

**ASSET STRUCTURE AND FINANCIAL PERFORMANCE OF LISTED
MANUFACTURING AND ALLIED COMPANIES IN KENYA**

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ABSTRACT

The purpose of this study was to establish the effect of asset structure on the financial performance of listed manufacturing and allied companies in Kenya. The study employed a casual research design. A census of eight companies listed under the manufacturing and allied segment of the Nairobi Securities Exchange was taken. The study used secondary panel data. The study estimated a multiple panel regression equation in order to establish the effect of asset structure on the financial performance of listed manufacturing and allied companies in Kenya. The study used random effect regression following the results of the Hausman specification tests. The results of the regression estimation established that tangible fixed assets had a negative and insignificant effect on the return on assets. Intangible fixed assets were found to have a positive and insignificant effect on the return on assets. Current assets were determined to have a positive and significant effect on return on assets. The study concluded of the different asset classes, the performance of manufacturing and allied companies in Kenya depends on the current assets. The study recommends that the managers of listed manufacturing and allied companies should reconsider their holdings of fixed assets and current assets.

Keywords: Asset Structure, liquidity, Return on Assets, Intangible, Tangible, Performance

INTRODUCTION

The manufacturing sector in Kenya is a significant contributor to the economic prosperity and development of the country. This sector contributes approximately 12% of the country's GDP (Deloitte,2017). However, over the last few years several of the companies in this sector have been registering declines in financial performance and in some instances losses. This poor financial performance has seen some of the companies that had been listed on the NSE being delisted. This is contrary to the expectations of the investors and government who expect stellar performance from these companies (Kenya Association of Manufacturers, 2017).

Evaluation of the total profits and total assets of the manufacturing and allied companies listed on the NSE exchange shows mixed results. In some years and for some companies the value of total profits increases as the value of total assets increase. In other companies as the value of total assets increase but the value of profits realised declines. Further, trend analysis indicates that in some companies during some years as the value of total assets reduces the value of total profits increases. These results indicate that research needs to be undertaken to determine the nature, the size, and the direction of the relationship between the assets and profits realised by the listed manufacturing and allied companies in Kenya.

Some scholars have studied the nature of the relationship, and the strength of the relationship between the asset structure and financial performance. Some studies, especially those targeting manufacturing sector have found a positive and statistically significant relationship between the asset structure and financial performance (Dong, Charles & Cai, 2012; Igbal & Mati, 2012; Rehyhani, 2012; Jamali & Asadi, 2012; Ishmael & Kehinde, 2013). However, other researchers have found that the effect of asset structure on financial performance to be negative (Li, 2004; Demir, 2005, Azadi, 2013). While other studies have found that the asset structure does not affect the financial performance (Okwo, Okende, &

Nweze, 2012; Dhillia & Vacharajani, 2012; Kotsina & Hazak, 2012; Mawik, 2014). The differences in the results of the different studies are due to different concepts, contexts, and methodologies.

The study is significant to the management of manufacturing and allied firms in Kenya who play a significant role in the process of asset acquisition and allocation, performance evaluation, and performance enhancement. The findings of the study will enlighten the management of the listed manufacturing and allied companies on the effect of their holdings of different classes of assets on their performance. There are many manufacturing and allied companies in Kenya. However, the study limited its scope to manufacturing and allied companies that are listed on the Nairobi Stock Exchange (NSE) during the period 2017. This would effectively exclude the Eveready East Africa Limited which had stopped being a manufacturing company but an importer of finished goods during some of the time period of the study. The study will cover the period 2010-2016. This period was thought to be sufficient for analysis of the trends in asset structure and financial performance.

LITERATURE REVIEW

Theoretical Literature Review

This study was anchored on the Resource Based View Theory, Pecking Order Theory, and Marginal Efficiency of Capital.

