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# Moderating effect of Organizational Factors on the relationship between Diversification Strategies and Competitiveness: Case of Sugar Firms in Kenya

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#### Abstract

This study sought to analyze the effect of organizational factors on the relationship between diversification strategies and competitiveness sugar firms in Kenya. The main objective was to establish the effect of organizational factors on the relationship between diversification strategies and competitiveness of sugar firms in Kenya. The specific objectives were to: establish the effect of age of the firm on the relationship between diversification strategies and competitiveness sugar firms in Kenya, to establish the effect of size of the firm on the relationship between diversification strategies and competitiveness sugar firms in Kenya and finally to find out the effect of management structure on the relationship between diversification strategies and competitiveness sugar firms in Kenya. The study adopted descriptive correlational survey design and this being a census study; all the sugar firms in the Kenya were studied. Using a questionnaire, primary data was collected from the production and marketing managers as key informants of each of the sugar firms. The production and marketing managers of every sugar firm were selected to take part in the study as they are perceived to be knowledgeable on the issues under study and for which they are either responsible for their execution or they personally execute them. The questionnaire was pre-tested on a pilot respondent who are not part of the study respondents but knowledgeable in the study aspects in order to ensure their validity and relevance. Secondary data was extracted from annual reports, publications and documentary analysis was also used to gather background information by reviewing literatures relevant to the study. Reviews of the measures used to measure the study variables were also used to construct the questionnaire to ensure face and construct validity. The data collected was analyzed using descriptive and inferential statistics. Cronbach's alpha coefficient was used to measure the reliability of the scale, which was used to assess the interval consistency among the research instrument items. To determine the effect of organizational factors on the relationship between diversification strategies and competitiveness, the researcher used Karl Pearson's first order partial coefficient  $(r_{xy,z})$ . Organizational factors had no overall moderating role on the relationship between diversification strategies and competitiveness in that they had an overall significance value greater than the set p-value of 0.05 (Overall significance = 0.069). However, on individual significance, the degree of moderation varies from one organizational factor to another. The findings of this study are of great benefit to practitioners, academicians in the area of knowledge development, farmers and other stakeholders in the sugar industry.

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Key Words: Moderating factors, Diversification strategies, Competitiveness, Sugar Firms in Kenya

# **1.1 Introduction**

Sugar firms in Kenya have resulted in diversifying their operations in an effort to build a competitive edge over their competitors. Diversifying means developing a wide range of products, interests or skills in order to be more successful or reduce risks. It involves buying of different investments alternatives to spread the risk of investments (Nickels, 2002). It is a strategy used by many firms not to become too dependent on only one product line, but get involved with new products aimed at penetrating new markets (Nickels, 2002). Diversification merits strong consideration whenever a single business company is faced with diminishing

market opportunities and stagnation of sales in principle business (Thompson et al, 2005). According to Thompson et al (2010), diversification is due if a firm expands into industries whose technologies and products compliments its present business. When a firm is diversifying into closely related business, it opens new avenues for reducing costs which can be a major driver to strategic diversification. Concentric or related diversification is seen where the firms have diversified into related businesses like the generation of power and water project which in turn help in cutting down the production costs. It is on this view that this study on the effect of concentric diversification on competitiveness of sugar firms is aimed at accessing how concentric diversification strategy has influenced the sugar firms' competitiveness in Kenya.

Competitiveness on the other hand, is where a firm is able to create more economic value than other competing firms (Barney, 2010). Economic value is the difference between perceived benefits gained by a customer that purchases a firms product or service and the full economic cost of these product and services (Barney, 2007). Competitiveness in Sugar firms was measured by their ability to turn input into output in the most efficient and economic way. According to Pearce & Robinson (2010), a scheme developed by Michael Porter, for a firm that seeks to build competitive advantage, it should strive for overall low-cost leadership in the industry, the firm should be able to use its low cost advantage to charge lower prices and yet enjoy higher profit margins. This enables the firm to be able to defend it in price wars and attack its competitors to gain market share and growth in sales which shows that the firm is competitive (Pearce and Robinson, 2010). In this study, competitiveness of sugar firm was used to refer to being able to produce quality sugar at lowest cost possible hence being able to charge lower price of the commodity and yet enjoy higher profit margins than the rivals. Competitiveness in this study was characterized by market share, growth rate and production expansion.

