

The Relationship of Organizational Structure and Return on Assets of large Manufacturing Firms in Kenya

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Abstract

The general objective of this study was to determine the effect of organization structure on return on assets of large manufacturing firms in Kenya. The specific objective of this study was to determine the influence of organizational structure on return on assets of large manufacturing firms in Kenya. The study was a cross sectional survey targeting 102 large manufacturing firms and the response rate was from 94 firms. The data was analyzed using Statistical Package for Social Sciences. Null hypothesis was tested and results indicated that organizational structure had no influence on return on assets. The study was limited in that change of variables of study was not monitored or observed over time as would be the case with longitudinal studies.

Key terms: Organizational structure, Return on assets (ROA), Manufacturing firms, Performance, Formalization, Centralization

Introduction

There have been debate whether organizational structure influence return on assets or not. The study aimed at establishing the position regarding this debate in Kenya large manufacturing firms. Organizational

structure is how the organization is designed to meet its goals and objectives. This study

used return on assets as measure of performance. The Kenya manufacturing sector decelerated from an expansion of 3.4 percent in 2011 to a growth rate of 3.1 percent in 2012. The slower growth was due to high cost of production, stiff competition from imported goods, high cost of credit and political uncertainty due to the 2013 general elections (Kenya National Bureau of Statistics (KNBS), 2013). Manufacturing exports are targeted at both regional markets, including the Common Market for Eastern and Southern Africa (COMESA) and the East African Community (EAC) as well as European and American markets. Kenyan manufacturers have in recent years through African Growth Opportunity Act (AGOA) and associated export processing zones, increased exports of textiles, mainly targeting the US market.

Karabag and Berggren (2013) study, based on 1,000 largest manufacturing firms in Turkey found that firm related factors did not significantly influence performance, instead factors related to industry structure and business groups membership were the strongest determinants of firm perspective. Chen (2010) showed that firm factors

explained a substantial part of Korean and Taiwanese firm performance. Zheng, et al., (2010) study observed a negative effect of structure on organizational effectiveness. Review of previous studies indicates they have been conflicting results and this study sought to determine the relationship of organizational structure and return on assets of large manufacturing firms in Kenya.

Research Objective

The specific objective was to determine the influence of organizational structure on return on assets of large manufacturing firms in Kenya.

Literature Review

Organizational Structure and Performance

Chandler (1962) substantiated 'structure follows strategy' thesis based on four case studies of American conglomerates that dominated their industry from the 1920's onward. The ensuing debate on the contingent relationship between strategy, structure, and firm performance flourished in the 1970s and 1980s. Researchers have used ground-breaking work by Chandler (1962) to build the Strategy-Structure Performance (SSP) paradigm, which has become the most important sub stream of research on structural contingency theory (Galunic & Eisenhardt, 1994). Rather than seeing each of strategy or structure alone having an important impact on performance, the paradigm holds that it is the linkage between

them that is important (Lenz, 1980; Miller, 1988). According to Akinyele (2011) the organizational structure and strategies adopted by oil and gas marketing companies affect market share positively. Lavie (2006) gave evidence that the level of organizational structure and strategies was positively related to company effectiveness. Grewal and Tansuhaj (2001) reported that more successful companies had well defined organizational structures in sharp contrast to less successful companies. Focusing on large firms (Ekpu, 2004) found a positive relationship between the unstructured organizational patterns and large firm financial performance.

Organizational structure is normally described as the way responsibility and power are allocated, and work procedures are carried out among organizational members. Robbin and DeCenzo (2005) argue that the organizational structure performs a significant role in the achievement of organization's set objectives and accomplishment of its strategic goals and direction. The organizational structure becomes more relevant when it is in harmony with the objective mission, competitive environment and resources of the organisation. The believe "one cap fits all" is non-existence in an organizational structure design as no two firms are entirely similar and as such faces different challenges from its environment.

