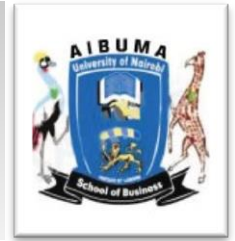




AFRICAN JOURNAL OF BUSINESS AND MANAGEMENT

(AJBUMA)

ISSN 2079-410X



ORGANIZATIONAL RESOURCES 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 resources on return on assets of large manufacturing firms in Kenya. The specific objective of this study was to determine the influence of organizational resources 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 resources had influence on return on assets of large manufacturing firms in Kenya. 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 Words: *Organizational resources, return on assets, manufacturing firms, performance*

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Introduction

There has been debate whether organizational resources influence return on assets. The study aimed at establishing the position regarding this debate in Kenya large manufacturing firms. Organizational resources are the various intangible and tangible assets an organization owns or controls (Grewal&Tansuhaj, 2001). 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.

Galbreath and Galvin (2008) demonstrated that firms' resources were more important than industry. Lopez (2003) carried out a survey of Spanish manufacturing firms and found a significant relationship between intangible resources and organizational performance Chen (2010) showed that firm factors explained a substantial part of Korean and Taiwan firm performance. 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 culture and business groups membership were the strongest determinants of firm perspective.. Review of previous studies indicates they have been conflicting results and this study sought to determine the

relationship of organizational resources and return on assets of large manufacturing firms in Kenya.

Research Objective

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

Literature Review

Organizational Resources and Performance

Firm's resources have been classified into six strategic resources that are physical, reputational, organizational, financial, human intellectual, and technological (Barney, 1991). Resources can be defined as the productive assets of firms, the means through which activities are accomplished. In the same manner, it also has been defined as stocks of available factors (knowledge, physical assets, human capital, and other tangible and intangible) that are owned or controlled by the firm, which are converted into final products or services efficiently and effectively (Barney, 1991). Tangible resources include capital, access to capital and location such as location of the buildings, warehouse and other facilities. Intangible resources consist of knowledge, skills and reputation, proactiveness, innovativeness and risk-seeking ability.

The RBV theory theoretically predicts intangible resources as the important factors for firm success (Peteraf, 1993). Strategists who embrace the RBV theory point out that competitive advantage comes from aligning skills, strategic deployment, capable workforce with organizational systems, structures, and processes that achieve capabilities at the organizational level resource as those assets owned or controlled by a firm. The key dimension of differences in strategies and performance levels among competitors within an industry is the existence of

unique firm characteristics capable of producing core resources that are difficult to imitate (Wernerfelt, 1984; Barney, 1986; Peteraf, 1993). The RBV theory states that only some of these resources can lead to SCA. A key aspect is that superior resources remain limited in supply. Barney (1991) proposes that advantage creating resources must meet four criteria; value, rareness, in-imitability and non-substitutability. These last three criteria are internally focused or focused on competitors (on the input side of the firm). The value of a resource is determined by the customer (and therefore output oriented). Literature in RBV theory however does not pay further attention to what valuable then is. The value of a resource is measured in the market in which the firm operates. There have been some attempts to describe the value of resources (Miller & Shamsie, 1996). The RBV theory appears to provide only ex post explanations of firms successes. The literature offers little guidelines for managers seeking to create strategic assets. It is not possible to know a priori whether an asset will prove to be a strategic asset in the future.

According to Wernerfelt (1984), firms possessing valuable, rare resources and capabilities would attain competitive advantage, which would in turn improve their performance. In the theoretical outstanding works of RBV theory, Grant, et al., (1988) attempted to conceptualize a comprehensive framework of relationships among resources, organizational capabilities and competitive advantage. He suggested that the basic and primary inputs into organizational processes are the individual resources of the firm such as tangible resources (financial capital, physical equipment), intangible resources (intellectual property, reputation, firm culture and organizational structure), and human resources. Nonetheless, in most cases, resources on their own are not so productive. In order for the firm to create

competitive advantage, individual resources must work together to initially establish organizational capabilities. Hence, it can be interpreted that there is no direct link between the individual resources and the competitive advantage or performance.

In empirical studies of RBV theory, there have so far been many researches which focus on the different approaches. Newbert (2007) categorized theoretical approaches into four types resource heterogeneity, organizing approach, conceptual-level, and dynamic capabilities. The resource heterogeneity approach argues that a specific resource, capability, or core competence controlled by a firm, affects its competitive advantage or performance. The organizing approach tends to indicate firm-level conditions in which the effective exploitation of resources and capabilities is implemented.

