questionnaires in order to enrich the collected data.

Key Words: Competitive strategy drivers, Environment based drivers, Hybrid Strategy drivers, Value chain, Performance, Macro Environment

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Introduction

SMEs are central to achieving successful economic growth through promotion of innovation, creation of employment opportunities, sharpening of entrepreneurship skills and supporting social integration (Dahmen & Rodriguez, 2014). This recognition is derived from the knowledge that they fuel economic growth in most economies and if their performance is undermined, economic development suffers significantly (Sidik, 2012). Nairobi County has the largest concentration of microenterprises in Kenya, accounting for approximately 25% of total employment in the sector (KNBS, 2013).

According to Salavou (2015), a strategy driver is a deliberate set of clearly defined activities that are planned and implemented with the aim of achieving a competitive advantage. A manufacturing SME can improve or erode its market position within its industry through the strategy it adopts. In furtherance of this view, Peteraf (1993) emphasizes that the competitive strategy drivers ought to be aligned to a firm's long-term strategy in an endeavor to achieve a competitive position and achieve long term profitability. The manufacturing SMEs competitive strategy drivers in this study are categorized as environmental-based strategy drivers, resource-based strategy drivers and hybrid strategy drivers. Environmental drivers include cost leadership and (product) differentiation. On the resource-based theory, manufacturing SMEs must optimize their resources if they are to sustain a competitive advantage. Gathungu and Baariu (2018) identify these resources as human resources, intellectual property, materials and organization brand as well as capabilities, such as innovativeness, efficiency and quality. For this study, the resource-based strategy drivers comprise of manufacturing SMEs capital-raising capacity, technology development, human capital and value chain. The hybrid strategy drivers are classified as a blend of low cost and differentiation. The hybrid strategy is a more complex strategic driver compared to generic strategic approaches because it involves a number of strategic focuses.

The resource-based theory argues that a firm's competitive advantage is mainly derived from its ability to mobilize resources to its advantage (Barney, 1991), and hence the need to carefully identify, evaluate and select competitive strategy drivers to drive performance. According to open systems theory of entrepreneurship, as enterprises perform their trades, they will be subjected to events and changes in their macro environments. Recognizing organizations as open entities, there is need for their careful management to gratify and stabilize internal needs and enable adaptation to macro circumstances (Burnes, 2000). The open systems theory identifies the surrounding environment as having an impact on a firm's change and survival. This is so since enterprises are environment serving and reliant (Ansoff & McDonell, 1990). The theory also explains how strategy helps an organization to achieve sustainable competitive advantage.

A firm's macro environment as defined by Hitt, Ireland and Hoskisson (2011) is a blend of business environmental factors that influence the firm's operations or functioning. Since the dynamics in the macro environment are continuously evolving, there should be regular re-assessments of business strategies (Adeoye & Elegunde, 2012). Macro environment is central to SMEs because it offers business opportunities. Risks and prospects in the macro environment exist in the form of

different types of threats and challenges facing SMEs. Macro environment is also an important source of resources that firms need for its day to day operations. For this study, macro environment has been represented by Political, Economic, Social, Technological, Legal and Ecological factors affecting manufacturing SME businesses. The macro environment is influenced politically for instance, by the extent to which government operations affect the economy. Specifically, political factors include government policies on tax, trade, tariffs, and general political stability. These factors may also include goods and services which the government wants or does not want provided (Chen, Du, & Chen, 2011)). The political situation of a region or country in which the manufacturing SMEs operates will have greater impact on their existences. The government authorities play a critical role as the market regulator, promoter and planner. The government of the day plays a major role in dictating the political environment and political stability as this remains an essential factor that affects the growth of manufacturing SMEs (Gathungu & Baariu, 2018). The philosophy of political parties in power also influences business practices. Noteworthy is that the pro-business attitude allows arrangements such as mergers, acquisition, joint venture, business allowances and outsourcing arrangements in between the manufacturing SMEs.

On the other hand, the legal framework in a country or region also plays an important role in how SMEs operate. Legal factors include law provisions that guide the general SMEs operations including the management of labour (Chen et al., 2011). These factors can affect how a firm operates, its costs and the demand for its products. The socio-cultural dimension of the macro environment includes customs, way of life and morals that characterize the society in which the SMEs operate. Social factors are the cultural aspects that include health consciousness, population growth rate, age distribution, career attitudes and emphasis on safety.

SMEs may change their management strategies to adjust to the social trends (Ndife, 2014). Culture is the result of complex factors that include religion, language, education and ethical beliefs where social class is identified by income, occupation, life style and class norms. A socio-cultural component of the macro environment influences the ability of the SMEs to obtain resources, market its goods and services, and function within the society. This enables SMEs to identify the opportunities and threats for their businesses (Gathungu et al., 2014). Other macroeconomic aspects such as economic, environmental and technological impact the operations and performance of firms, and manufacturing SMS in varied ways. The dynamic nature of the macro environment, today, provides a challenge for determining which environment that manufacturing SMEs need to choose for them to thrive, the timing of their operations and activities as well as how to deal with the environmental challenges. This ever-changing environment forces organizations to remain agile in order to survive (McMahon & Carr, 1999).