Resource-Based View Theory

The Resource-Based View (RBV) was first postulated by Wernerfelt in 1984 and later formalised by Barney in 1991 (Madhani, 2010). The RBV suggests that the organisational internal resources are an avenue for attaining and maintain superior competitive advantage and performance. The earlier RBV scholars centred their focus on the internal, firm-specific factors and their effect on the firm while explaining why some firms operating in the same

industry perform better than others (Wernerfelt, 1984; Barney, 1991; Grant, 1991; Peteraf, 1993; Amit & Schoemaker, 1993). The in-ward-looking approach has been shown to be both influential and useful in the analysis of numerous strategic issues; amongst them is the performance of the firm. For the internal resources to be strategic to the firm, they must be rare, difficult to duplicate, valuable, and over which a firm has control (Kapelko, 2006). These resources include mineral resources such as oil, intellectual property such as patents, and even trademarks and brands (such as the valuation of the EABL brand).

Pecking Order Theory

This theory was first postulated by Donaldson (1961) and later refined by Myers (1984). This theory asserts that a firm has access to three sources of financing which include internally generated funds, debt, and equity (Frank, Goyal, & Vidhan, 2011). According to the theory, the firm should first finance its projects with internally generated funds, secondly, they should use debt and the last option should be equity (Hiller, 2013). According to Hiller (2013), the order of financing arises out of asymmetry of information and signalling value.

The value of assets held by the firm affects the capital structure according to the pecking order theory of debt. The assets held by the firm can be pledged as security meaning the larger the asset structure of the company the higher the amount of debt that the firm can assess. The asset structure of the firm affects the ability of the firm to raise resources needed for the production process. According to Charalambaksi and Psychoyios (2012), the higher the production level the high the income level of the firm. This study borrowed from this concept that firms with assets are able to assess higher amount of debt without being forced to issue equity. This eventually translates into higher financial performance. Additionally, there are tax benefits associated with debt.

Marginal Efficiency of Capital

Keynes introduced the concept of marginal efficiency of capital (MEC). According to Keynes, investment in capital assets are made until the present value of expected future revenues, at the margin, is equivalent to the opportunity cost of capital (Eklund, 2013). The investment in assets is expected to stimulate streams of future cash flows. According to Eklund (2013), the firm assets held by the firm will depend on the expected rate of net return which is usually measured by profits during its lifetime and the price of the asset. Where the expected rate of profits is greater than the replacement cost of the asset, the firm will acquire the asset. This theory was relevant to this study as it identifies the motives of the firm in acquiring and replacing different classes of assets.

