Effect of Firm Size On Financial Performance of Manufacturing Firms Listed in Nairobi Stock Exchange

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Abstract

The purpose of study was to assess the effect of firm size on financial performance of manufacturing firms listed in Nairobi Securities Exchange. Manufacturing firms are expected to increase profits from its capital base, but there has been decreasing trend over the years. The decline in financial performance over the period under study can be attributed to the weak capital structure characteristic of the manufacturing firms. Firms' characteristic is all about its capital structure which is the life-blood and nerve center of a business. This study was guided by the following specific objective; to establish the effect of the firm size on financial performance of manufacturing firms listed in NSE, the study was carried out using a correlation design. The target population comprised of manufacturing sector. The secondary data was obtained from annual financial statements of all manufacturing firms prequalified in Kenya, and operated between the years 2012 to 2018. Data was analyzed by use of panel descriptive statistics. The study concluded that Firm size was characterized in Carbacid investments. Firm size as per each manufacturing firms which depicts that Carbacid investments had highest firm size. The firm's size was characterized by financial position being highest mean. The firm's size was not highly characterized by number of employees. This recommended that most manufacturing firms to use number of employees to measure firm size. Thus, there is need to carry out the same study to other sectors especially long period than five years.

1. Introduction

Firm characteristic includes the knowledge and information capabilities and processes within a firm. The firm size influenced financial performance as part of capital structure. Capital structure is a firm's mix of securities. Firm's size was started by Franco Modigliani and Merton Miller in 1958, their propositions are considered the foundation upon which modern capital structure knowledge is advanced (Abeywardhana, 2017).

In United States, firms can be financed entirely by common stock and therefore all the cash flows belong to the stockholders. When both debt and equity are issued, cash flows are split into two streams by the firm, a relatively safe stream that belongs to the debt holders and a more risky one that belongs to the stockholders. A firm's capital structure can be changed almost overnight (Brealey, 2012). The capital structure which is a financing decision is a key managerial decision that influences the shareholder's return and risk (Danso, 2014).

In Swaziland, there are many factors affecting firm performance in Greece, however, financial leverage was the main factor. It is because proportion of borrowed capital can be used to make money for operations. The characteristic of this firm was based on debt related to the conditions that limit growth. The efficient of firm size is the value of performance based on return of assets.

Firm size is difficult to the busing expansion as it provides large liquidity which may limit cash flows activities. There is no effect of firm size on financial performance but the firms expect to increase in tax liability to enhance performance (Gathogo & Ragui, 2014).

A Firm characteristic policy should not be a static document, but has to be reviewed periodically and revised in light of changing circumstances surrounding the financial needs. To a large extent, the economy of the firm served by the bank dictates the composition of the loan portfolio. The widely divergent circumstances of firm size regime economies and it is a considerable variance in preclude establishment of standard. There are however, certain firm characteristic areas of consideration and concern that should be addressed in the lending policies of all banks regardless of firm size need to be explored (Njeri 2016).

1.2 Statement of the problem

Manufacturing firms are expected to increase profits from its capital base, but there has been decreasing trend over the years (Masira R., 2018). The decline in financial performance over the period under study can be attributed to the weak firm size. This has been evidenced by Nairobi securities exchange reported that Manufacturing firms listed in Nairobi Securities Exchange recorded a profit after tax of Ksh.6.47 Billion in 2016 as compared to that of Ksh.14.17 Billion in 2010 (KNBS,2017). Firm's size have been employed in manufacturing firms such as a profitability and asset tangibility, but it is not clear which of the characteristic can improve performance in terms of profitability. This is not well objected to maximize financial mix from market share price per share of the firm (Minfang 2010). This is done by debt and equity as the two major classes of liabilities with debt holders and equity holders to manage investors of the firms. The level of risk control in debt holders are expecting less control as they earn fixed rate of return and protected by contractual obligations with respect to their investment. A company should earn profits to survive and grow over a long period of time. Sufficient profits must be earned to sustain the operations of the business and to be able to obtain funds from investors for expansion and growth (Pandey, 2011).

Owolabi (2013) analyzed firm size on the profitability of firms in the manufacturing sector in Kenya. The study aimed to verify the firm size on the profitability of manufacturing firms in Kenya. Using a sample size of 20 firms, the study was analyzed using regression analysis. The variables used were leverage, equity financing, firm's asset tangibility and the size of the firm. The study therefore, assessed the general manufacturing sector. It also left out the size of the firm and tax as independent variables. This study therefore assessed the effect of firm's size on the financial performance of manufacturing firms, specifically those listed in NSE.

2. Theoretical review

Modigliani and Miller suggest that the composition of the firm characteristic is an irrelevant capital structure in the company's market valuation. They have really attacked the traditional position that companies have the optimal capital structure. In Modigliani and Miller (1958) the Cost of Capital, Corporation Finance and the Theory of Investment, strengthen the net operating income approach by adding a behavioral dimension to it.