Scholars utilizing the conceptual-level approach try to investigate if the attributes of a resource identified by Barney (1986) such as value, rareness, and inimitability, can effectively explain performance. The dynamic capabilities approach emphasizes specific resource-level processes influencing on competitive advantage or performance, in which a specific resource interacts with a specific dynamic capability as an independent variable. Although Grant (1991) comprehensive framework had not been linked to approaches by Newbert (2007), they seemed to be consistent with each other. Firm plans and implements various strategies in order to create competitive advantages so that they could out-perform their competitors and earn a higher rate of profits in their industry. To achieve superior competitive advantage, Besanko, et al., (2003) argue that a firm must create more values, which depends on its stock of resources and distinctive capabilities of using those resources. A firm must ensure its successful strategies and the created

competitive strategies are sustainable for long-term profitability (Cullen & Parboteeah, 2005). A firm is essentially a pool of resources and capabilities which determine the strategy and performance of the firm. If all firms in the market have the same pool of resources and capabilities, all firms will create the same value and, thus no competitive advantage is available in the industry (Barney, 1991; Peteraf, 1993; Dierickx & Cool, 1989; Grant, 1991; Wernerfelt, 1984; Mahoney & Pandian, 1992). Lockett and Thompson (2001) state that RBV theory emphasizes firm heterogeneity and path dependency, as each firm's resource bundle is unique, and the consequence of its past managerial decisions and subsequent experiences, it follows that so is each firm's opportunity set.

The RBV theory also argues that, to sustain competitive, a firm should possess resources and capabilities that are imperfectly mobile, valuable, non-substitutable and difficult to imitate. These four characteristics can lead to the asymmetries in the resources and capabilities of firms in the industry and serve as the basis of sustainability. Besanko, et al., (2003) suggest that these four characteristics can be induced or reinforced through isolating mechanisms that are defined by Rumelt (1984) as the forces that limit the extent to which a competitive advantage can be duplicated or neutralized through the resource-creation activities of other firms. There are two groups of isolating mechanisms; impediments to imitation that impede existing firms and potential entrants from duplicating resources and capabilities, such as legal restrictions and intangible barriers (causal ambiguity, dependence on historical circumstances and social complexity; and early-mover advantages) that increase the economic power of a competitive advantage over time.

Grant, (1991) defines capabilities as a special type of resource; an organizationally embedded non-transferable firm-specific resource whose purpose it is to improve the productivity of the other resources possessed by the firm. The resources are less transferable and less imitable than "normal" resources. An organization achieves competence when it has an ability to sustain coordinated deployments of resources in ways that help that organization to achieve its goals.

The inability of competitors to duplicate resource endowments is one of the basic premises of the RBV theory. There are two ways for a firm to possess (and maintain) unique resources. The first is to buy them on factor markets (Barney, 1986). The way to build Sustainable Competitive Advantage (SCA) is to out-smart other firms on the resource market by applying a superior resource-picking skill. This is done by developing systematically more accurate expectations about the future value of resources than other market participants have. The second way to possess (and maintain) unique resources is to develop them. Capabilities by definition cannot be bought and must be developed or built (Teece, et al., 1997; Johnson, et al., (2002)). In both cases SCA is only achieved when the costs of acquiring the resources is lower than the gains they impact. From the RBV perspective, firms exist (instead of markets) because of the opportunity to seize rents created by resources and resource interdependencies within the firm.

Newbert (2007) concluded that the firm's organizing context and its valuable, rare, inimitable capabilities (dynamic and otherwise) and core competencies may be more important to determine its competitive position than its static resources, identified mostly by the resource heterogeneity approach. Peteraf (1993) suggested that a firm can sustain its

competitive advantage if it is able to generate sustainable economic rent by endowing it with superior internal resources. To facilitate the sustainability of the economic rent for the firm in the long term, the superior resources of the firm must be inelastic in supply (Dierickx & Cool, 1989; Peteraf, 1993), inimitable or non-substitutable (Lippman & Rumelt, 1982; Porter, 1980; Rumelt, 1984) and the costs of the resources must be lower than their economic rents (Barney, 1986; Dierickx & Cool, 1989). Resources are generally defined as those assets owned or controlled by a firm. According to Wernerfelt (1984) a firm's resources are those tangible and intangible assets tied semi-permanently to the firm".

