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THE MODERATING ROLE OF BOARD COMPOSITION ON THE RELATIONSHIP BETWEEN ATTENTION CAPABILITY AND PERFORMANCE OF SUGAR FIRMS IN KENYA

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Abstract: **The sugar industry in Kenya has faced tough times recently. This has led to cut throat competition between the sugar firms and forced a rethink of strategy by the players to survive the tough times as each one is constantly in the race to better performance in the industry. This study sought to determine the influence of attention capability on the performance of sugar firms in Kenya. The study utilized a descriptive survey research design that incorporates quantitative and qualitative approaches. The target population for this study consisted of all management-level employees of the nine sugar firms in the western sugar belt. Using Yamane's formula to determine the size of the sample, 204 respondents were sampled using random sampling from the population from which primary data was collected using questionnaires administered through drop and pick method. The collected data was coded and analyzed using quantitative methods with the help of descriptive and inferential statistics. The results of this study are useful to sugar companies as a guide in the formulation of strategies to enhance their market position and performance. The study is also useful to strategic management practitioners in the sugar industry in the formulation and implementation of strategies and plans to promote growth. The study also builds on existing knowledge in the area of strategic flexibility and therefore, is of benefit to scholars and researchers as it can be used to stimulate further research to develop a better understanding of assessment capability as a concept of strategic flexibility, its adoption and implementation. The study concludes that board composition has statistically and positive moderation on the relationship between attention capability and performance and hence is a good moderator for the relationship.**

Keywords: **Board Composition, Attention Capability, Performance.**

1. INTRODUCTION

The business environment is increasingly becoming unpredictable and complex. Rapid changes increase the volatility of the business environment and require flexible and creative strategies (Khodammi, 2016). Brozovic (2016) asserts that as modern society is characterized by irregularity, increased levels of complexity and uncertainty, and reduced levels of predictability (Nowotny, Scott & Gibbons, 2001), it is necessary for the actors in the marketplace to develop the ability to navigate complex business environments.

According to Thomas (1996), the ability to take action and adopt swiftly is a primary determinant of superior performance in many industries. He asserts that the ability to take action and adopt swiftly is a primary determinant of superior performance in many industries. The ability to notice and respond to changes in the business environment is determined

by the top managers' cognitive processes (Nadkarni & Barr, 2008), attention being one of them. Attention is the selection of a set of information from the environmental event for analysis and interpretation (American Psychological Association, 2009; Kosslyn & Rosenberg, 2006).

1.1 Attention Capability

Attention involves deploying the mental sensory glands to receive stimuli from environmental events, detecting environmental stimuli and storage of the stimuli information in the brain (Posner & Petersen, 1990) and as such a dynamic business environment calls for high attention capacity to support environmental scanning and identification of opportunities and threats. Nadkarni & Barr (2008) posit that attention capability is crucial in strategic decision making because it determines the extent to which an environmental event in considered as a factor in the firm's strategic choices, actions and outcomes.

Dynamic business environments require firms to have high level attention capacity to manage with discontinuous changes (Eggers & Kaplan, 2009; Cho & Hambrick, 2006; Tuggle, Schnatterly, & Johnson, 2010). Shimizu & Hitt (2004) asserts that companies need to be sensitive, that is, to maintain attention to feedback from the market, particularly negative feedback. This sensitivity he further argues demands for prompt response from the company to feedback from the environment in a timely manner since in a dynamic environment, even a seemingly good project may suddenly lose its potential value. Unfortunately, both research and anecdotal evidence suggest that managers often ignore early signs of strategic mistakes (Shimizu & Hitt, 2005).

1.2 Sugar Industry

Globally, the sugar industry has over the years been delicate resulting from the dynamics of the operating environment. Out of the total white crystal sugar production in the world, approximately 70 percent comes from sugarcane and 30 percent from sugar beet (Sharpe, 1998). The argument he presents is that though the normal benchmarks and standards of competitiveness in the industry are difficult to define, a policy that exposes any market to sugar at the residual free market price would be a disaster to even the most stable economy enjoying high efficiencies in sugar production. Despite ultimately turning out as a net importer of sugar, Africa prides itself in consistently producing five producers who are known among the lowest cost producers globally. Only Brazil (lowest cost producer) and Australia (same level) can compare to the five which include Zimbabwe, Malawi, Zambia, Swaziland and South Africa.

