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The Effect of SMEs' Cost of Capital on Their Financial Performance in Nigeria

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Abstract Small and medium enterprises (SMEs) play an important role in the development of a nation's economy. The reasons for this are the fact that SMEs provide benefits such as job creations, knowledge spillover, economic multipliers, innovations driver and cluster development in an economy. Given the importance of SMEs in an economy, it becomes quite plausible to look at factors affecting their financial performance which is a major determinant of their survival and growth. This paper examines the effect of SMEs cost of capital on their financial performance using a sample of five SMEs from the total population of eleven SMEs listed on the Alternative Securities Market (ASEM) of the Nigerian Stock Exchange Market during the five year period, 2008 – 2012. Data for the selected SMEs were generated and analyzed using linear regression technique. The result shows that SMEs cost of capital have insignificant effect on their financial performance (return on asset, ROA). The outcome of these finding, indicates consistency with prior empirical studies and provide evidence in support of Modigliani and Miller, M&M study, 1958. It is recommended that SMEs should utilize the opportunity created by ASEM to access long term financing as the costs have no effect on their performance.

Keywords: *ASEM, cost of capital, financial performance, SMEs*

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1. Introduction

Small and medium enterprises (SMEs) play an important role in the development of a nation's economy. The reasons for this are the fact that SMEs provide benefits such as job creations, knowledge spillover, economic multipliers, innovations driver and cluster development in an economy (Chinaemerem & Anthony, 2012). Given the importance of SMEs in an economy, it becomes quite plausible to look at factors affecting their financial performance which is a major determinant of their survival and growth.

SMEs represent about 90% of the manufacturing/ industrial sector in terms of enterprises in the Nigerian economy. Studies showed that approximately 96% of Nigerian businesses are SMEs compared to 53% in the US and 65% in the Europe (Banji, 2010). Nadada (2013) observes that the number of MSMEs in Nigeria is at 17,284,671 with total employment of 32,414,884. Despite the encouraging numbers of SMEs and the huge percentage they occupied in the economy, the contribution they make to the economy's GDP is quite unfortunate as Banji, (2010) observes that SMEs contribute 1% of GDP compared to 40% in Asian countries and 50% in the Europe and US.

A veritable platform was created by the Nigerian stock exchange for emerging businesses to access the capital market which is refer to as the Alternative Securities Market (ASEM) which is a special board to accommodate small and mid-sized enterprises with high growth potential. It seeks to address major challenges of emerging businesses in Nigeria such as;

- Difficulty in accessing long term capital due to high cost of fund as a result of perceived high risk
- Informal nature of operations
- Inadequate accounting standards, controls and management of resources

In spite of this opportunity, not more than 11 SMEs are participating in this capital market.

One of the major problems of SMEs is finance (Nadada, 2013). While their capital structure is a combination of funds from owners of business (owners' equity/ internal financing) which might be as a result of savings from the business owner and external financing (debt), both type of funding have their resulting cost. The cost of both financing is an opportunity cost of using these funds elsewhere. Most SMEs are constrained with fear of the cost of long-term financing through various means such as the capital market where opportunities are provided for emerging businesses to access funds for capital.

Various researches had been carried out on cost of capital and financial performance of firms; the numbers of these researches with regard to Nigerian SMEs are insignificant as none the researchers were able to lay their hands upon. Therefore, this research is expected to add to

the existing literature on the relationship between SMEs' Cost of capital and performance in Nigeria.

Thus, this paper is aimed at assessing the effect of cost of capital on the financial performance of SMEs in Nigeria. Hence, the study is structured into 5 sections. Following the introductory part is Section 2 which highligted the definition of SMEs and empirical review. Section 3 discussed the methodology adopted for research. This is followed by section 4 which discussed data presentation and analysis. Section 5 concludes the paper.

2. Literature Review

2.1. Definition of SMEs

Central Bank of Nigeria (2010) defined Small and Medium Scale Enterprises (SMEs) as an enterprise that has an asset base (excluding land) of between N5Million – N500Million and labour force of between 11and 300.

Alternative Securities Market (ASEM) for emerging businesses (2013) defined SMEs as an enterprise with an asset base excluding land and building of N10million to less than 100million with 10 – 49 employees for "SMALL" and N100million to less than N1billion with 50 – 199 employees for "MEDIUM".

Banji (2010) defined SMEs as business with turnover of less than N100million and/or less than 300 employess.

It can be observed that the scope of these definitions is within the same framework, but notwithstanding, the study adopts the definition of ASEM.

2.2. Cost of Capital and Financial Performance

Cost of capital is referred to as the price of obtaining fund/capital. It is the rate which is paid for the use of capital. It can also be referred to as the cost of a company's fund; minimum rate of return a firm must earn on its investment (Mogaji, 2011).

Capital structure, which is also referred to as financial leverage or gearing, is the proportion of a company's long-term debt (and preference shares if any) to ordinary share capital (ICAN, 2009). With this definition, it can be described as the proportion of debt to business owners fund/equity with regard to SMEs, as these are the major sources of finance for SMEs. This is consistent with the point of Nadada (2013) that the two principal sources of finance for SMEs in Nigeria are loans/debt and equity (owner's investment).