In Van Horne (2002), the Modigliani-Miller (MM) position is based on the following assumptions: (1) Perfect capital market. There is a free flow of information in the market that can easily be accessed by investors. There are no costs involved in obtaining the information. (2) Securities issued and traded in the market are infinitely divisible. (3) No transaction costs such as

flotation costs, underpricing major issues, brokers, transfer taxes (4) All participants in the market are rational that they are trying to maximize profits or minimize their losses. (5) All investors have homogeneous expectations about future earnings of all firms in the market. (6) The company can be classified into the class `equivalent return '. Firms in each class have the exact same profile of business risk. So, the company can be taken as perfect substitutes for one another (Mburu 2015)

Danso, F., (2014) analyzed the Modigliani and Miller 1958 theory and noted that the arbitration process postulated to support their position said that the value of the company with leverage cannot be higher than the value of a company with no leverage. On the other hand, the value of a company with no leverage cannot be higher than the value of a company with leverage. Therefore, the leverage in the capital structure has no importance in a perfect capital market. It implies that, firms that are identical in all respects, except for their capital structure, must have the equal value. In the event that they have a different valuation, the arbitration process will initiate. This will maintain to occur until the two companies command the same valuations. At this position, the market reaches equilibrium or stability.

2.1 Empirical Literature Review

2.1.1 Firm size

In this study company size is measured by the natural logarithm of total employees. As stated in the trade-off theory, firms decide how much debt or equity financing they require by weighing the costs and benefits of such decision. Large sized firms normally have more business diversification than small firms in terms of credit ratings, constant cash flow, and lower risk of being dissolved. When company size is used as a proxy for the (inverse) probability of default, it should not be strongly positively related with leverage in countries where costs of financial distress are low. Furthermore, according to the Pecking order hypothesis, informational asymmetries between insiders within a firm and capital markets are expected to be lower for large firms so large firms should be more capable of issuing informational sensitive securities like equity (Jooma Y., & Gwatidzo, (2013).

Maja Pervan, Ivica Pervan and Marijana Ćurak (2017) did a research on sources of finance available to small scale enterprises in Nairobi. The aims of the study were to identify which types of credit are easily obtainable by SSEs and to evaluate the credit policies SSEs. The research found out that most entrepreneurs view borrowing as both important and necessary for business pursuits. The majority indicated that the effect of credit on the business as positive, and would, when possible, borrow to save business from collapsing. On access to credit, majority of entrepreneurs relied on limited own and family savings for start-up and additional capital. For this reason, these enterprises have poor access to credit. The research also showed that formal financial actors, such as banks, provide relatively large credit volumes for long time at moderate interest rates, but the procedures take long time and formal collateral and guarantors are required. In addition, the supply of short term credit was noted to be restricted because transaction costs are too high. He further states that, informal financial actor, includes money lenders and Rotating Savings Associations (ROSCAs) provide quick and easily accessible credit for short periods and these suppliers flexible as regards collateral requirements, though conditions are insecure and interest rates is high.

Masira R., (2018) did the study on the relationship between company size and total debt in Chinese firms which produced a positive result, but this cannot be statistically significant in the fixed effects model. However, the coefficient of the company size to long-term debt will negative and highly significant, which suggests that company size has a negative relationship with long-term debt. The negative relationship however, will not as a result of informational asymmetries because the market capitalization of equity in China will very high. The negative relationship between size and long-term debt may will said to be due to the fact that large firms have better access to capital markets for equity finance because of their reputation in the markets and the attraction of the capital gains in the secondary markets. In 2015, Psiwa's study to determine the relationship between gearing levels of companies and size found that firm's size will positively related to debt ratios.

From the literature reviewed it was observed that firm's size have an effect of financial performance. Different studies have viewed firm size as firm size, liquidity and debt size. Study done by Owolabi (2013) analyzed the firm's size as a determinant of capital structure on the profitability of firms in the manufacturing sector. Gathogo & Ragui, (2014) found that firms in Kenya both listed and unlisted in Nairobi Securities Exchange are characterized by their capital structure choices based on institutional factors. These have not focused on asset growth of the firm, profitability, cost of debt, size of the firm and liquidity. Thus, this study will be conducted for considerations.

3. Research Methodology

The study was carried out using a correlation design, employing quantitative data variables. According to Masira R., (2018) research design is a process of describing the situation the way it is with the aim of collecting data in order to test hypotheses or to answer questions concerning current status of the subjects in the study. Correlation design is a type of research design where a researcher seeks to understand what kind of relationships. It will advantageous in that it allows the collection of large sum of data from the standard population, Micheni (2011). Target population comprised of all the listed firms in the manufacturing sector which was prequalified for a period of five years for easy analysis of the research problem, which is 2012 to 2018. Since the population is small, the study conducted census of all 9 firms. The secondary data was obtained from annual financial statements of listed manufacturing firms in Kenya which have operated between the years 2012 to 2018.