#### **1.1.2 Literature Review**

Diversifying is developing a wide range of products, interests or skills in order to be more successful or reduce risks (Nickels, 2002). However some scholars like Adner and Zemsky (2006), argues that firms diversify when they have valuable and difficult-to-imitate resources that are valuable across industries, or are complementary to resources in other industries, and where these gains cannot be realized by contracting among independent firms. Firms also diversify when they have effective internal resource-allocation mechanisms. Diversification merits strong consideration whenever a single business company is faced with diminishing market opportunities and stagnation of sales in principle business as proposed by (Thompson et al, 2005). Diversification is due if a firm expands into industries whose technologies and products complement its present business. When diversifying into closely related business, it opens new avenues for reducing costs then this can be a major driver to strategic diversification (Arthur, 2004).

When a firm has a powerful and well known brand name that can be transferred to the product of the other business, then this may drive a firm to diversify. Thompson et al, (2005) are of the view that a firm leverages its existing competencies and capabilities by expanding into businesses where these same resource strengths are valuable competitive assets. Diversification strategies involve buying different investments alternatives to spread the risk of investment as argued by (Nickels, 2002). Diversification strategies help the firm not to become too dependent on only one product line but the firm should get involved with new products and aim at new markets (Kotler, 1991), he also observes diversification as a strategy for a company's growth and states that by starting up or acquiring business outside the company's current products and markets, diversification will aim at the development of new products with a view to capturing new markets. This study has covered various forms of diversification strategies that the sugar firms in Kenya use in their efforts to build a competitive edge over their rivals. These diversification strategies include concentric or related, vertical and horizontal diversification.

#### 1.1.3 Concentric diversification

A related diversification strategy involves building the company around businesses whose value chains possess competitively valuable strategic fits. Strategic fit exists whenever one or more activities comprising of the value chain of different businesses are sufficiently similar as to present opportunities for the diversifying firm (Arthur, 2004). Concentric diversification is a grand strategy that involves the operations of a second business that benefits from access to the firm's core competencies (Pearce and Robinson, 2010). Concentric diversification is where a firm can diversify into a related business. It is also referred to as related diversification and its where a firm diversifies to a company whose value chain posses completely valuable strategic fits (Arthur, 2005).

According to Thompson et al, (2004) Strategic fit exists when the value chain of different businesses present opportunities for cross-business resource transfer, low cost through combining the performance of related value chain activities, cross business use of potential brand names, and cross-business collaboration to build new or stronger competitive capability. Achieving superior performance through diversification is largely based on relatedness. Related diversification allows the firm to reap the competitive advantage benefits of skills transfer, lower cost, common brand names and still spread the investors risk over a broad business base (Thompson et al, 2004). On the other hand, Barney (2007) suggests that relatedness hypothesis loosely claims that multi-business firms holding portfolios of similar or related businesses might obtain efficiency advantages unavailable to non-

diversified firms and firms with unrelated portfolios. This gives the diversified firm competitive advantage over the undiversified one. If all the business in which a firm operates shares a significant number of inputs, production technologies, distribution channels, similar customers, then the diversification strategy is called related constrained as suggested by Barney (2007). In essence, synergy is the ability of two or more parts of an organization to achieve greater total effectiveness together than would be experienced if the efforts of the independent parts were summed.

# 1.1.3.4 Vertical diversification

Vertical diversification is a grand strategy based on the acquisition of firms that supply the acquiring firm with inputs or new customers for its outputs (Pearce and Robinson, 2010). Vertical diversification occurs when a firm goes back to the previous stage of its productivity cycle or moves forward to subsequent stage of the same cycle, production of raw materials or even distribution of the final product (Gregory et al, 2005). Nickels (2002) argue that diversification is as one of the time-honoured tenets of sound investing 'don't put all your eggs in one basket' and when a firm diversifies closer to the sources of raw materials in the stages of production, it is following a backward vertical integration strategy.