A lot of studies had been carried out with regard to the implication of these sources of finance, their cost effect and the variations in their combination on the value of a firm or their resulting future earnings.

Modigliani & Miller study (1958), which was the first study addressing the relationship between financial leverage (capital structure) with both capital cost and firm value. Its aim was to prove that market value of the firm is independent from its capital structure, regardless of fluctuations in financial leverage. The study was conducted in (1958) on a number of American firms and found an evidence that negated the effect of capital structure on capital cost, and as such, it doesn't affect the firm value, as well as, investment decisions but not financing decision, that affect the firm values.

Fatoki, (2011) investigated the impact of human, social and financial capital on the performance of Small and Medium-Sized Enterprises (SMEs). Objective and subjective methods were used to measure performance. Data was collected through the use of self-administered questionnaire in a survey. Data analysis was done through descriptive statistics, chi square, Pearson correlation and regression analysis. The results indicate that there is a significant positive relationship between human, social and financial capital and the performance of SME.

Mohammad & Qamar, (2011) studied the relationship between corporate performance and cost of equity capital. Corporate performance was taken as an independent variable and cost of equity capital was taken as dependent variable while return on asset was taken as proxy to measure the corporate performance. Panel regression and Hausman test was applied to check the effectiveness of random and fixed effect. The finding shows insignificant relationship between corporate performance and cost of equity capital which is consistent with M&M study.

Pratheepkanth, (2011) studied capital structure and it impact on financial performance of business companies. Descriptive statistic, correlation and regression analysis was employed in carrying out the research. The finding shows that there is negative relationship between capital structure and financial performance. This finding is consistent with the M&M study.

Chinaemerem & Anthony (2012) examined the impact of capital structure on financial performance of Nigerian firms. Panel data for the selected firms were generated and analyzed using ordinary least squares (OLS) as a method of estimation. The result shows that a firm's capital structure surrogated by Debt Ratio (DR) has a significantly negative impact on the firm's financial measures (Return on Asset, ROA, and Return on Equity, ROE). This study finding indicates consistency with the M&M study.

Edelen & Kadlec (2013) examined the link between a firm's investor base, discount rate, capital budgeting decisions and profitability. They argue that a downward shift in discount rates (cost of capital) associated with an expanded investor base can account for both poor stock returns and operating performance following security offerings. Their finding was that an expansion in the firm's investor base is both a necessary and sufficient condition for anomalous poor performance. This finding contradicts the M&M study; it shows that a change in the capital structure can affect performance of a firm.

Khaled & Samer (2013) studied the impact of cost of capital, financial leverage and the growth rate of dividends on rate of return on investment. The study used multiple linear regression analysis; The model included a number of independent variables which are the cost of capital, financial leverage, and growth rate of dividends. The results of the study showed that there is appositive effect and statistically significant for growth rate of dividends on rate of return on investment. On the other hand, the study showed no effect with statistical significance for each of the cost of capital and financial leverage on rate of return on investment. This support the M&M study showing insignificant relationship between cost of capital, financial leverage and rate of return on investment.

2.3. Theorethecal Framework

The relevant theoretical literatures will centre on the relationship between capital structure and cost of capital and how they impact on the value of a firm. In relation to the effect of capital structure on the value of a firm there are two views- the traditional view and the net operating income approach.

The view of the traditionalist is that optimal capital structure is attainable. And this can be achieved on the decision management make with regard to the proportion of debt and equity. The optimal capital structure is that which minimizes the company's cost of capital and maximizes the total value of the firm. This theory shows that high cost of capital can affect the value of a firm; therefore, effort should be made to reduce the cost of capital.

The net operating income approach (NOI) are of the view that weighted average cost of capital (WACC) and the total value of the company remain the same regardless of the level of gearing. This view implies that capital structure, cost of capital do not affect the value of a firm.

Modigliani & Miller, (1958) support the NOI approach on the absence of any relationship between total value of a firm or its cost of capital and its level of gearing. M&M's belief is that the total value of the company depends on the future earnings stream of the company and the risk of those earnings and not on the way the company is financed. This theory was later reviewed in 1963 with the introduction of the tax benefits of debt. This is attributed to the fact that a perfect market does not exist in the real world. Since interest on debt is tax-deductible, thereby creating tax savings for the borrower, it becomes possible for firms to minimize their costs of capital and maximize shareholders' wealth by using debt. This is known as the leverage effect of debt (Fatoki, 2011).

Sogorb (as cited in Fatoki, 2011) points out that the most relevant capital structure theories that explain the capital structure of small and medium enterprises (SMEs) are those related to static trade-off, adverse selection and moral hazard (agency theory) and the pecking order theory. While the optimization of capital structure involves a trade-off between the present values of the tax rebate associated with a marginal increase in leverage and the present value of the costs of bankruptcy. Agency problems such as asymmetric information and moral hazards can impact on the availability of credit and hence the capital structure of SMEs. And the Pecking Order Theory (POT) suggests that there is no well-defined optimal capital structure; instead the debt ratio is the result of hierarchical financing over time. The foundation of POT is that firms have no defined debt-to-value ratio. Management has a preference to choose internal financing before external financing. When a firm is forced to use external financing sources, managers select the least risky and demanding source first. When it is necessary to issue external sources, debt issuance is preferred to new equity.

