Equity Financing and Firm Value in Nigeria

Auwalu Sani Ibrahim[1], Hadiza Sabo[2], Sunusi Kabiru[3], Sharafuddeen Ibrahim Abubakar [4]

[1,2,3,4]*Department of Management Science, Kano State College of Education and Preliminary Studies*

Abstract:- **This study investigates the influence of equity financing on firm value in Nigeria using panel analysis technique for 12 listed industrial goods enterprises from 2006 to 2016. The estimate reveals that equity finance reduce the capacity of firm value in Nigeria. It is also discovered that the firm size and growth have negative influence on the value of frim. Hence, the study suggests that managers should design appropriate management skills to come up with the efficient capital mix in financing firm business. This could be through taking into consideration of various theoretical application and the weakened nature of the economy in the best combination of capital for viable business operation.**

Keywords: **Equity financing, value of firms, firm size, growth, Nigeria.**

I. INTRODUCTION

Nowadays, firm's business operation in the world has been on deteriorating trend due to improper capital combination (Aziz &Abbas 2019). The crucial decision on the best capital mix for better performance of business operation in developing world is worrisome. In ability of large sum of debt to maximize firm operation, particularly, in developing economies like Nigeria have drawn back and collapse of a significant number of firms the country. An analysis based on the Nigerians stock exchange market reveals that in a decade almost 46 percent of listed enterprise have lose substantially for debt financing. This scenario may be attributed to lack and poor management to take decision on the appropriate capital combination for business operation. In finance theory, disagreement exists with respect to the bearing of capital mix on firm performance. The traditional view of corporate capital combination and valuation holds the existence of viable capital mix, and thus the firm performance can be increased through a judicious financing mix(Saunders, Lewis, & Thornhill 2009). Several studies and theoretical affiliation has been discuss on the optimal capital structure and its applicability for high yield business performance (Brealey & Myers 2003). Therefore, adopting a suitable measure could guide firms to pull out from such issues related to equity finance and value of firms in Nigeria. This study contributes in the existing literature by studied the influence of equity finance on firm performance in Nigeria as most these studies are concentrated in developed nations and very few in African nations. This will help managers and stakeholders in making efficient management decisions with the regard to appropriate capital combination for greater firm performance.

II. LITERATURE REVIEW

The linkage among equity financing and value of firm has been discuss in the literature. For instance, Masidonda et al.

(2013) studied the association among capital mix and value of firms. The study illustrates that capital combination influence firm performance positively. Similarly, Nirajini and Priya (2013) documents that there is direct influence of equity finance on the firm performance in Sri lanker. Shah and Khan (2014) used quoted companies in Karachi to assess the influence of capital mix on firm performance. The outcome reveals that equity assets accelerates frim performance. In another development, Kodongo, Mokoaleli-Mokoteli, and Maina (2014) stress that inappropriate use of capital mix reduce the capacity of firm value in Nairobi. This outcome is similar with the result reported by earlier studies Mwangi, Makau and Kosimbei (2014).Vo and Ellis (2017) argued that equity finance decrease the firm performance in Vietnam. Achieng, Mutur, and Wanjare (2018) analyze data of 40 non-financial enterprises to estimate the influence of equity finance on firm performance in Kenya. The outcome shows equity finance condense firm performance. Aziz and Abbas (2019) their estimate reported that equity financing negatively influence value of firm in Pakistan from 2006 to 2014. Salerno (2019) employ OLS technique to evaluate the effect of equity financing on firm performance using 533 sample of SMEs in Europe. The finding reveals that equity finance improve firm performance. Form the literature reviewed it has been observed that most the studies on the effects of capital combination and firm performance are concentrated on developed nations. Examining the influence of equity financing and firm performance are limited particularly in Nigeria. Hence, this study examines the influence of equity finance on value of firms for Nigerian industrial good enterprises.

III. MATERIALS AND METHODS

The study comprised the ex post facto research design. This is deemed necessary in examining how an independent variable, affects a dependent variable. The ex-post facto research design also helps to ascertain possible cause association through identifying some existing consequence on explaining variable (Sambo, 2005). 19 industrial goods enterprises are used for the analysis. The criteria of industrial goods enterprises are based on Nigerian stock Exchange classification and its choice by this study is informed by the need to make generalizations that cover the entire industrial goods companies. Therefore, census method have been employed for data collection and enhances validity of the collected data by eliminating errors associated with population (Saunders, Lewis & Thornhill, 2009). Census is a total enumeration which remains merely a head count from part of the population. Similarly, Mugenda and Mugenda (2003)

noted that a census is preferred where the population is small and manageable. Hence, information from the census units is used to determine the characteristics for the population. Nonetheless, census method has given equal chance for the entire population.