Richard, Devinney, Yip and Johnson (2009) define firm performance as the firm's ability to achieve planned results as estimated against its proposed yields and expected outcomes in terms of financial performance, market performance and shareholder return. Moullin (2003) provides that there is a need to come up with measures that can be quantified through identification of aspects of the business

operations or objectives that need regular evaluation or improvement and whose final achievements enable the evaluation of the overall business performance at the end of the period. These assessments include both financial and non-financial measures depending on value, importance and individual business circumstances. Common measures of firm performance in SMEs include financial and non –financial measures. Financial measures of performance include return on asset, investment and equity. Non-financial measures of performance include operational efficiency and market share, employee turnover, entrepreneur satisfaction and longevity of the firm (Gentry & Vaidyanathan, 2010). There are few studies seeking to establish the moderating effect of macro environment on the relationship between competitive strategy drivers and performance especially in the context of manufacturing SMEs in Nairobi County. There is therefore a need to undertake studies in the foregoing area with a view to enhancing the performance of these firms.

Literature Review

Entrepreneurship is the process of identifying an opportunity in the business environment, pooling of resources, exploiting the opportunity, make profit and meeting the needs of customers. It mainly involves taking risks, creativeness and being innovative. Several theories explain entrepreneurship, among them, the resource-based theory of entrepreneurship and open systems theory of entrepreneurship. The resource-based theory, which largely drives this study contends that a distinct bundle of resources that are at the firm's disposal generate sustained competitive advantage (Barney, 1991; Conner & Prahalad, 1996). In this study, the theory conceptualizes the position that firm performance is enhanced when firms use and manage their unique resources to enable the firm attain a competitive advantage position. The open systems theory argues that organizational performance is significantly related to the vibrant evolutionary nature of fit amid the business environment and the firm (Machuki & Aosa, 2011). The theory only concentrates on the environmental effects but does not explain the critical role of competitive strategy drivers, well aligned with the environmental forces, in enabling a firm achieve performance.

It can therefore be conceptualized that this theory can explain the relationship that arises from the interaction between competitive strategy drivers that arises from the macro influence in terms of norms, culture and policies on environment and also the entrepreneurial nature of the owners. The open systems view assumes that firms are forced to act under situations of constrained freedom and that they tend to serve external actors who afford them resources. While organizations rely on their environment for critical resources, the environment is considered to be unpredictable as it is beyond the firm's administrative control. Therefore, firms tend to build relationships with surrounding actors in order to reduce uncertainty (Dubois, 1998). As organizations network with actors, they often become obligated to act under conditions of interdependence. Interdependence is a situation where the outcome of an action relies on two or more actors (Pfeffer &Salancik, 1978). As firms controls varying bundles of resources and undertake various activities, networks of firms come up, where no one is in total control over their own operations.

Perceiving, understanding and responding to environmental conditions have implications on competitive strategy drivers and performance of every firm. Empirical evidence on the effect of macro business environment on organizations in terms of competitive strategy drivers and firm performance indicate that environment is a source of opportunities as well as threats for all organizations (Pearce & Robinson, 2011). Environmental scanning, a critical aspect in strategy formulation is conducted to identify important factors and forces that exist outside the organization and can possibly specifically or in an indirect way influence the focused procedures and execution. To attain a competitive advantage, firms are required to critically think and decide on the competitive advantage that they will try to gain and the degree to which it will achieve it. Researches that have conclusively linked macro environment and firm performance are few, yet performance depends on organizations alignment with environmental changes (Machuki & Aosa, 2011). Literature on the macro environment of organizations and its direct and indirect effect on business processes and outcomes are documented (Osborn & Hunt, 1974). However, several subsequent studies have treated macro environment as an independent variable and performance as dependent (Machuki & Aosa, 2011; Venkatraman & Prescott, 1990).

To remain competitive, manufacturing SMEs must be recognize any stimulus from the macro environment and ought to continuously adjust to it. An organization's ability to adapt to the changes in the macro environment will determine its success and sustainability as well as its survival. There are many competitive pressures and risks which hinder the businesses from achieving their intended goals (Akdogan & Cingoz, 2012). Any manufacturing SME is an open system between itself and its macro environment up to a series of relationships that influence each other (Muhammad, 2014). SMEs influence the macro environment primarily through their service or products offerings and are geared toward relationships with other organizations making their mark on the community to which they belong. Analysis of competition and positioning is essential to realizing sustainable competitive advantages for organizations (Selvam, Vanitha, Gayathri, Bennet, & Nageswari, 2010). The macro environment includes organizations in the industry that produce similar products, suppliers, customers, potential new entrants and also, products.