Mansoor, et al., (2012) asserted that performance effect of organizational structure is moderated by changes in the

environment and hence, conclude that to attain desired superior performance by an organization, adequate attention is required to have organizational structure that can match the prevailing environment dynamism in place. These structures are characterized with different attributes such as control, communication, organizational knowledge, task, prestige, governance and values. Hajipour, et al., (2011) studied on relationship between industry structure, strategy type and organizational characteristics and the results indicated that industry structure determine organizational characteristics. Mansoor, et al., (2012) contended that ideal organizational structure is a recipe for superior performance.

Organizational structures are discussed in the extant literature with reference to two key factors; formalization and centralization (Bucic & Gudergan, 2004). Organizational structure includes the nature of layers of hierarchy, centralization of authority, and horizontal integration. It is a multi-dimensional construct in which concerns: work division especially roles or responsibility including specialization, differentiation or departmentalization, centralization or decentralization, complexity, and communication or coordination mechanisms including standardization, formalization and flexibility. The main feature of new organizational structures is the flexibility and the ability to acclimatize to the changing environment (Lenz, 1980). Mintzberg (1979) indicated that an organic structure, with its low degree of formality and high degree of information

sharing and decentralization, improves an organization's flexibility and ability to adapt to continual environment change. Organizations having different levels of adaptation would utilize different strategies to match their structural arrangements.

According to Miles and Snow (1978), strategy typology organizations with a high-level of adaptation would exhibit a prospector strategy and organic structure while organizations with a low-level of adaptation would adopt a defender. Oyewobi, et al., (2013), study on impact of organizational structure and strategies on construction organizations performance, found that organization structure had no direct impact on both financial and non-financial performance. Qingmin, et al., (2012) study in Austria and China found that organizational structure influence performance directly and indirectly. According to Robbin and DeCenzo (2005) organizational structure has two essential functions which were control and coordination. Controls involved making sure that decision makers at all levels use the managerial or hierarchial constrains as of one of the criteria in making their decisions.

According to Bucic and Gudergan (2004), there are four generic types of control mechanism which include centralization, formalization, outputs and cloning. Robbin and DeCenzo (2005), defines formalization as degree to which jobs are standardized while defines centralization as a situation where decisions are made at the top of the organization. Bucic and Gudergan (2004),

considered decentralization as pushing decision authority downward to lower level employees. There are different types of organizational structure which include divisional structure, functional structure geographical structure, horizontal structure, hybrid structure and matrix structure. According to Bucic and Gudergan (2004), organizational structure is the formal system of task and reporting relationships that controls, coordinates and motivates employees so that they cooperate to achieve organizational goals. According to Lenz (1980) organization structure has a direct effect in the success of an organization operation strategy. Lenz (1980) supports the argument that organizational structure shapes performance. Adeoye and Elegunde (2012) found that external environment had impact on organization performance in study of food and beverage industry in Nigeria.

Conceptual Hypothesis

The conceptual hypothesis for the study was Organizational structure does not influence return on assets of large manufacturing firms in Kenya.

Research methodology

This study was based on the positivist paradigm because it had predefined hypothesis. The study was a cross sectional survey to collect data at particular time rather than over a period of time. The population of the study was all large manufacturing firms in Kenya (KAM 2011); there were 102 large manufacturing firms in Kenya. In determining the size of the firm, several

different measures have been used and accepted as appropriate. They included turnover, capital employed, value of output, asset size and employment level. The indicators of large manufacturing firms in Kenya include a firm with more than 50 employees (Awino, 2007); KIRDI (2007); (Aosa, 1992), sales per employee KShs 60,000 and sales turnover of excess of KShs 400 million (Waweru, 2008).