The RBV theory has greater perceived advantage due to its focus on firm-level determinants of company strategy and performance. The RBV theory is compatible with both behavioral and economic schools of thought in strategy (Mahoney & Pandian, 1992). The RBV theory logic is simple and easy to understand and has a high level of trialability "the degree to which an innovation may be experimented with on a limited basis" (Rogers, 1983, p 15). With the attributes above, the RBV theory is adopted by most firms all over the world. In the early 1980s, the work of Porter (1980, 1985) focused attention on the role of industry in determining firm level profitability. Porter argued that some industries were more profitable than others due to their characteristics and that firms should select these "structurally attractive" industries or manipulate the forces driving competition in their favour through the selection of generic competitive strategies (Porter, 1980). Research showed differences in performance between firms in the same industry and even firms in the same strategic group (Cool & Schendel, 1988; Wernerfelt, 1984; Rumelt, 1991). Building on the work of evolutionary economics the

RBV theory has re-established the importance of an individual firm, as opposed to an industry as the critical unit of analysis. The RBV theory sees the firm as a bundle of resources (Barney, 1991; Wernerfelt, 1984). These resources explain the (occurred) success of the firm. In the RBV theory the firm's resources are generally defined as all the assets, capabilities, processes and knowledge that reside in the firm (Grant, 1991).

Tangible resources are those physical items or assets within an organization, such as equipment, facilities, raw materials, and equipment (Carmeli & Tishler, 2004). Intangible resources on the other hand, are those assets identified as know-how, skills, knowledge, perceptions, product reputation, culture and network that cannot be listed in regular managerial, accounting reports. Intangible resources are heterogeneous and immobile in nature (Barney, 1991; Peteraf, 1993). In the study of 72 Spanish manufacturing firm, Lopez (2003) found empirically a significant relationship between a group of intangible resources (company reputation, human capital and organizational culture) and organizational performance. The empirical results of the regression coefficients analysis indicated that intangible resources were positively related to the firm's performance. Corresponding to the results of López (2003), Henderson & Cockburn (1994) also found significant differences in firms performance when they possess different level of intangible resources. Awino (2007) study on selected strategy variable found that all cited strategy variable had independent effect on performance and joint effect was more than independent effect. Henderson and Cockburn (1994), Carmeli and Tishler (2004) examined 99 local government authorities in Israel for the relationships of a set of intangible resources with a set of multi-performance measures (financial performance, municipal development,

internal migration, and employment rate). The results from the multiple regression analysis indicated that all intangible resources variables were positively and significantly related to organizational performance variables.

Tuan and Takahashi (2012) study on resources, organizational capabilities and performance of manufacturing firms in Vietnam, found that different group of resources are related to each organizational capability and that cost reduction and quality capabilities are related to performance. The study was based on comprehensive framework of RBV theory.

Conceptual Hypothesis

The conceptual hypothesis for the study was that organizational resources 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 $p\text{-value} \leq 0.05$, 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 and organizational resources (OR) is as follows. Model : $ROA = \beta_0 + \beta_1 OR + \varepsilon$ where β_0 is the constant and β_1 is the coefficient (slope or gradient) and ε is the error term.

Results and Discussion

Table 1 indicates that the relationship of organizational resources and ROA was 0.130 indicating that organization resources explained 13 percent of variation in ROA in large manufacturing firms in Kenya. The remaining 87 percent was explained by other variables not within the scope of this study. The overall test of significance using F-value statistic was 13.804 which was significant because p value (0.000) was less than 0.05 significance level and the null hypothesis (0.000)

This implies that a unit marginal change in organizational resources result in an increase in ROA by Kshs 0.052. This implies that the organization should invest in more resources to enhance performance.

that organizational resources does not influence performance with respect to ROA of large manufacturing firms in Kenya at 0.05 level of significance was consequently rejected. In-order to establish individual significance t-test was carried out.

Table 1 indicates that the constant coefficient was not statistically significant but organization resources coefficient was statistically significant.

ROA = 0.052 OR

Table 1: Relationship Between Organizational Resources and Return on Assets

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	
1	.361 ^a	.130	.121		.06710	
a. Predictors: (Constant), Organization Resources						
Model		Sum of Squares	df	Mean Square	F-value	Sig.
1	Regression	.062	1	.062	13.804	.000 ^b
	Residual	.414	92	.005		
	Total	.476	93			
a. Dependent Variable: ROA						
b. Predictors: (Constant), Organizational Resources						
Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.104	.057		-1.805	.074
	Organizational Resources	.052	.014	.361	3.715	.000

a. Dependent Variable: ROA

The results were consistent with RBV theory (Wernerfelt, 1984; Barney, 1986; Peteraf, 1993). Wernerfelt (1984) emphasized that organization possessing valuable, rare resources and capability would have competitive advantage, which would in turn improve their performance. The findings are consistent with Carmeli and Tishler (2004) study in Israel, local government which found that intangible resources were positively and significantly related to organizational performance.

Lopez (2003) study of Spanish manufacturing firms found that there was significant relationship between resources and organization performance.

Conclusion

Organizational resources significantly influenced performance based on return on assets. The management of large manufacturing firms should ensure they have the necessary resources and effectively utilize them which would be

expected to affect the organizational performance.

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