Method

Research Procedure and Sample Characteristics

The study was used the cross-sectional study design, considered appropriate for entrepreneurship research (Davidsson, 2004). This design enabled pooling of quantitative data and allowed the researcher to identify patterns of association amongst the variables that confirmed the general interpretation of the associations among the study variables. The principal research tool of data collection of this study was a structured questionnaire. Respondents included SME's owners or senior managers/persons in charge of the SME who by virtue of their positions were better placed to give informed and reliable responses. The study population comprised of all manufacturing SMEs in Nairobi County. The enterprises were in two categories; category A with between 5-19 employees and category B with between 20-49 employees. The sample size for the study was calculated using the formula for finite population as proposed by Israel (2009).

$$n = \frac{N}{1+N(e^2)}$$

Where:

n= Desired Sample Size

N= Population

e = Margin of Error at 5% (standard value of 0.05)

The size of the sample in this research will be:

$$n = \frac{2050}{1+ 2050(0.05)^2}$$

n= 334 Manufacturing SMEs

A stratified random was used to establish proportianate sample from each strata as follows:

Table 1: Sample Size Determination

Strata	Population	Sample	Percent
Building, Mining and Construction	61	10	3
Chemical and Allied	325	53	16
Energy, Electrical and Electronic	153	25	7
Agriculture and Fresh Produce	49	8	2
Food and Beverages	344	56	17
Leather and Footwear	25	4	1
Metal and Allied	301	49	15
Automotive	129	21	6
Paper and Board	172	28	8
Pharmaceutical and Medical Equipment	123	20	6
Plastics and Rubber	270	44	13
Textiles and Apparel	43	7	2
Timber, Word and Furniture	55	9	3
Total	2,050	334	100

Source: Nairobi County Licensing Office (2019)

Measures

The questionnaire used nominal and ordinal scaled items on a five-point Likert scale ranging from Strongly disagree (1) to Strongly agree (5) and are shown in Table 2, Table 3 and Table 4 below:

The variables and respective measurement items for macro environment are articulated under Appendix 1, those of competitive strategy drivers are under Appendix 2 and those of firm performance under Appendix 3

On the whole, the measurement instrument was highly reliable with an overall Cronbach alpha of 0.813.

Analytical Procedure

To describe the demographic characteristics of the association and the respondents,

descriptive statistics, that is, frequency and percentages were used. Manifestation of the study variables were analyzed using mean, standard deviation, coefficient of variation, skewness and kurtosis. To test the normality of the data, measures of dispersion (SD) were utilized while factor analysis test was carried out to reduce the set of study items to subgroups which could directly be explained. Inferential measurements were used to test the data drawn from the respondents from manufacturing SMEs in Nairobi County with respect to the stated hypothesis. The study performed inferential tests to understand the relationship between different variables and validate/invalidate theories. Pearson product of correlation coefficient was used to measure the direction and magnitude of relationship between the study variables. It varied from -1 to +1. Coefficient of determination (R^2) was used to measure the goodness of fit of the model. The hypothesis was tested using hierarchical regression analysis.

Results

Measurement model

Confirmatory factor extraction was done to confirm the structures for entrepreneurial orientation measures of innovativeness, proactiveness, risk taking, competitive aggressiveness as well as the overall factor as shown in Table 2 below.

Table 2: Variables and Factor Statistics

Variable	Dimension/Structure/Factor	No of Items	Scale Mean Scores
Macro Environment	**Overall Macro Environment**	**32**	**3.76**
	Political	3	4.12
	Economical	8	3.74
	Social	9	3.61
	Technological	1	3.57
	Environmental/Ecological	5	3.82
	Legal	6	3.67
Competitive Strategy Drivers	**Overall Competitive Strategy Drivers**	**14**	**3.78**
	Environmental Based Drivers	5	3.87
	Resource Based Drives	4	3.55
	Hybrid Based Drivers	5	3.92
Firm Performance (Non-financial)	**Overall Firm Non-Financial Performance**	**12**	**3.74**
	Entrepreneurial Satisfaction	3	3.88
	Growth in Employment	4	3.65
	Business Longevity	5	3.69

On the whole, our measurement model shows acceptable good levels of statistical fit as indicated by the confirmatory factor analyses.