4. Results and Discussions

4.1 Firm size

Descriptive statistic was conducted to analyze panel data collected from the financial statements. Table 4.2 shows Carbacid investments had mean of 6.8020 and standard deviation 2.59257, BOC Kenya had mean of 2.2880 and standard deviation.43883 Unga Group LTD had mean of 2.1800 and standard deviation .46347, British American Tomacco had mean of 1.4540 Eveready East Africa Ltd had mean of 1.2060 and standard deviation.28228 Mumias Sugar Company LTD had mean of 1.0100 and standard deviation.76099, Kenya Orchards had mean of.9880 and standard deviation 1.38070,Flame Tree group had mean of.8820 and standard deviation.82150, EAST African Breweries LTD had mean of.8040 and standard deviation.14258.

Table 1. Firm size of manufacturing firms

	N	Minimum	Maximum	Mean	Std. Deviation
BO.C Kenya	5	1.94	3.05	2.2880	.43883
British American Tomacco	5	1.18	2.13	1.4540	.39093
Carbacid investments	5	4.26	10.09	6.8020	2.59257
EAST African Breweries LTD	5	.70	1.05	.8040	.14258
Mumias Sugar Company LTD	5	.34	2.20	1.0100	.76099
Unga Group LTD	5	1.53	2.67	2.1800	.46347
Eveready East Africa Ltd	5	.78	1.54	1.2060	.28228
Kenya Orchards	5	.00	2.86	.9880	1.38070
Flame Tree group	5	.00	1.65	.8820	.82150
Firmsize	5	1.42	2.16	1.9144	.29633
Valid N (listwise)	5				

From the table 1 indicates the trend of firm size as per each manufacturing firms which depicts that Carbacid investments had highest firm size of a mean of 6.8020 and standard deviation 2.59257, while the least EAST African Breweries LTD had mean of.8040 and standard deviation .14258.

Table 2. firm size in relation to indicators

	N	Minimum	Maximum	Mean	Std. Deviation
Number of employees	35	0	114	29.02	40.469
financial position	35	1	152	34.74	48.490
Valid N (listwise)	35				

The study determined the overall panels as per the firm size indicators. This was presented in table 2 which depicts number of employees of a mean of 29.02 points with standard deviation of 40.469, and financial position of a mean 34.74 points to a standard deviation 48 .490. The number of employees with the least mean of the value to firm size while financial position of highest mean. This implied that most manufacturing firms use financial position for their firm size size.

The study conducted regression analysis to investigate whether there is relationship that exists between firm characteristic and financial performance of manufacturing firms listed at the Nairobi security exchange. The multiple regression analysis was given in form equation shown.

Table 3. Regression Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	21.859	91.301		.239	.812
	Firm size	.113	.240	.069	.470	.641

a. Dependent Variable: financial performance

From the regression coefficients the following equation was established

$Y = 21.859 + .322X_1$

Y- Financial performance,

X_1 – firm size of a firm,

The regression results showed that asset tangibility and firm age had significant effect on financial performance with regression coefficient R .322 and .241 with probability value of .045 and .021 <0.05 respectively at 95% confidence interval. Firm size has insignificant effect on financial performance of manufacturing firms at Nairobi security exchange R .113 with p .641>0.05. The study also indicated that firm size cannot predict financial performance of manufacturing while leaving other variable constant. On the hypothesis that Firm size has no statistical significance effect on financial performance of manufacturing firms listed in NSE it is accepted, since the calculated r .113 with p value .641>.05 at 95% confident level. This concurred with Jooma and Gwatidzo (2013) posited that sub Saharan Africa firms possess low leverage ratio than market or firm sized economies

ANOVA Table 4 was also used to establish the model fit, as presented in the results shown

Table 4.11 ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	151797.523	3	50599.174	5.143	.005[b]
	Residual	305005.387	31	9838.883		
	Total	456802.910	34			

a. Dependent Variable: financial performance

b. Predictors: (Constant), Firm Size

The calculated F showed that predictors' variables are determined at 5.143, p value .005 given at degree of freedom Df 3, 151797.523). This implied that there is significant effect between firm sizes on financial performance. The p value 0.05<0.005 which imply that the regression model is statistically significant and thus, the model holds to predict firm size and financial performance. This agreed with the study of Nalwelishe (2013) who said that the regression model is

statistically significant can be used to predict the relationship between firm size and financial performance.

5. Conclusions and Recommendation

The financial statements of manufacturing firms listed at NSE from 2012 to 2018 were used in respect to their financial performance. The causation effect of manufacturing firms is presented with tables on Firm size which indicated that Carbacid investments had mean of 6.8020 and standard deviation 2.59257, and EAST African Breweries LTD had the lowest mean of.8040 and standard deviation.14258. Firm size as per each manufacturing firms which depicts that Carbacid investments had highest firm size, while the least EAST African Breweries LTD. The firm's size was given by the number of employees the least while financial position being highest mean. This implied that most manufacturing firms use financial position for their firm size.

The study concluded that financial performance of manufacturing listed firms. The study concluded that financial performance was depicted by return of equity. From the correlation matrix, the study concluded that there was a positive correlation between firm size and financial performance. Further, it depicted that Firm size has no statistical significant effect on financial performance of manufacturing firms listed in NSE it is accepted.

Based on firm's size, the study recommended that firm size was characterized in Carbacid investments. The firm's size was not highly characterized by number of employees. This recommended that most manufacturing firms to use number of employees to measure firm size.

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