The Kenyan sugar industry is credited with the cash circulation the rural families and households depend on. The sustenance of many of the rural towns around the sugar belts and the surrounding market places heavily rely on the industry (Government of Kenya (GOK), 2010). The industry is complexly knotted into the rural economies of most areas in Western Kenya. Imbambi, Oloko & Rambo (2017) assert that the sugar firms in Kenya have technology capability limitations and yet there is a positive relationship between technology capability and competitive advantage.

1.3 Statement of the problem

With the liberalization of the sugar industry, high level competition has been realized both at local and international level (Kennedy & Harrison, 1999). This has resulted to closure of many firms which are not able to sustain the high competition (GOK, 2021; Sugar Directorate, 2018). The domestic industry has faced numerous challenges arising from its external environment such as increased debt portfolio, high cost of production, delayed payments to farmers due to poor financial performance, high cost of inputs, high processing costs, and unpredictable rainfall pattern among others (KSB, 2018) leading to massive job losses, constrained business activities in the sugar growing areas, loss of revenues in taxes for the government, and the farmer and the farming community also suffering loss of income and livelihood. Sugar firms that have been exhibiting unsatisfactory performance (Ojera, Bulitia & Ogutu, 2017) and fighting imminent closure include, Muhoroni Sugar Company, South Nyanza Sugar Company, Chemelil Sugar Company as well as the giant Mumias Sugar Company. This business environment has obligated players in the market to adapt to the fast dynamics of the market. Consequently, for survival purposes, some have been forced to realign their strategies to achieve and sustain performance in the industry. This study, therefore, sought to shed light on the moderating role of board composition on the relationship between attention capability and performance of sugar firms in Kenya

1.4 Research objective

The study sought to establish the moderating role of board composition on the relationship between attention capability and performance of sugar firms in Kenya

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2. LITERATURE REVIEW

The study was anchored on the following theories: -

2.1 Dynamic Capabilities Theory

The dynamic capabilities theory was initially introduced by David Teece and Gary Pisano in 1994. The theory sets out to explain the genesis of competitive advantage in organizations. According to Teece and Pisano (1994), traditionally prosperous firms relied on the resource-based strategy of defensively acquiring vital technological resources to fight out their rivals in the market. Teece, Pisano and Shuen, (1997) defined dynamic capabilities as the capacity of businesses to incorporate, construct, and reorganize internal and external proficiencies to respond to the ever-changing business environment. In this study, this theory explains the need and pursuit of Assessment capability during disruption for performance of sugar firms in Kenya. Accordingly, dynamic capabilities theory is thought to provide a solid theoretical base for the main objective as well as specific objectives one to four of this study.

2.2 The moderating role of board composition on the relationship between Attention capability and performance

Board composition can show several degrees of heterogeneity (Bhagat & Black, 2002). Munyradadzi, Padia & Callaghan (2016) studied board composition, board size and financial performance of Johannesburg stock exchange companies basing on the resource dependence theory and agency theory predicted that board composition can be positively related to firm performance. In this study, as suggested by Rashid (2011) the measures of board composition employed was the ratio of independent non-executive directors and board size. The study adopted a quantitative approach and use of multiple regression analysis in data analysis. Krivogorsky (2006) suggests the existence of a positive relationship between board composition and firm performance. Meme (2017) supports the position that board characteristics in regard to board size, board diversity and board independence has a significant effect on the financial performance of organizations.

Shimizu & Hitt (2004), in support of the relationship of board diversity and performance, posit that nomination of new outside directors has the effect of increasing the probability of shaking off a poorly performing enterprise since the directors provide new insights and fresh perspectives to a firm not apparent to the incumbents. Kalsie & Shrivastav (2016) assert that a larger board consists of a bigger number of members who work towards the interest of the stakeholders in monitoring and controlling, and thereby increasing the firm performance.

Several studies also support this as Adhikary, Huynh, & Hoang (2014); Fauzi & Locke, 2012; Jackling & Johl, 2009; found that the evidence of a positive relationship between the firm's board size and its firm performance. However, Hermalin and Weisbach (2001) disagree and suggest that larger boards are way less effective relative to small boards as their size moves them into a more symbolic role, rather than performing their elementary role as part of the management.