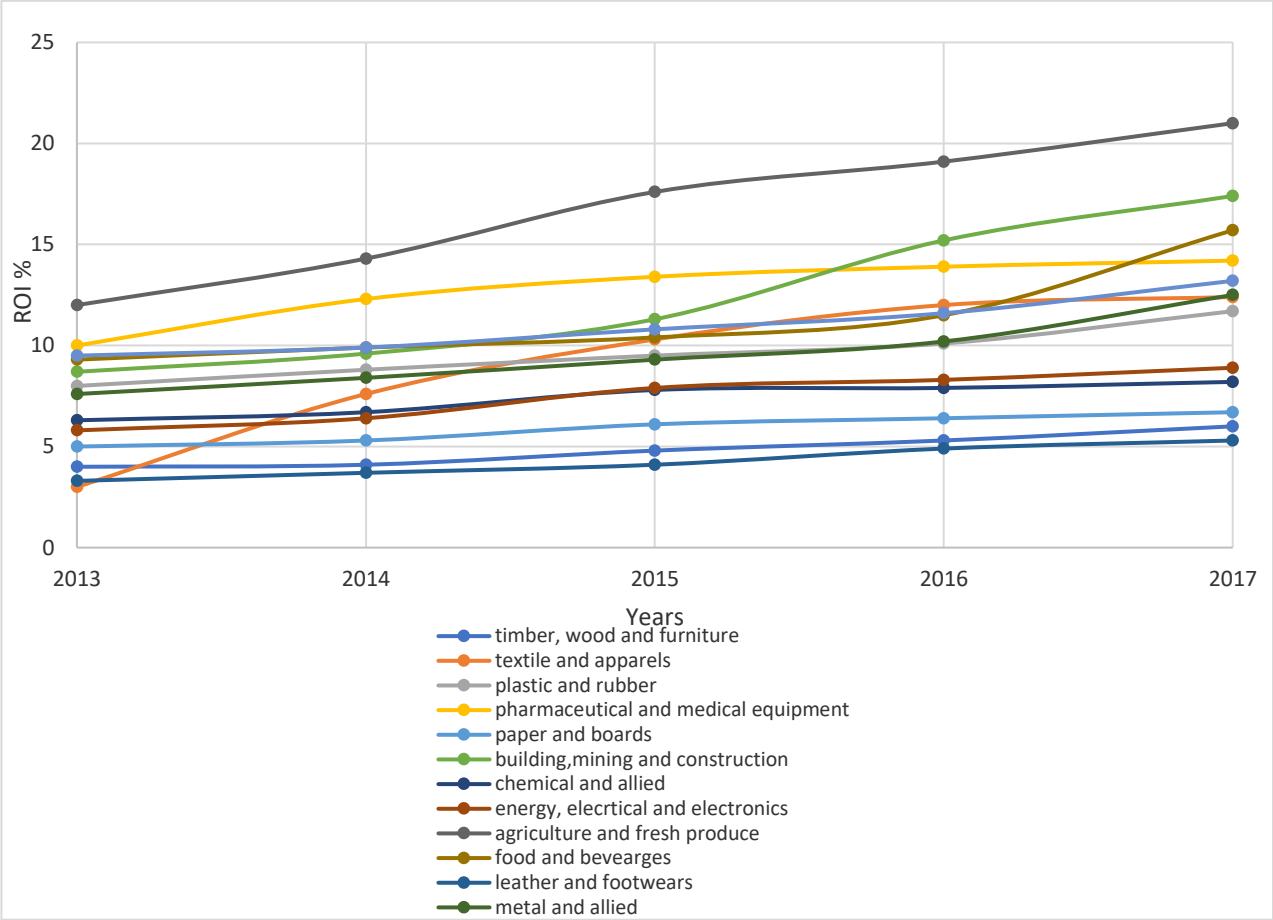
Table.3: Descriptive Statistics

Response Rate				
	Frequency	Percent		
Returned Usable Questionnaires	300	89.82		
Returned Non-Usable Questionnaires	5	1.50		
Non-Returned Questionnaires	29	8.68		
Total	334	100.00		
Reliability				
Variable	**Components of Variables**	**Cronbach's Alpha**	**No of items**	**Decision**
Competitive strategy drivers	Environmental Based Drivers, Resource Based Drivers and Hybrid Strategy Drivers	0.812	14	Reliable
Macro environment	Political, Economic, Social, Technological, Ecological, Legal	0.909	32	Reliable
Entrepreneurial orientation	Innovativeness, Proactiveness, Risk taking and Competitive aggressiveness	0.731	18	Reliable
Performance of Manufacturing SMEs	Financial measures; ROI	0.91	12	Reliable
	Non-financial measures; Entrepreneur satisfaction, Growth in Employee numbers, business longevity			
Overall		0.841	76	Reliable

Age of the Firm				
	Frequency	**percent**		
1-5 years	54	18.16		
5-10 years	167	55.5		
10-15 years	47	15.6		
Over 15 years	32	10.74		
Total	**300**	**100%**		
Ownership				
Sole proprietor	266	88.75		
Partnership	28	9.21		
Company	6	2.05		
Total	**300**	**100%**		

The study achieved a response rate of 89.82 percent which was considered adequate for further analysis. The measurement instrument was highly reliable with an overall Cronbach alpha of 0.813, thus, the information obtained was reliable and could be used in decision making. Further majority of the firms had been in operation for a period of 5 to 10 years. In terms of business classification; sole proprietorship was the most popular model followed by partnership and companies respectively.