According to Barney (2007), backward integration allows the diversifying firm to exercise more control over the quality of the supplies being purchased. Backward integration also may be undertaken to provide a more dependable source of the needed raw materials. Forward integration allows a manufacturing company to assure itself of an outlet for its products and it also allows a firm to have more control over how its products are sold and serviced (Barney, 2007). Furthermore, a company may be better able to differentiate its products from those of its competitors by forward integration. By opening its own retail outlets, a firm is often better able to control and train the personnel selling and servicing its equipment (Barney, 2007). According to Pearce and Robinson (2010), some firms employ vertical integration strategies to eliminate the "profits of the middleman." Firms are sometimes able to efficiently execute the tasks being performed by the middleman and the middlemen profits helps the firm in lowering the production costs making the firm to be competitive in terms of low cost leadership (Pearce and Robinson, 2010).

# 1.1.3.5 Horizontal diversification

According to Pearce and Robinson, (2010), horizontal integration is a grand strategy based on growth through the acquisition of similar firms operating at the same stage of production-marketing chain. Horizontal diversification occurs when a firm adds new products or services that are technologically or commercially unrelated to the current products or services but that may appeal to customers (Baldwin et al, 2000). Internal horizontal diversification occurs when a firm enters a different, but usually related, line of business by developing the new line of business itself. Internal diversification frequently involves expanding a firm's product or market base (Thompson et al, 2004). On the other hand, External horizontal diversification is where a company enters a new area of business by purchasing another company or business unit. Mergers and acquisitions are common forms of external diversification (Thompson et al, 2004).

# **1.2 Firms' Competitiveness**

A firm is said to be competitive over rivals when it is able to create more economic value than other competing firms (Barney, 2010). Economic value is the difference between perceived benefits gained by a customer that purchases a firms product or service and the full economic cost of these product and services. Berry (1995) argues that competitiveness grows fundamentally out of the value that a firm is able to create for its buyers, do more business with the existing ones, and reduce the loss of customers. Once more and more customers perceive benefits they gain by purchasing a sugar firms product, then they tend to buy more of the product which leads to gaining more market share which is an indicator of competitiveness (Barney2010).

According to Thompson et al (2006), firms with high relative market shares normally have greater competitive strength than those with lower shares. Market share can be defined as the percentage of a market accounted for by a specific entity and it is an advantageous way of measuring business competitiveness since it is less dependent upon macro environmental variables such as the state of the economy or changes in tax policy (Gregory, 2005). Market share is a key indicator of firm competitiveness in that it shows how well a firm is doing against its competitors. Sharma and Kesner (1996), argues that diversifying entrants enter at a bigger scale and are more likely to survive and grow than undiversified entrants; consequently diversifying entrants pose a bigger threat, in increasing rivalry and challenging incumbents' market share, than undiversified entrants. This means that a more diversified firm is more competitive and can survive the stiff competition in the industry.

Additionally, according to Robert (2004) growth rate is to extend firms potentials in the face of competition. As the firm extends its potentials more than its rivals, the rate of growth is said to be on the increase and this shows that the firm is more competitive. The firm's ability to increase in resources, human, physical and even financial, then the growth rate of the firm is said to have increased and it's a sign of being competitive.

Finally, production is the conversion of inputs into outputs using physical resources, so as to provide the desired utilities of form, place, possession or state or a combination thereof to the customers while meeting the other organizational objectives of effectiveness, efficiency, adaptability and competitiveness (Chary, 2004).

Production expansion therefore refers to increase in the capacity of a firm to be able to convert input into output using it physical resources. Once a firm is able to do so better than its rivals, then the firm is said to be more competitive than its competitors.