3. Methodology

The study employs descriptive research design. The population of the study comprises all SMEs listed on the Alternative Security Market (ASEM) of the Nigerian Stock Exchange which are 11 in number. The sample consists of SMEs that have their complete annual report for five years from 2008 to 2012. Data were sourced from the SMEs annual report and the Nigerian Stock Exchange. In order to measure the cost of capital, cost of equity and cost of debt makes up the entire cost of capital of a firm (WACC). While most of the SMEs in the sample are financed by equities, the only SME that was financed by debt had a non-interest bearing loan. Therefore, the study uses cost of equity only to ascertain the cost of capital. This was measured using the model:

$$K_{e(i,t)} = d_{i,t} / mv_{i,t\ (ex-div)} \quad (1)$$

Where:

K_e = cost of equity
d = dividend
mv = market value of equity
$_{ex\text{-}div}$ = excluding dividend
$_{i}$ = name of firm
$_{t}$ = period.

The market value of the SMEs' stock was obtained from the daily official listing of the Nigerian Stock Exchange. Current dividend declared by SMEs was used, where the current dividend is not obtainable, last dividend paid was used to determine the cost of equity.

Consequently in measuring the financial performance, literature provides different ratios used as a proxy to measure financial performance. However, this study uses ROA as an indicator to measure the financial performance. Market base return on assets (ROA) is used as a proxy for financial performance by means of Tobin's Q technique. Accounting rate of return as a measure of financial performance does not show the real and current scenario of the businesses. Thus, Tobin's Q is the best technique that shows the performance on market base return on assets. (Mohammad & Qamar, 2011 and Wernerfelt & Montgomery, 1988).

The model is defined as:

$$\text{Torbin's Q} = MVE_{i,t} / T.A_{i,t}$$

Where:

MVE = total market value of firm
T.A = total assets of firm
$_{i}$ = name of firm
$_{t}$ = period.

However, in analyzing the relationship between cost of capital and financial performance of SMEs, the study employed linear regression technique to test the hypothesis which state that cost of capital does not influence return on asset.

4. Result and Discussions

Table 1. Descriptive Statistics

	Mean	Std. Deviation	N
Return on Assets	1.9200	2.36731	25
Cost of Capital	3.2320	2.54685	25

Source: Researchers' Computation using SPSS 19.0.

Table 1 shows the average value of the variables as 1.9200 and 3.2320 for return on asset and cost of capital respectively. The table also shows the standard deviation of 2.36731 and 2.54685 for return on asset and cost of capital respectively which signifies that there is variation among SMEs with regard to these variables.

Table 2. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.316[a]	.100	.061	2.29392	.100	2.560	1	23	.123	1.657

Source: Researchers' Computation using SPSS 19.0.

From the analysis above, the extent of the correlation is weak; this is explained by the R value of 0.316. The R square of 10% implies that 90% change in return on asset is influenced by other factors not explained in this model. The durbin Watson value of 1.641 shows that the information is sufficient and the P-value of 0.123 which is higher than 5% level of significance shows insignificant effect of cost of capital on financial performance.

Table 3. ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.472	1	13.472	2.560	.123
	Residual	121.028	23	5.262		
	Total	134.500	24			

Source: Researchers' Computation using SPSS 19.0.

The F-value of 2.560 and P-value of 0.123 showed that there is insignificant relationship of the tested variables and also the costs of capital have no significant effect on return on assets.

Table 4. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.871	.751		3.824	.001
	Cost of Capital	-.294	.184	-.316	-1.600	.123

Source: Researchers' Computation using SPSS 19.0.

Table 4 indicates that there is a negative impact of cost of capital on return on asset. The P-value of 0.123 which is higher than the 5% level of significance implies that the null hypothesis should be accepted. The study therefore, has provided empirical evidence that SMEs' cost of capital have no significant effect on their return on assets. The outcome of this study corroborates with studies such as Modigliani & Miller, (1958); Mohammad & Qamar, (2011); Pratheepkanth, (2011); Chinaemerem & Anthony, (2012); Khaled and Samer, (2013).

5. Conclusions

This study tested the effect of SMEs' cost of capital on their financial performance using cost of equity and return on asset as proxies for the study. The result showed that there is insignificant relationship between the variables at 5% level of significance. Base on this, the study accepts the null hypothesis and established that SMEs' cost of capital have no significant effect on their return on assets which is the measure of financial performance. On the basis of this finding, the study recommends that SMEs should seek for long term financing to foster their growth through various means such as the opportunities provided by the Nigerian Stock Exchange through the Alternative Securities Market (ASEM) for emerging businesses since the cost of these finances pose no threat to their financial performance.

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