Figure 1: Financial Performance-Return on Investment



There was an upward trend of ROI for the period 2013-2017 in most of the sectors. This trend over a period of time suggests that firms improved their performance with time and they were responding better to their macro environment situations. Positive ROI values show that the firm's total returns exceed total costs. It further shows that firm's profitability is steadily rising with time.

Correlation Analysis

Table 4: Correlation between Macro Environment and Performance of Manufacturing SMEs

		Performance	Political	Economic	Social	Technological	Ecological	Legal
Performance	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	300						
Political	Pearson Correlation	.709**	1					
	Sig. (2-tailed)	.000						
	N	300	300					
Economic	Pearson Correlation	.533**	.225**	1				
	Sig. (2-tailed)	.000	.000					
	N	300	300	300				
Social	Pearson Correlation	.498**	.185**	.670**	1			
	Sig. (2-tailed)	.000	.000	.000				
	N	300	300	300	297			
Technological	Pearson Correlation	.513**	.386**	.286**	.446**	1		
	Sig. (2-tailed)	.000	.000	.000	.000			
	N	300	300	300	300	295		
Ecological	Pearson Correlation	.588**	.312**	.390**	.394**	.498**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000		
	N	300	300	300	300	300	300	
Legal	Pearson Correlation	.300**	.417**	.314**	.416**	.346**	.315**	1

	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	300	300	300	300	300	300	300

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

Source: Field Data (2019)

The Pearson correlation for political and economic aspects on performance was significant (r= .709, p=0.000<.05 and r =.533, P=0.00<.05 respectively). The correlation for social and technological aspects on performance was significant (r = .498, P=0.00<.05 and r = .513, P=0.00<.05 respectively). The Pearson correlation for ecological and legal aspects on performance was also significant (r = .588, P=0.000<.05 and r = .300, P=0.000<.05). There exists a strong positive correlation between the independent and dependent variables. Thus, macro environment influences performance.

Hypothesis Testing

Objective: ***Macro environment moderates the effect of competitive strategy drivers on the performance of manufacturing Small and Medium Enterprises in Nairobi County, Kenya***

The objective of this study was to determine effect of macro environments on the relationship between competitive strategy drivers and performance of manufacturing SMEs, hierarchical regression analysis was used. The equations used to measure the hypothesis are:

$Y_1 = \beta_0 + \beta_1 X + \varepsilon$

$Y_2 = \beta_0 + \beta_1 X + \beta_2 Z + \varepsilon$

$Y_3 = \beta_0 + \beta_1 X + \beta_2 Z + \beta_3 X.Z + \varepsilon$

Where,

Y_1, Y_2, Y_3 = performance of manufacturing SMEs.

β_0 = constant (intercept),

β_1, = coefficients of competitive strategy drivers

β_2= coefficients of macro environment

$X_=$ composite index of competitive strategy drivers

Z=Macro environment

X*Z== Competitive strategy drivers and macro environment interaction term

ε = Error term

Composite index was computed for competitive strategy drivers, macro environment and firm performance.

Table 5: Regression Results for Moderation Results of the Effect of Macro Environment on competitive strategy drivers and Performance

Model Summary

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
						R Square Change	F Change	df1	df2	Sig. F Change
1	Competitive Strategy Drivers	.352[a]	.124	.121	.61984	.124	42.113	1	298	.000
2	Competitive Strategy Drivers, Macro Environment	.447[a]	.200	.197	.46321	.200	74.332	1	298	.000
3	Competitive Strategy Drivers, Macro environment interaction	.489[a]	.239	.234	.57874	.239	46.568	2	297	.000

ANOVA

Model			Sum of Squares	df	Mean Square	F	Sig.
1	Competitive Strategy Drivers	Regression	16.180	1	16.180	42.113	.000[b]
		Residual	114.492	298	.384		
		Total	130.671	299			
2	Competitive Strategy Drivers, Macro Environment	Regression	15.949	1	15.949	74.332	.000[b]
		Residual	63.940	298	.215		
		Total	79.889	299			
3	Competitive Strategy Drivers, Macro environment interaction	Regression	31.195	2	15.597	46.568	.000[b]
		Residual	99.476	297	.335		
		Total	130.671	299			

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1.849	.202		9.143	.000		
	Competitive Strategy Drivers	.390	.060	.352	6.489	.000	1.000	1.000
2	(constant)	1.608	.151		10.646	.000		
	Competitive Strategy Drivers, Macro Environment	.387	.045	.447	8.622	.000	1.000	1.000
	Competitive Strategy Drivers, Macro environment interaction	.485	.072	.379	6.696	.000	.800	1.249

a. Dependent Variable: Firm performance

b. Predictors: (Constant), Competitive strategy drivers, Macro environment

Source: Field Data (2019)