According to Pearce and Robinson (2010), for a firm that seek to build competitive advantage, it has to use one of the three generic strategies. It should strive for overall low-cost leadership in the industry, the firm should be able to use its low cost advantage to charge lower prices or enjoy higher profit margins. This enables the firm to be able to defend it in price wars and attack its competitors to gain market share and growth in sales which shows that the firm is competitive (Pearce and Robinson, 2010). Striving to create and market unique product for various customer groups through differentiation is the second generic strategy as stated by Porter et al (1993). This is where the products are designed to appeal to customers with a special sensitivity for a particular product attribute to build customer loyalty. Such loyalties translates into a firm's ability to charge a premium price for its products and the product attributes also helps in the development of marketing channels through which it is delivered (Barney 2010). Finally, the firm should strive to have special appeal to one or more groups of customer or industrial buyers, focusing on their cost or differentiation concerns which attempts to attend to the needs of a particular market segment (Ma, Hao 2007). The study proposes that any useful strategic undertaking adopted by the sugar firm, such as diversification strategies, should enable the firm to effectively build its competitiveness.

#### **1.3 Organizational factors**

For the purpose of this study, organizational factors are conceived as environmental or situational issues that affects an organization's strategic effectiveness. The study therefore suggests that organizational factors are likely to have significant influence on the link between diversification strategies and competitiveness. This therefore suggest that organizational factors in this study will serve as moderating variables between the independent and dependent variables of the study. The organizational variables to be used in this study are: the age of the firm; size of the firm; management structure and the financial ability of the firm. Organizational factors have an important role in shaping the competitiveness of any organization including the sugar firms.

Age of the firm refers to the number of years the sugar firm has been in existence and sugar firm age is measured as the number of years the firm has been in business. This study proposes that, the older the diversifying firm, the bigger the impact of diversification strategies on the competitiveness and vice versa. Kuria (2010) argue that the more the age of the firm, the more likely it may achieve effective market productivity and competitiveness. This is because an older firm in relation to its rivals has well established distribution and marketing channels as well as big customer base that facilitate diversification and finally its competitiveness against its rivals. This study proposes that the more the age of a firm, the more likely it may have achieved effective diversification strategies to influence competitiveness of the sugar firm.

Another organizational factor of interest to this study is the size of the firm. The size of the diversifying firm in relation to other firms in the same industry will relatively influence the effect of diversification strategies on competitiveness of the firm. Size of the firm may be operationalized in terms of the firm's total assets for example capital (machine and physical structures) finances and human resources that a firm has in relation to its competitors. In addition, the number of employees, sales and the branch outlets are all appropriate indicators of organizational size. If the diversifying firm is bigger in size than its rivals, then the diversification strategies may have more effect on the competitiveness of the firm. This is because it uses its size in favour of diversification strategies which leads to being more competitive than its rivals. On the contrary Chen et al (2004), however argue that size erodes not only performance but also the competitiveness of the larger firms due to the organizational diseconomies which increases as the size increases. This however is not the case in sugar firms in that size of the firm favours competitiveness due to its large customer base and resources. Therefore this study proposes that the size of the sugar firm will influence the link between diversification strategies and competitiveness of the sugar firms.

The sugar firm management structure is very important in shaping of the competitiveness of sugar firms. This is the division of authority, responsibility and duties among the members of an organization. Walter (2011) proposes that, it is the method by which the staffs, departments, division and regions work and interact with one another. Management structure may be centralized (hierarchical) or decentralized (flat), centralized structure restricts decision making process to the top management which in turn affects negatively the performance and competitiveness of the firm because of time wasting before a decision is arrived at. Flat management structure promotes a decentralized decision making process by increasing staff participation in the decision making and this increases the efficiency and competitiveness of the firm. The study suggests that the type of management structure in the sugar firms will influence the relationship between diversification strategies and competitiveness of the sugar firms.