However, a two-point filter is used to censure the population of the study. For a company to qualify as part of the census, the company must satisfy the following: Firstly, it must be listed within the period of the study. Secondly, it must have the required data for the study. The first filter is to ensure that the same group of companies is used all over the period of the study so as to satisfy the requirement of a panel study. The second filter is to avoid redundant sample. As a result of the foregoing criteria, five companies are dropped because they failed to meet filter (i) the companies are Austin Laz & Company PLC, Cu tix PLC, Dangote Cement PLC, Paints and Coatings Manufacturers Nig. PLC and Portland Paints and Products Nigeria PLC. Moreover, two companies failed to meet filter (ii) and the companies are African Paints (Nigeria) PLC and Ipwa PLC. Hence, a total of seven (7) companies are dropped from the initial population of nineteen (19) companies.

The data were sourced from the annual reports and accounts of the industrial goods companies listed on the Nigerian stock spanning from 2006 to 2016. To minimize data error and ensure accuracy, the data collected from individual's firm's annual report and the financial statements of the enterprises published in the Nigerian stock exchange Fact book for the various years and the data obtained from these sources relate to both explain and explanatory variables. Though, the data collected was analyzed using multiple regression analysis using 132 observations, including 12 cross-sectional units, Time-series length of 11years. The study analyze the effects of debt financing on value of listed industrial goods companies in Nigeria. Furthermore, multiple regression was employed for model estimation as it is describe in equation 1

$$VF = f \ (EQTA, FRMSZE, GRWTH) \qquad (1)$$

In equation (1) EQTA represent equity financing, FRMSZE is firm size and GRWTH represent growth. The econometrics specification of the model is on the following equation.

$$VF_{it} = \alpha_{0 \ it} + \beta_1 EQTA_{it} + \beta_2 FRMSZE_{it} + \beta_3 GRWTH_{it} + \varepsilon_{it} \ (2)$$

In equation (2) VF represent value of firm, EQTA is equity financing (ratio of equity to total assets), FRMSZE is firm sizeIn equation (2) VF represent value of firm, TDTA is debt financing (ratio of total debt to total assets), FRMSZE is firm size(logarithm of total assets), and GRWTH represent growth,(logarithm of total assets),while β and α are the coefficient of the variables, i represent the corrections of the firms, t is period of time, ε is error term.

IV. RESULTS

Table 4 illustrates the outcome of the estimated model. The adjusted R^2 0.98, 0.95 and 0.97 for the random, fixed and OLS models, respectively. This indicates that more than 90% of the change in Tobin's Q as a measurement of value of listed industrial goods companies in Nigeria is influence by the changes in their equity EQTA, firm size FRMSZE and growth GRWTH. Hence, the variables in the estimated random effects model have a mutual very strong impact on the dependent variable. The F-statistics is also satisfactory enough for use in making useful inference.

Moreover, in order to further ascertain the validity of the estimated random effect model, various post estimation tests of autocorrelation, Hausman specification and heteroscedasticity tests were conducted. As can be seen from Table 5, the result of the autocorrelation test indicates that there was no problem of autocorrelation in the variables. As for the test of heteroscedasticity, the Probability value of the Cameron and Trivedi im-test shows that there was a problem of heteroscedasticity in the original model. However, such problem was dealt with by conducting robust estimation of the original model and therefore, the presented random effect model being estimated using robust standard errors is free from heteroscedasticity. Additionally, the VIF test for multicollinearity among the variables indicates that none of the variables in the model has a VIF value of up to 5 and therefore no much multicollinearity among the variables included in the model.

However, the result of Hausman specification test indicates that the random effect here is the most appropriate model and therefore interpretation of results in Table 4 will concentrate only on the estimated random effect model presented in Table 5. Moreover, the evidence found from Table 4 that EQTA and GRWTH are significant in explaining variations in TOBINS Q, only FRMSZE is found to be insignificant. However, all the two significant variables EQTA and GRWTH are found to meet the expected sign or supported the hypotheses, while FRMSIZE is found to have a different sign than expected. The negative result of FRMSZE indicates that an increase in the above mentioned variable by one unit will decrease value of firm by 0.003 units. Furthermore, the negative result of EQTA, indicates that a decrease in EQTA by one unit will increase value TOBIN'S Q of firm by 1.0 unit. The table also revealed that EQTA has the highest beta coefficient value (-1.0141); indicating the strongest contribution in explaining the dependent variable.

However, the hypothesis of the study states that equity financing EQTA has no significant relationship with TOBINS Q. Nevertheless, contradictory to the hypothesis, the regression results show that equity financing EQTA is found to be significant at 1% but negatively related to TOBINS Q. Owing to the beyond outcome reported as regards to equity financing EQTA showing that, it is significant in influencing the value of firms, thus providing an evidence to reject null hypothesis of the study.