This involved three steps of testing moderating effect. In step one, non-financial performance was regressed on competitive strategy drivers. The result shows a moderate positive relationship between competitive strategy drivers and non-financial performance ($R= .352^{a}$). coefficient of determination (R^2=0.124) indicated that competitive strategy drivers accounts for 12.4% of the variation in non-financial performance. The critical value for t test had P-value<0.05), thus test statistic is significant at that level. The results confirmed the first step of testing moderation thus moves to step two. In step two, non-financial performance was regressed on competitive strategy drivers and macro environment. The results indicated that non-financial performance had a strong positive relationship with competitive strategy drivers and macro environment ($R= .447^{a,}$). Further coefficient of determination (R^2=.200) depicted that competitive strategy drivers and macro environment explained 20 % of the variation in non-financial performance. F value of 74.332 with P-value<0.05) confirmed that the model is statistically significant. The results thus suggested that the second step of testing moderation is confirmed and the process proceeds to step three. In step three, interaction term is introduced. The results showed that (R^2=0.239) 23.9% of the variation in non-financial performance is explained by the changes in competitive strategy drivers, macro environment and interaction term.

The value of the interaction term (CSD*ME) had a significant influence (β= .485, P-value = .000<0.05) thus confirming a moderation effect of macro environment. The study therefore supports the hypothesis

that macro environment moderates the effect of competitive strategy drivers on non-financial performance of manufacturing SMEs in Nairobi County.

Table 6: Regression Results for Moderation Results of the Effect of Macro Environment on competitive strategy drivers and Financial Performance (Return on Investment)

Model Summary					
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate
1	Competitive strategy drivers	0.323	0.104	0.081	0.0374771
2	Competitive strategy drivers Macro environment	0.351	0.123	0.076	0.0375788
3	Competitive strategy drivers Macro environment Interaction term	0.358	0.128	0.055	0.0379914

ANOVA							
Model			Sum of Squares	df	Mean Square	F	Sig.
1	Competitive strategy drivers	Regression	0.006	1	0.006	4.418	0.042
		Residual	0.298	298	0.001		
		Total	0.304	299			
2	Competitive strategy drivers Macro environment	Regression	0.007	2	0.004	2.594	0.088
		Residual	0.297	297	0.001		
		Total	0.304	299			
3	Competitive strategy drivers Macro environment	Regression	0.008	3	0.003	1.759	0.001
		Residual	0.296	296	0.001		

	Interaction term	Total	0.304	299		

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-0.006	0.032		-0.182	0.857
	Competitive strategy drivers	0.019	0.009	0.323	2.102	0.042
2	(Constant)	-0.027	0.04		-1.669	0.007
	Competitive strategy drivers	0.015	0.01	0.26	1.936	0.003
	Macro environment	0.009	0.011	0.151	0.891	0.379
3	(Constant)	0.038	0.151		0.254	0.801
	Competitive strategy drivers	-0.006	0.048	-0.094	-2.117	0.008
	Macro environment	-0.009	0.042	-0.144	-2.212	0.003
	Interaction term	0.006	0.013	0.552	2.448	0.007

Model 1 Predictors (Constant) Competitive strategy drivers

Model 2 Predictors: (Constant) Competitive strategy drivers and macro environment

Model 3 Predictors: (Constant) Competitive strategy drivers, macro environment and Interaction term.

Dependent Variable: Return on Investment

Source: Field Data (2019).

Stepwise method used involved three steps of analysis. In step one, financial performance was regressed on competitive strategy drivers. The result shows that the association between competitive strategy drivers and ROI is significant (R= .323[a,] R^2=0.104, P-value<0.05). The test statistic is significant at this level, thus proceeds to step two. In step two, financial performance was regressed on competitive strategy divers and macro environment. The results indicated that the association

between competitive strategy divers, macro environment and financial performance is significant (R= .351[a,] R^2=.123, P-value<0.05). the results, thus, suggested that the second step of testing moderation is satisfied and the process proceed to step three. In step three, the interaction term was introduced to test on moderation. The results indicated that competitive strategy drivers, macro environment and interaction term accounts for 12.8% of the variation in financial performance (R= .358[a,] R^2=0.128, P-value<0.05). Further, the value of the interaction term (CSD*ME) had a significant influence (β=.006, P-value = .007<0.05) thus confirming a moderation effect of the macro environment. The hypothesis that macro environment moderates the relationship between competitive strategy drivers and financial performance of manufacturing SMES was supported.