Finally, the firm's financial ability is another noteworthy organizational factor. The financial ability of the firm enables the firms to be able acquire modern equipments for its operations which leads to being more competitive. The advancement in IT has led to reshaping of all aspects of production and marketing in many organizations sugar firms being no exception. Liu (2007) suggest that firms need to invest heavily in IT

infrastructure and specialized software to record, track, and analyze customer interaction in order to build a competitive edge over their rivals. The investment in IT requires large amount of finances hence a sugar firm with better financial ability will have an advantage in the IT investment and will be more competitive than those with less amounts of finances. Additionally, a firm with a strong financial ability is able to acquire modern equipments which lead to efficiency in the production process which in turn leads to firm being more competitive. The study proposes that financial ability of sugar firm will influence the relationship between diversification strategies and competitiveness of the sugar firm.

#### 3.0 Methodology

# 3.1 Research Design

A research design is the arrangement of conditions for collection, measurement and analysis of data in that aims to combine relevance to the research purpose Kothari (2010). This study used descriptive correlational survey design as it sought to describe and establish the relationships among the study variables namely concentric diversification strategy and competitiveness. Descriptive correlational survey design allows the researcher to describe and evaluate the relationship between the study variables which are associated with the problem. Correlational survey design also allows a researcher to measure the research variables by asking questions to the respondents and then examining their relationship (O'Connor, 2011).

This being a census study, all the sugar firms in Kenya which were registered and licensed by the Kenya Sugar Board as at February 2013, and still in operation at the time of data collection in the year 2013 were studied. A list of the sugar firms which were registered and licensed by the Kenya Sugar Board indicated that there are nine sugar manufacturing firms in Kenya. Sugar industry was deliberately chosen in this study due to the fact that the sector has faced a lot of challenges in the recent past to the extent that some sugar firm closed hence the need for the study.

Both descriptive and inferential statistics were used in the analysis then presented using frequency and contingency tables. Descriptive statistics were used to deduce any patterns, averages and dispersions in the variables. They include measure of locations (mean) and measure of dispersions (standard error mean). These measures were used to describe the characteristics of the collected data. Inferential statistics were used to determine the relationship between the study variables and these inferential statistics included correlation and regression analysis. The primary association among the study variables were assessed using correlation which were tested at 95 percent confidence level (level of significance,  $\alpha = 0.05$ ) and 99 percent confidence level and the hypothesis tested at 95 percent confidence level (level of significance,  $\alpha = 0.05$ ).

# 4. Findings

The results presentation in this section has been done in accordance with the study variables in the conceptual framework (Figure 1.1). These variables were diversification strategies, sugar firm competitiveness and the organizational factors. Karl Pearson's coefficient of correlation has been used to highlight the interrelations within the study variables.

# **4.1 Diversification strategies**

The table 4.1 below shows the Pearson's correlation coefficient between the various dimensions building the independent variable. The correlation results for diversification strategies shows that usage of firms competencies and capability in expansions and related businesses owned by the sugar firm had statistically significant positive correlation (r = 0.731 and p-value < 0.05). This goes hand in hand with Thompson et al (2005) opinion that, a firm leverages its existing competencies and capabilities by expanding into businesses where these same resource strengths are valuable competitive assets. This shows that related businesses owned by sugar firms were directly linked to competencies and capabilities that the firm had. The effect of this is that the competencies and capabilities that a sugar firm had helped the firm to use them in their expansions to businesses where these competencies and capabilities are valuable competitive assets. Purchased other firms in same line and stage of production largely depended on the level of related businesses owned by sugar firms.

The more firms purchased by the sugar firm which are in the same line and stage of production, the larger the number of related businesses owned by sugar firms vice versa (r = 0.745 and p-value = 0.01). This goes hand in hand with Thompson et al, (2004) proposition that Strategic fit exists when the value chain of different businesses present opportunities for cross-business resource transfer, low cost through combining the performance of related value chain activities, cross business use of potential brand names, and cross-business collaboration to build new or stronger competitive capability. Generally, most of the diversification strategies indicators had very strong positive correlation indicating that the move in the same direction to one another. This is good indicator that as the firm diversifies; it not only improves on its performance but also the diversification strategies produce positive results to the well being of the sugar firm. Firms performs middlemen task in marketing of its products had also a very strong positive correlation with related businesses whose output becomes input in sugar production process (r = 0.687 and p-value = 0.01). This concurs with Pearce and Robinson (2010) suggestion that firms are sometimes able to efficiently execute the tasks being performed by the

middleman and the middlemen profits helps the firm in lowering the production costs making the firm to be competitive in terms of low cost leadership.