Conceptual framework

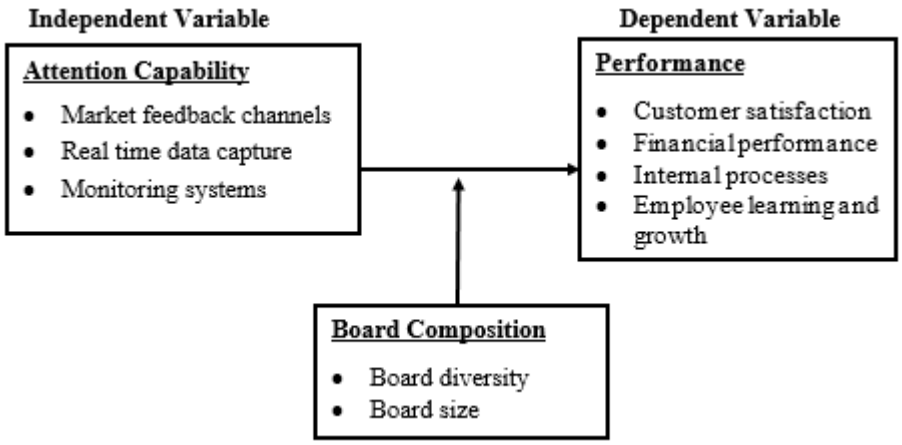

Figure 1

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3. METHODOLOGY

The research philosophy adopted for this study is positivism. The research design was a descriptive survey study. The population of study comprised of all management employees of sugar firms operating in Western Kenya which form the western sugar belt. In this study, the sampling frame consisted of a list of all the management staff at top level and business level in the nine sugar firms operating in Western Kenya. The total number of management staff was 416 consisting of supervisors, middle level managers and top management executives in the nine firms as shown in table below :-

Table 3.1:

Sugar Company	No. of Management Staff
West Kenya Sugar Company	40
Nzoia Sugar Company	84
Butali Sugar Mills	35
South Nyanza Sugar Company	74
Sukari Industries Limited	22
Kibos Sugar and Allied Industries Limited	27
Muhoroni Sugar Company	29
Chemelil Sugar Factory	74
Busia Sugar Industry	31
Total	**416**

Source: Field data (2024)

Yamane's (1967) formula was employed to determine the size of the sample as follows:

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

Where:

n represents sample size,

N represents study population,

e represents error margin ($2\% \leq e \leq 5\%$). Five percent margin of error will be used because the study will be an ex-post facto survey, whereby the independent variables cannot be manipulated hence necessitating relatively higher margin of error.

Table 3.2: Sample Distribution in Sugar Firms in Kenya

Sugar Company	No. of Management Staff	Sample Size
West Kenya Sugar Company	40	20
Nzoia Sugar Company	84	41
Butali Sugar Mills	35	17
South Nyanza Sugar Company	74	36
Sukari Industries Limited	22	11
Kibos Sugar and Allied Industries Ltd	27	13
Muhoroni Sugar Company	29	14
Chemelil Sugar Factory	74	36
Busia Sugar Industry	31	16
Total	**416**	**204**

Source: Field Data, (2024)

Primary data was collected through the administration of the questionnaires to management staff (strategic level and business level mangers) of the sugar companies in the western sugar belt. The collected data was analysed by descriptive statistics as well as inferential statistics. Therefore, the following regression model was used:

$PF = \beta_0+\beta_1SF+\beta_2Z+\beta_3SFZ+\varepsilon_i$, where:

PF represents Performance of Sugar Firms

SF represents Attention Capability

Z represents Board Composition

SFZ represents interaction term introduced to measure the moderation effect

The statistical results were interpreted, elucidated and discoursed consistent with the theoretical and conceptual fundamentals of the study and the findings presented in the form of tables, charts and graphs.