Table 7: Summary of Regression Results for Moderating Influence of Macro Environment

	Hypothesis	Results	Hypothesis Remarks
H_1	Macro environment moderates the effect of competitive strategy drivers on the non-financial performance of manufacturing SMEs in Nairobi County, Kenya.	R^2=0.239 F= 46.568, P-Value= 0.000<0.05 β= 0.485, t= 6.696, P-Value=0.000<0.05	Supported
H_1	Macro environment moderates the effect of competitive strategy drivers on financial performance (return on investment) of manufacturing SMEs in Nairobi County, Kenya.	R^2=0.128 F= 1.759, P-Value= 0.01<0.05 β= 0.006, t= 2.448, P-Value=0.007<0.05	Supported
H_{1a}	Political environment moderates the effect of competitive strategy drivers on the performance of manufacturing SMEs in Nairobi County, Kenya.	R^2=0.177 F= 31.919, P-Value= 0.000<0.05 β= 0.005, t= 2.500, P-Value=0.001<0.05	Supported
H_{1b}	Economic environment moderates the effect of competitive strategy drivers on the performance of	R^2=0.131 F= 30.739, P-Value= 0.000<0.05	Supported

	manufacturing SMEs in Nairobi County, Kenya.	β=0.115, t= 3.710, P-Value=0.001<0.05	
H_{1c}	Social environment moderates the effect of competitive strategy drivers on the performance of manufacturing SMEs in Nairobi County, Kenya.	R^2=0.151 F= 30.323, P-Value= 0.001<0.05 β= 0.221, t= 2.146, P-Value=0.002<0.05	Supported
H_{1d}	Technological environment moderates the effect of competitive strategy drivers on the performance of manufacturing SMEs in Nairobi County, Kenya.	R^2=0.209 F= 34.202, P-Value= 0.003<0.05 β=0.322, t= 3.188, P-Value=0.000<0.05	Supported
H_{1e}	Ecological environment moderates the effect of competitive strategy drivers on the performance of manufacturing SMEs in Nairobi County, Kenya.	R^2=0.221 F= 27.992, P-Value= 0.000<0.05 β=0.278, t= 2.122, P-Value=0.000<0.05	Supported
H_{1f}	Legal environment moderates the effect of competitive strategy drivers on the performance of manufacturing SMEs in Nairobi County, Kenya.	R^2=0.110 F= 33.544, P-Value= 0.000<0.05 β=0.116, t=0.899, P-Value=0.073>0.05	Not supported

The results above indicate that macro environment moderates the relationship between competitive strategy drivers and firm performance except for the legal environment. All the macroeconomic aspects except the legal one individually moderates the relationship between competitive strategy drivers and firm performance.

Conclusion

The objective of the study was to assess the effect of macro environment on the relationship between competitive strategy drivers and the performance of manufacturing SMEs. In order to achieve this objective, a hypothesis which stated that macro environment moderates the effect of competitive strategy drivers on the firm performance was formulated. Macro environment was operationalized into six

aspects, that is, political, economic, social, technological, Legal and Ecological. Moderation takes effect if the interaction term between the moderator variable and independent variable in the model is significant (p-value<0.05). The study findings supported the hypothesis that the macro environment moderates competitive strategy and firm performance relationship. Political, economic, social, technological and ecological aspects were found to individually moderate the relationship between competitive strategy drivers and firm performance. Legal aspect on its own did not moderate the relationship between competitive strategy drivers and firm performance. This finding concurs with the resource-based theory of entrepreneurship which argues that unique bundle of resources at the disposal of the firm generate sustained competitive advantage (Barney, 1991; Conner & Prahalad, 1996). Thus, entrepreneurs develop strategies based on the resources available in the firm and also based on the environmental conditions and also the pro-activeness and innovative nature of the entrepreneurs. Resources that are valuable, rare, and difficult to imitate or substitute are deemed to be strategic enough to offer sustainable competitive advantage (Barney, 1991). Such strategic resources strengthen organizations' ability to uniquely differentiate their products or service offerings. These results showed that owners of manufacturing SMEs need to scan their political, economic, social, technological environment as they adopt various competitive strategy drivers so as to enhance performance as proposed by Conner (1991). Developing strategies in an industry is the starting point for achieving competitive advantage. However, firms do not operate in a vacuum, they instead operate in a n environment macro environment creates both opportunities and threats which then influence the strategies adopted by the firms. Rohitratana and Boon-Itt, (2011), argues that the present business environment conditions cannot allow companies to ignore the key impacts of value for its focused position. Thus, owners of manufacturing SMEs should take cognizant of customers, competitors, suppliers facilitate alignment between competitive strategy drivers and macro environments.

Recommendations

The results revealed significant relationship between macro environment as a moderator of the relationship between competitive strategy drivers and performance of manufacturing SMEs. This indicates that owners of manufacturing SMEs should embrace scanning of the environment in which they operate as they formulate their strategies. It was also revealed that legal aspect of macro environment does not moderate the relationship between competitive strategy drives and performance. On this basis, the study recommends further analysis so as to find the reasons behind this insignificant moderating effect. Further manufacturing SMEs across the board should adapt appropriate competitive strategy drives in line with the environment in which they operate which would increase their performance. The present study relies on a single informant who had knowledge of the firms' activities and their level of commitment. The use of multiple respondents from each firm is preferable and would provide additional data.