Table 4.1:	Correlation	results for	diversification	strategies
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Business owned and are related to sugar production	Related businesses whose output is input in sugar	Ever merged or bought other businesses	Firm uses its competencies and capability in expansion	Firms purchased and at the same stage of production	Firms purchased but not in same stage of production	Control over raw material supplied and purchased	- <del>-</del>	r urenased arms in same mic or stage of production
1	L							
.697	1	-						
.301	.292	1						
731	.626	.226	1					
556	.447	.163	.543	1				
149	.210	.313	.192	335	1	-		
070	.014	.369	.090	316	.210	1		
575	.687	.163	.529	594	.234	.110	1	
745	.499	.347	.691	744	.098	.196	.520	
	pupulation provided and provide	1         .697       1         .301       .292         731       .626         556       .447         149       .210         070       .014         575       .687	1         .697       1         .301       .292       1         731       .626       .226         556       .447       .163         149       .210       .313         070       .014       .369         575       .687       .163	1       .697       1         .697       1       .301       .292       1         731       .626       .226       1         556       .447       .163       .543         149       .210       .313       .192         070       .014       .369       .090         575       .687       .163       .529	1	1       1	1       1	1       0 and are reliant         1       <

Source; Research data

4.2 Competitiveness

Sugar firm competitiveness was the dependent variable of the study and the dimensions characterizing it were the market share, growth rate and production expansion. The correlation results in Table 4.2 for the firm competitiveness shows that all the dimensions of firm competitiveness move in the same direction and they all had very strong positive correlation. The factors whose correlation was very strong was the dependence of sales turnover on the market share (r = 0.934) and the dependence of the production cost on the sales turnover (r = 0.885) this suggests that the amount of sales that firm makes is dependent on the market share of that firm and as the sales turnover increases, the production need to be increased to meet the demand which in turn lead to increase in production costs. This concurs with Barney (2010) who proposes that once more and more customers perceive benefits they gain by purchasing a firms product, then they tend to buy more of the product which leads to gaining more market share which is an indicator of competitiveness.



#### Table 4.2: Correlation results for firm competitiveness

Indicators	Firm has more market share than rivals	Post more Sales earnings than rivals	Grown rapidly after diversification	Increased businesses after diversification	Creates more economic value	Posts higher Sales turnover than rivals	Production capacity has increased	Cost reduced after diversification	Cutting edge over rivals
Firm has more market share than rivals.	1								
Posts more sales earnings than rivals.	.894	1							
Grown rapidly after diversification.	.596	.467	1						
Increased business after diversification.	.866	.775	.775	1					
Creates more economic value.	.722	.592	.592	.626	1				
Posts higher Sales turnover than rivals.	.934	.731	.453	.674	.703	1			
Production capacity has increased.	.415	.046	.417	.539	.187	.460	1		
Cost reduced after diversification.	.408	.612	.365	.730	.707	.885	.572	1	
Cutting edge over rivals.									
	.750	.679	.000	.763	.802	.000	.540	.763	1

# 4.3. Organizational factors

The organizational or the firm specific factors which were the moderating variables in the study included age of the firm, size of the firm, management structure and the financial capability of the sugar firm. Table 4.3 below shows the correlation results for the organizational factors and no statistically significant correlation was observed as all the variables indicators had a positive correlation coefficient between themselves. Despite the fact that they all had positive correlation coefficient, some had stronger positive relationship, for example, the management structure and the size of the firm had very strong positive correlation coefficient (r = 0.935). This could be explained by the fact that as the size of the sugar firm increases, the need to have a more decentralized management structure also increases hence the two have very strong positive correlation. The size of the firm had also very strong positive correlation with the age of firm (r = 0.870) and this can be explained by the fact that the size of the firm largely depends on the number of year that sugar firm has been in existence. This concurs with Kuria (2010) argument that the more the age of the firm, the more likely it may achieve effective market productivity and competitiveness. This is because an older firm in relation to its rivals has well established distribution and marketing channels as well as big customer base that facilitate diversification and finally its competitiveness against its rivals. This however disagrees with Chen et al (2004) who argue that size erodes not only performance but also the competitiveness of the larger firms due to the organizational diseconomies which increases as the size increases. The financial ability had the least though positive correlation with the management structure (r = 0.266). This could possibly be explained by the fact that the more centralized management structure mainly in the privately owned firm lead to more financial ability based on the fact that all the profits are retained by the owners of the firms.