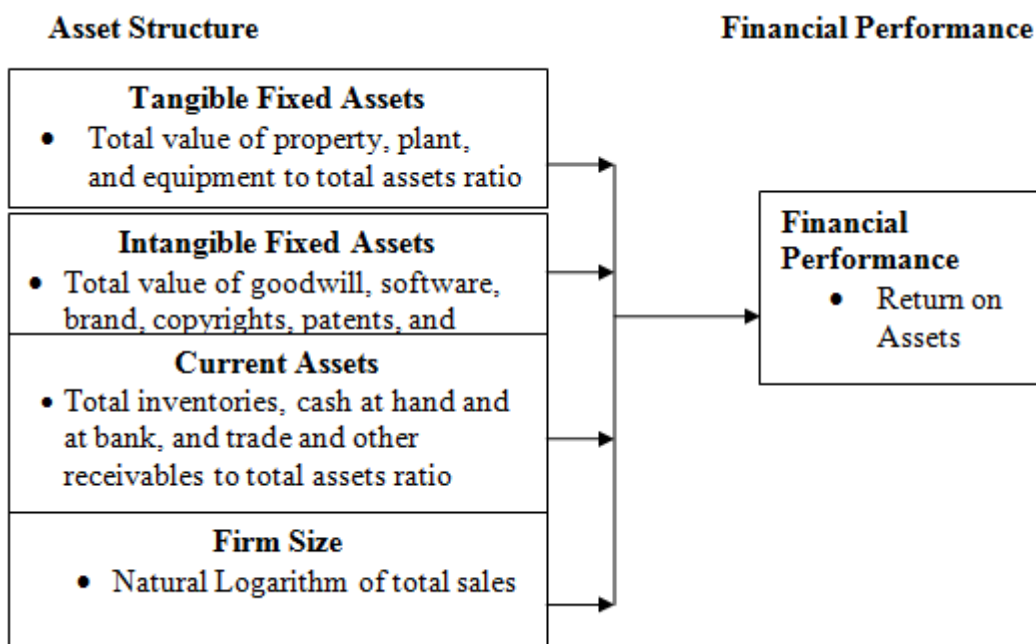


Figure 1: Conceptual Framework

METHODOLOGY

Research Design

The study adopted the causal research design. This design method is also referred to as explanatory research as it provides an investigation into the cause-and-effect relationship (Brians, Willnat, Manheim, & Rich, 2011). The target population of the study consisted of all the companies listed under the manufacturing and allied segment of the NSE. Currently, there are nine companies listed under this segment. Given the small number of companies listed under the manufacturing and allied segment of the NSE, the study will adopt census approach. According to Chichra (2013), the census approach is advantageous given that it provides exact and accurate results about the elements in the study. However, the study excluded Eveready East Africa Ltd because during the period of the study, the company suspended the manufacturing of goods and resulted to importation of fixed goods.

The researcher applied for a research permit from the National Commission for Science, Technology and innovation so as to be able to collect data required for the study. The study sought to collect data from audited financial statements and accounts of the manufacturing and allied firms listed on NSE. The study collected cross-sectional data from the individual companies. The time series data consisted of data covering the period 2010-2016. The study data was collected from the published statements, accounts, and reports from the website of the Capital Markets Authority (CMA) covering the period 2010-2016.

DATA ANALYSIS, PRESENTATION AND DISCUSSIONS

Table 1 presents the descriptive statistic of the study data

Table 1: Descriptive Statistics

Variable	Observations	Mean	Std. Dev	Min	Max
ROA	53	0.0917802	0.1342763	-0.5031962	0.3672704
Tangible Fixed Assets	53	0.4365180	0.1768478	0.1892447	0.9172042
Intangible Fixed Assets	49	0.1152935	0.1242907	0.0003920	0.3721140
Current Assets	53	0.4226900	0.1823926	0.0698861	0.7812304
Firm Size	53	15.991920	1.6070150	13.2640200	17.9835200

Source: Study Data, (2018)

The results presented in Table 1 indicate that the mean value of the return on assets of the 53 observations was 0.09178 with a standard deviation of 0.13428, a minimum of -0.5032 and a maximum value of 0.36727. The negative minimum value indicates that on average some companies were recording losses during the period of the study, however, positive maximum values indicates that some companies were profitable. The results summarized in Table 1 indicate that the mean of the ratio of tangible fixed assets to total assets is 0.43652. The standard deviation of the ratio of tangible fixed assets to total assets was found to be 0.17685, the minimum was 0.18925 and the maximum was 0.9172. This indicates that on average the approximately 44% of the assets held by listed and manufacturing and allied companies in Kenya consists of fixed assets suggesting that these category of assets are important for production.

The results presented in Table 1 indicate that the mean value of the intangible fixed assets is 0.11529. The standard deviation was found to be 0.12429 while the minimum and maximum values were 0.00039 and 0.37211 respectively. These indicate that on average the manufacturing and allied companies listed on the NSE require a small amount of intangible assets for their business processes. Table 1 indicates that the mean value and standard

deviation of current are 0.42269 and 0.18239. The minimum value was found to be 0.06988 while the maximum value was 0.78123. These results indicate that the listed manufacturing and allied companies in Kenya require significant amount of current assets during their business processes. As presented in Table 1, shows that the mean of the firm size was 15.99192, the standard deviation 1.60701 indicating that there was little variation between the sizes of the firms listed on the manufacturing and allied segment of the NSE in Kenya. The minimum value was 13.26402 and the maximum value was 17.98352.