Limitations of the Study

This study had limitations encountered in the process of writing the report. The research was limited to a descriptive cross-

sectional survey approach method for which data was collected analyzed at interpretation done at a specific time a cross all the sampled SMEs as opposed to longitudinal approach which allows for collection, analysis and interpretation of data over a period of time. Secondly only one respondent for the target SMEs in the manufacturing sector was used. This required that the respondent be much conversant with the operations of the SMEs in the manufacturing sector. The research was also aimed at SME owners/managers who would not always have time to respond. Further, the research only focused on manufacturing SMEs in Nairobi County thus there is a need to extend the research to other counties for comparison of findings. The questionnaire tool used was also a limitation as it had closed ended questions only. We encourage that future research work deploys both open and closed ended questions to allow for deeper insights into the issue being studied. Future research may also consider qualitative research approaches to examine the above issues as they would provide useful insights and complement already existing quantitative approaches in this area.

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APPENDICES

Appendix 1 : Variables and respective measurement items for Macro Environment

Political Aspect	
1	The political stability of the country
2	Change of political regime
3	The country's overall political stability
Economic Aspect	
1	Inflationary trends in the country
2	Level of the country's overall economic development
3	Foreign exchange rates
4	Interest rates
5	Availability of credit
6	Changes in the taxation regime
7	Annual budget allocations to the firm
8	Intermittent budget reviews and re-allocations by government
Social Aspect	
1	Societal norms and values
2	Customs of various communities
3	Religion of host communities
4	Demands of host communities
5	Cultural practices e.g. land demarcation, farming practices, pastoralism, etc.
6	Population growth rate
7	Crime rates and terrorism
8	Tribal inclinations
9	Gender issues
Technological Aspect	
1	Developments in Information Communication & Technology e.g. internet, digitization of services etc.
Legal Aspect	
1	Interest from various stakeholders

2	Government pronouncements on changes in policy from time to time
3	Devolved Government structure
4	Occurrences in the natural environment e.g. floods, drought etc.
5	Civil society firm's agitation for rights
Legal Aspect	
1	Government's fiscal policies
2	Taxation policies
3	Changes in the Kenya Constitution 2010 and subsequent legislation
4	The legal framework prescribing the mandate of the firm
5	Legislative activities touching on the firm's business
6	Environmental legislation

Appendix 2 : Variables and respective measurement items for Competitive strategy drivers

Environmental based drivers	
1	We have the ability to deliver high quality products and services
2	We have effective sales and marketing team
3	The market understands the benefits offered by the differentiated offerings
4	Products and services different from and more attractive than those of our competitors
5	We have brand image that our customers value
6	We concentrate on particular niche markets
7	We understand the dynamics of the niche market and the unique needs of customers within it
8	We build strong brand loyalty amongst our customers thus making our particular market segment less attractive to competitors
9	We offer unique features that fulfill the demands of a narrow market
10	The firm concentrate on a particular market
11	The firm charge low prices relative to other firms that compete within the target market
12	The firm practice the lowest cost of operation in the industry
13	Our production process is backed by innovation
14	The firm acquire quality raw materials at the lowest price
15	The firm produces highly standardized product using advanced technology
Resource based drivers	
1	Our firm can easily mobilise resources
2	Our firm has a strong business plan
3	Our firm has clear strategy and competitive edge
4	Our management team are competent and valuable
5	Our business valuation and scalability are in line with investors needs
6	Our firm embraces the development of individual and institutional ingenuity
7	Digitization of performance management not only provides more precise data but also positively influences management process
8	Technology facilitate a culture of continuous feedback thus everyone knows where they stand on a regular basis
9	Technology enables collection of more objective performance data on a real time basis

10	Our firm has high skilled labour so as to produce economic value
11	Human capital is the most essential capital in our firm
12	The firm value knowledge, experience, skill, attitudes, abilities, behaviour and obligation of employees
13	The ability to effectively acquire, control and utilize knowledge in every business activity is the differentiator between our firm and competitors
14	A tool of managing increasingly complex global value chain networks
15	The firm focuses on optimizing volumes and value based on cross functional management
16	The firm integrate decision making throughout the value chain
Hybrid strategy drivers	
1	Our firm achieve both high quality and productivity at the same time
2	Our firm embraces mass customizations
3	Our firm makes consistent low cost strategic decisions on how to pursue competitive advantages and align resources and capabilities
4	It is a way of responding to changes in the competitive environment more flexibly and effectively and stay competitive

Appendix 3 : Firm Performance

Entrepreneur Satisfaction	
1	You are generally satisfied with your current business
2	Your current business meets your expectations
3	Your current business is your most ideal
Growth in Employment	
1	Number of employees have significantly increased in line with our business expansion
2	Local market plays a role in employment growth
3	Our firm promotes and hire new employees annually
4	Our firm experience low employee turnover annually
Business longevity	
1	Financial strength influences our longevity
2	Customer orientation determine business lifespan
3	Internal capabilities influence our longevity
4	Strategic perspective defines our firm lifespan
5	Learning and growth influences our firm longevity