# 4.4 Summary and Key Findings

This study on the moderating effect of organizational factors on competitiveness of sugar firm in Kenya had a specific objectives of establishing the moderating effect of organizational factors on sugar firm competitiveness which was latter developed into null hypothesis and statistically tested using the Karl Pearson's zero order and first order partial correlation analysis. The discussions in the following sections highlight the key findings of the study based on the hypothesis. The organizational factors involved in this study were size of the firm, age of the firm, management structure and the financial ability of the sugar firm.

# Table 4.3: Correlation results among organizational factors

Indicators	Age of the sugar firm	Size of the sugar firm	Management structure	Financial Ability
Age of the Firm				
	1			
Size of the Sugar Firm	0.870	1		
Management Structure	0.701	0.935	1	
Financial Ability	0.518	0.379	0.266	1

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

Source; Research data

# Table 4.4 Summary of the moderating effect of organizational factors on the relationship between diversification strategies and competitiveness

Results of zero order Correlation of Diversification strategies and competitiveness							
		Mean of Competitiveness	Mean of diversification strategies				
Mean of Competitiveness	Pearson Correlation Significance. (2-tailed) N	1 18	0.280 0.014 18				
Mean of diversification strategies	Pearson Correlation Significance. (2-tailed) N	0.280 0.014 18	1 18				

Correlation is significant at 0.05 lever (2-tailed)

Results of first order partial correlation of Diversification strategies and Competitiveness with Organizational factors.

Control / moderating variable(z)	First order partial correlation (r <sub>rxy.z</sub> )	Moderation effect of organizational factors (compared to zero order simple correlation coefficient of diversification strategies and firm competitiveness ( $r_{xy} = 0.280$ )	Significan ce (p-value = 0.05, 2-tailed)			
Size of the firm	0.259	Moderately positive	0.024			
Age of the firm	0.285	Slightly negative	0.019			
Management structure	0.270	Moderately positive	0.014			
Financial ability	0.274	Moderately positive	0.012			
	Overall significance = 0.069					

Source; Research data

On aggregate, the organizational factors were found to have a moderating effect on the relationship between diversification strategies and competitiveness of sugar firms though the degree and direction of the effect varied across the organizational factors. Size, management structure and financial ability improved the relationship between diversification strategies and firm competitiveness ( $r_{xy,z} = 0.259$ ,p-value= 0.024,  $r_{xy,z} = 0.270$ ,P-value = 0.014 and  $r_{xy,z} = 0.274$ , P-value = 0.012) respectively while age ( $r_{xy,z} = 0.285$  p-value = 0.019) of the firm had slightly negative correlation which means that it had a suppressing effect on the relationship between diversification strategies and firm competitiveness.

#### **4.5** Conclusion

The study was based on the premise that diversification strategies influence sugar firms' competitiveness but this influence is moderated by a number of organizational factors. The study results supported this premise in that the relationship between diversification strategies and firm competitiveness was found to be moderated by organizational factors. It was noted that the direction and strength of this effect vary across individual organizational factors but three of these factors can be controlled by a sugar firm, the size of the firm, the management structure and financial ability. A decentralized management structure is good for the firms in order to reduce the negative effects associated with the centralized and rigid management structure. A large size is ideal and desirable for the firm since it had a moderately positive moderating effect and financial ability is another factor that can be controlled by the firm and had a moderate positive moderating effect.

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