4. FINDINGS, CONCLUSION AND RECOMMENDATIONS

Response Rate:

Table 4.1: Analysis of the response rate

Response rate	Frequency	Percent
Questionnaires sent out	204	100%
Questionnaires filled and returned	178	87.3%

Source: Field Data, (2024)

The sample of the study consisted of 204 target respondents to whom questionnaires were sent out. From these, 178 questionnaires were correctly filled and returned. As presented in Table 4.1, this yielded a response rate of 87%. This response rate was deemed appropriate for the study which in agreement with Kothari (2011) perceived a response rate greater than 70% to be satisfactory for a given study.

Hierarchical Regression Analysis

To analyze the moderating role of board composition on the relationship between Attention capability and performance of sugar firms, a hierarchical regression analysis was done. The findings are as indicated in the table below:-

Table 4.2:

Model Summary

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.498[a]	.248	.243	.499	.248	55.258	1	168	.000
2	.517[b]	.267	.258	.494	.020	4.485	1	167	.036
3	.551[c]	.303	.291	.483	.036	8.600	1	166	.004

a. Predictors: (Constant), Attention Capability

b. Predictors: (Constant), Attention Capability, Board Composition

c. Predictors: (Constant), Attention Capability, Board Composition, ATCBC

Source: Field Data, (2024)

From the table above, Attention capability accounted for 24.8% of the changes in performance of sugar firms (P=0.01<0.05) at 95% confidence level. With the introduction of the moderator, the R square value increased to 26.7% indicating an R square change of 2.0%. Further with the introduction of the interaction term, the R square change increased to 30.3% indicating a further 3.6% increase in performance.

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Table 4.3:

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.748	1	13.748	55.258	.000[b]
	Residual	41.797	168	.249		
	Total	55.544	169			
2	Regression	14.841	2	7.420	30.444	.000[c]
	Residual	40.704	167	.244		
	Total	55.544	169			
3	Regression	16.846	3	5.615	24.087	.000[d]
	Residual	38.699	166	.233		
	Total	55.544	169			

a. Dependent Variable: Performance

b. Predictors: (Constant), Attention Capability

c. Predictors: (Constant), Attention Capability, Board Composition

d. Predictors: (Constant), Attention Capability, Board Composition, ATCBC

Source: Field Data, (2024)

From the ANOVA table above, the p values of the three models were less than 0.05 at 95% confidence level. This indicated that the models were fit in testing the relationship between the three variables of the study.

Table 4.4:

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.146	.218		9.866	.000
	Attention Capability	.423	.057	.498	7.434	.000
2	(Constant)	2.001	.226		8.852	.000
	Attention Capability	.379	.060	.446	6.318	.000
	Board Composition	.095	.045	.149	2.118	.036
3	(Constant)	3.978	.710		5.606	.000
	Attention Capability	-.170	.196	-.199	-.865	.388
	Board Composition	-.540	.221	-.851	-2.445	.016
	ATCBC	.173	.059	1.379	2.933	.004

a. Dependent Variable: Performance

Model 1 above indicated that with a single unit increase in attention capability, there was 0.423 increase in performance ($p=0.001<0.05$). In model 2, with a single unit increase in attention capability and board composition, there will be a 0.379 and 0.095 increase in performance respectively. In model 3, with the introduction of the interaction terms, Attention capability and board composition account for negative results on performance i.e. -0.170 and -0.540 respectively. However, the interaction term accounts for significant and positive contributions to performance i.e. 0.173.

5. CONCLUSIONS

Finally, on the moderation effect of board composition on the relationship between attention capability and performance, the study concludes that there is statistically and positive moderation. This makes board composition a good moderator for the relationship.

REFERENCES

[1] Alarcon, J., & Caruso, J. (2013). Put some flexibility into your planning. *Pennsylvania CPA Journal, 84, 2, pp. 36-39.*

[2] Bhagat, S. & Black, B. (2002). The non-correlation between board independence and long-term firm performance. Journal of Corporation Law, 27(2), 231-273.

[3] Brozovic, D. (2018). Strategic flexibility: A review of the literature. *International Journal of Management Reviews*, 20 (1), pp. 3-31. Wiley online library.

[4] Carpenter, M. A., & Sanders, G. (2009). Strategic management: a dynamic perspective concepts. Upper Saddle River, NJ: Pearson International.

[5] Clarkson, M. (1995). A stakeholder framework for analysing and evaluating corporate social performance. *Academy of Management Review, 20*(1), 92–117.