Table 4: The estimated models of equity financing EQTA on firm value TOBIN'S Q

VARIABLES	(1) OLS	(2) Random Effects	(3) Fixed Effects
eqta	-1.0030***	-1.0141***	1.0237***
	(0.0180)	(0.0200)	(0.0225)
frmsze	-0.0047	-0.0003	0.03520
	(0.0058)	(0.0083)	(0.0235)
grwth	-0.0005***	-0.0008***	-0.0005
	(0.0003)	(0.0003)	(0.2270)
Constant	1.0470***	1.0092***	-0.6688***
	(0.0526)	(0.0776)	(0.2270)
Observations	90	90	90
R^2 Within R^2 Between R^2 Overall		0.9465 0.9903 0.9709	
Autocorrelation: F(1,7)= Prob>F=		0.994 0.3402	
Hausman: Test(χ^2) Prob>χ^2=		3.92 0.2704	
IM Test: χ^2 Prob>χ^2		25.42 0.0203	

Note: Robust Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Likewise, the problem of multicollinearity among the variables used in the estimated model is investigated using the variance inflation factor VIF presented.

Table 5 Multicolinearity Diagnostic Test

Variables	Tolerance Value	VIFs Value
EQTA	1.37	0.7307
FRMSZE	1.37	0.7322
GRWTH	1.00	0.9973
Mean VIF	1.25	

V. CONCLUSIONS

The study examines the influence of equity financing on firm performance in Nigeria from 2006 to 2016. The result shows that, the variable equity financing EQTA has negative but significant effect on value of listed industrial goods companies in Nigeria. This connote that, an increase in equity financing EQTA in companies, decreases the value of listed industrial goods companies in Nigeria significantly, when there is a commiserate increase in the cost of capital WACC level. In addition, firm size and growth negatively influence value of firm in Nigeria. Hence, the study suggests that managers should design appropriate management skills to come up with the efficient capital mix in financing firm business. This could be through taking into consideration of various theoretical application and the weakened nature of the economy in the best combination of capital for viable business operation.

REFERENCE

[1]. Achieng, B. O., Mutur, W., & Joshua Wanjare. (2018). Effect of Equity Financing Options on Financial Performance of Non-Financial Firms Listed at the Nairobi Securities Exchange, Kenya. *Applied Economics and Finance*, *5*(4).

[2]. Aziz, S., & Abbas, U. (2019). Effect of Debt Financing on Firm Performance: A Study on Non-Financial Sector of Pakistan. *Journal of Economics and Commerce*, *2*(1), 8–15.

[3]. Brealey, R., & Myers, S. . (2003). *Principles of Corporate Finance* (7th ed.). United Kingdom: McGraw Hill, London UK.

[4]. Kodongo, O., Mokoaleli-Mokoteli, T., & Maina, L. K. (2014). Capital Structure, profitability and firm value: Panel evidence of listed firms in Kenya. Profitability and firm value.

[5]. Masidonda, J. L., Idrus, M. S., Salim, U., & Jumahir, D. (2013). Determinants of Capital Structure and Impact Capital Structure on Firm Value. *Journal of Business and Management*, *7*(3), 23–30.

[6]. Mugenda, M. O., & Mugenda, G. A. (2003). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi, Kenya: Laba Graphics Services,.

[7]. Mwangi, L, W., Makau, M, S., & Kosimbei, G. (2014). Relationship between Capital Structure and Performance of Non-Financial Companies Listed In the Nairobi Securities Exchange, Kenya. *Global Journal of Contemporary Research in Accounting, Auditing and Business Ethics*, *1*(2), 72–90.

[8]. Nirajini, A., & Priya, K. . (2013). Impact of capital structure on financial performance of the listed trading companies in Sri Lanka. *International Journal of Scientific and Research Publications*, *3*(5), 2250–3153.

[9]. Salerno, D. (2019). Does the private equity financing improve performance in family SMEs? *Journal of Family Business Management*, *9*(1), 110–124. https://doi.org/10.1108/JFBM-12-2017-0046

[10]. Sambo, A. A. (2005). *Research Methods in Education*. Ibadan: Stiling-Horden Publishers (Nig.) Ltd. Gaaf Building.

[11]. Saunders, M. L., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*. London,UK: Financial Times Prentice Hall Inc.

[12]. Shah, A., & Khan, S. (2014). Determinants of capital structure: Evidence from Pakistani Panel data. *International Business Research*, *3*(4), 265–282.

[13]. Vo, X. V, & Ellis, C. (2017). An empirical investigation of capital structure and firm value in Vietnam. *Finance Research Letters*, *22*, 90–94.