The study used the number of employees to determine the size of the firm. Firms with more than 50 employees are considered large (Awino, 2007, KIRDI, 2007, Aosa, 1992). The use of number of employees is considered most appropriate since the studies were conducted in Kenya under similar conditions. Basing on the number of employees out of 627 manufacturing firms in Kenya, there are 102 large manufacturing firms with over 50 employees (KAM, 2011) and this formed the target population and the study used census survey. The study used both primary and secondary data; the primary data was collected using questionnaire. Questionnaire was delivered to top level managers and middle level managers which included Chief Executive Officers (CEOs)/managing directors and head of departments. Data was analyzed using Statistical Package for Social Sciences (SPSS) through a combination of both descriptive and inferential statistics. The F test of significance was performed to determine if the variables significantly contributed to the prediction of the dependent variable. Overall significance used F-test and p- values. When p-value \leq

0.05, the null hypotheses were rejected, otherwise they were not rejected. To test individual significance, t- test and p-values were used using the same level of significance ($\alpha = 0.05$). The data was subjected to reliability tests to check consistency of the measurement set. Reliability was operationalized as internal consistency and established through computation of Cronbach’s alpha coefficient, where all the variables had Cronbach’s alpha coefficient of more than 0.70 and therefore the data was reliable. Content validity was tested through expert judgment comprising of managers in manufacturing firms and scholars in strategic management. The relationship of dependent variable return on assets (ROA) and organizational structure (OS) is as follows. Model 1: $ROA = \beta_0 + \beta_1 OS + \epsilon$ where β_0 is the constant and β_1 is the coefficient (slope or gradient) and ϵ is the error term.

Results and discussion

The specific objective was to determine the influence of organizational structure on

return on assets of large manufacturing firms. To test this objective, null hypothesis (H1); organizational structure does not influence return on assets of large manufacturing firms was tested at 0.05 significance level. Table 1 below indicates relationship between organizational structure and return on assets. The coefficient of determination was 0.00 indicating that organization structure does not influence return on assets in large manufacturing firms in Kenya.

This implies that any changes in the large manufacturing firms studied, does not influence the return on assets. The overall test F-value statistic was 0.000 which was not significant because the p- value (0.997) was greater than 0.05 significance level. Therefore, the null hypothesis was not rejected that organization structure does not influence ROA of large manufacturing firms. The null hypothesis was therefore not rejected which meant that organization structure does not influence return on assets.

Table 1: Relationship Between Organization Structure and Return on Assets

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.000 ^a	.000	-.011	.07143		
a. Predictors: (Constant), Organization Structure						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.000	1	.000	.000	.997 ^b
	Residual	.464	91	.005		
	Total	.464	92			

a. Dependent Variable: ROA

b. Predictors: (Constant), Organization Structure

The results were consistent with Ogolla (2012) who found that ROA was not related

to organization configuration. Similarly Zheng, et al., (2010) found that structure had

negative effect on organizational effectiveness. Karabag and Berggren (2013) study on 1,000 largest manufacturing firms in Turkey found that firm related factors do not significantly influence performance. In contrast, Chen (2010) showed firm factors explain a substantial part of Korean and Taiwan firm performance.

The results of the study were consistent with Lavie (2006) study that found that organization structure was positively related to company effectiveness which was a non financial performance measure. The results were also consistent with Ekpu (2004) study which found positive relationship between unstructured organization patterns and large firm performance. Zheng, et al., (2010) study observed negative effect of structure on organizational effectiveness therefore inconsistent with this study. Oyewobi, et al., (2013) study on impact of organizational structure on organization performance, found that it had no direct impact on financial and non financial performance. Qingmin, et al., (2012) study in Austria and China found that organizational structure influence performance directly and indirectly. The results of the study were consistent with Lavie (2006) study that found that

organization structure was positively related to company effectiveness which was non-financial performance measure. The results were consistent with Ekpu (2004) study which found positive relationship between unstructured organization patterns and large firm performance. The results were inconsistent with Zheng, et al., (2010) study which found a negative effect of structure on organizational effectiveness.

Conclusion

The study established that organization structure did not explain any variation in ROA.

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