[6] Della-Piana, V., Low, M., & Lyman, K. (2005). The business strategy audit. Cambridge: Cambridge Strategy Publications

[7] Elshamly, A. B. (2013). *Developing a strategic framework in small and medium sized enterprises (SMEs)*. A PhD thesis submitted to the University of Gloucestershire.

[8] GOK (2008). *Sessional Paper of 2008 on Revitalization of Sugar Industry*. Government Printer, Nairobi.

[9] Hermalin, B.E., & Weisbach, M.S. (2001). Boards of directors as an endogenously determined institution: A survey of the economic literature. Economic Policy Review, 9(1), 7–26.

[10] Hodgkinson, G. P., & Healey, M. P. (2011). Psychological foundations of dynamic capabilities: Reflexion and reflection in strategic management. *Strategic Management Journal, 32*, 1500-1516. https://doi.org/10.1002/smj.964

[11] Imbambi, R. M., Oloko, M. & Rambo, C. M. (2017). Influence of Technology Capability on Competitive Advantage of Sugar Companies in Western Kenya. *International Journal of Academic Research in Business and Social Sciences*, 7 (2), 178. http://dx.doi.org/10.6007/IJARBSS/v7-i2/2021

[12] Kalsie, A. & Shrivastav, S. M. (2016). Analysis of Board Size and Firm Performance: Evidence from NSE Companies Using Panel Data Approach. Indian Journal of Corporate Governance, 9(2), 148–172

[13] Kennedy, P.L., & Harrison, R.W. (1999). Competitiveness in the world sugar industry: A comparison of the EU and U.S. sugar sectors. *American Agricultural Economics Association Annual Meetings, Nashville, Tennessee, August 8 - 11, 1999.*

[14] Kenya Sugar Board. (2007). Year book of sugar statistics. Nairobi, Kenya: Author.

[15] Kenya Sugar Board. (2010). Kenya Sugar Industry Strategic Plan 2010-2014. Nairobi: Author.

[16] Krivogorsky, V. (2006). Ownership, board structure and performance in continental Europe. International Journal of Accounting, 41(2), 176-197.Agarwal, S. (2008). *Corporate social responsibility in India*. New Delhi: Sage Publications.

[17] Minin, A. D., Frattini, F.,Bianchi, M., Bortoluzzi, G., & Piccaluga, A. (2014). Udinese Calcio soccer club as a talents factory: strategic agility, diverging objectives, and resource constraints. *European Management Journal*, 32 (2), pp. 316-336.

[18] Munyradadzi, R. M, Padia, N. & Callaghan, C. W. (2016). Board composition, board size and financial Performance of Johannesburg Stock Exchange companies. SAJEMS, 19 (4), 497-513

[19] Nowotny, H., Scott, P. & Gibbons, M. (2001). *Re-thinking science: Knowledge and the public in an age of uncertainty*. Cambridge, UK: Polity.

[20] Ojera, P.B., Bulitia, G. M., & Ogutu, M. (2017). Interactive control systems and strategic orientation on competitive position of sugar firms in Western Kenya. *International Journal of Business and Management Invention*, 6(4), pp. 79-93

[21] Sharpe, P. (1998). *Sugar cane: Past and present*. Southern Illinois University Press.

[22] Shimizu, K. & Hitt, M.A. (2004). *Strategic flexibility: Organizational preparedness to reverse ineffective strategic decisions. The Academy of Management Executive, 18 (4), 44-59*

[23] Shimizu, K., & Hitt, M. A. (2005). What constrains or facilitates divestitures of formerly acquired firms? The effects of organizational inertia. *Journal of Management*, in press.

[24] Singh, D., Oberoi, J., & Ahuja, I. (2013). An empirical investigation of dynamic capabilities in managing strategic flexibility in manufacturing organizations. *Management Decision, 51, 7, pp. 1442-1461.*

[25] Teece, D.J, Pisano, G., & Shuen A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), pp. 509-533.

[26] Zhou, K. Z., & Wu, F. (2010). Technological capability, strategic flexibility and product innovation. Strategic Management Journal, 31 (5). DOI.org//10.1002/smj.830.