Inferential Analysis

The results of the regression analysis are presented in Table 2

Table 2: Table 2: Feasible General Least Square Results

Variable	Coef.	Std. Err.	z	P> z
D1.TangibleFixedAssets	-3.123275	2.11584	-1.48	0.140
D1.IntangibleFixedAssets	2.222983	2.74033	0.81	0.417
D1. Current Asset	2.981295	2.21088	1.35	0.018
D1. Firm Size	0.0977831	0.06048	1.62	0.006
Constant	-0.016747	0.01787	-0.94	0.349
Wald chi2(4) = 70.61	Prob > chi2 = 0.0000			

Source: Study Data, (2018)

The results presented in Table 2 indicated that the coefficient of tangible fixed assets is -3.1232 with a p-value of 0.140. This implies that tangible fixed assets have a negative but insignificant effect on the ROA. These findings are consistent with the findings of Ani (2014) who established that fixed assets have an insignificant effect on the financial performance of manufacturing firms. Further, Ubesie and Ogbonne (2013), Reyhani (2013), and Okwo, Okeule, and Nwele (2012) found that the relationship between fixed assets and financial performance as being positive but insignificant.

The results summarised in Table 2 indicate that the coefficient is 2.223 with a p-value of 0.417. This implies that intangible fixed assets have a positive but insignificant effect on the ROA of listed manufacturing and allied companies in Kenya. These findings are similar to those of Gamayuni (2015) who established that intangible fixed assets have an insignificant effect on financial performance.

With regard to hypothesis (iii) the study established that current assets have a positive and significant effect on financial performance. The results presented in Table 2 show that the coefficient is 2.9813 with p-value of 0.018. This implies that a unit increase in the amount of current assets will result in an increase in the return on assets by 2.9813. These findings are consistent with the findings of Yahaya et al. (2015).

The results in Table 2 indicate that the coefficient for firm size is 0.0978 with p-value of 0.006. This indicates that firm size has a positive and significant effect on the financial performance of manufacturing and allied firms in Kenya. The results imply that a one unit increase in the firm size will result in a 0.0978 increase in the financial performance of listed allied and manufacturing firms in Kenya. The results presented in Table 2 show that the value of the computed Wald Chi-Square in Table 4 is 70.61 with a p-value of 0.000 which is less than the critical value of 0.05. This indicates that the independent variables in the study jointly determine the return on assets.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions of the Study

Based on these findings the study concluded that there is a mismatch between the firms' holdings of fixed assets and profits. The findings are attributed to the scaling of investment in fixed assets and the conservative accounting techniques. The study concluded that intangible fixed assets which include items such as goodwill and patents have monetary value but are not useful in converting the raw material into finished products which are converted to sales.

The study concluded that the current assets have productive capacity in the firms and are used to generate sales and profits. Further, the study concluded that the firms are effectively and efficiently utilising their current assets.

Policy Implications and Recommendations

The study found that fixed assets have a negative and insignificant effect on the financial performance of manufacturing and allied firms in Kenya. Specifically, the study found that as the level of fixed assets increases the level of profits reduce. However, the reduction was not significant. The study recommends that the managers of the manufacturing and allied companies listed on the NSE should reduce investment in plants, property, equipment and focus on utilising their current holdings.

The study established that intangible fixed assets have a positive but insignificant effect on the financial performance of listed manufacturing and allied firms in Kenya. Consequently, the study recommends that the management should dispose of some of the intangible fixed assets such as financial instruments so as to free up the resources for the production of goods and services.

The study established that current assets have a positive and significant effect on the financial performance of listed manufacturing and allied firms in Kenya. The study recommends that the manufacturing and allied companies should change their holdings of current assets relative to fixed assets. The mean holding of current assets was found to be

45% against fixed assets holding of 55%. The holding of different classes of assets should be guided by their contribution to the profitability.

Suggestions for Further Research

The results of the study indicate that only current assets and firm size have statistically significant effect on the financial performance of listed manufacturing and allied companies in Kenya are explained by the asset structure. This indicates that there are other aspects of the financial performance of the firms cannot be explained by the model. The researcher recommends that further studies should be conducted to explain the unexplained variation in the financial performance of the manufacturing and allied firms in Kenya. Additionally, further studies should be conducted on other listed manufacturing and allied companies in East Africa in order to have a basis for comparison.

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