

# THE EFFECT OF VENTURE CAPITAL FINANCING ON THE ECONOMIC VALUE ADDED PROFILE OF NIGERIAN SMEs

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## ABSTRACT

This study examines the use of venture capital (VC) financing for small and medium-scale enterprise (SME) development in Nigeria by comparing the economic value added (EVA) of venture capital-backed SMEs and those of non-venture capital-backed SMEs. Three independent variables were specified namely: Equity finance, management support, and technical support, and the following tests were conducted: paired t-tests for significance of the differences in dependent and independent means, f-test for significance of R<sup>2</sup> and t-test for significance of individual regression coefficients. 120 sets of questionnaire were administered, 60 for each category of SMEs, and a stepwise procedure followed the first response in order to maintain balanced responses between venture capital and non-venture capital-backed SMEs. Each set of questionnaire retrieved was checked for adequacy and completeness and if not, fresh questionnaires were sent out, ensuring that the objective criteria set out were met. It was found that VC financed SMEs clearly outperformed non-VC-financed SMEs, and that the distinctive performance is the effect of management support by venture capitalists in their portfolio SMEs. The study concluded that given this positive trend in enterprise sustainability, VC-backed SMEs will contribute more to society in terms of taxes to government, provision for corporate social responsibility, and staff welfare. Finally, it was recommended among other things that more incentives for VC investments should be offered to encourage greater participation.

**Keywords:** Venture Capital Finance, Economic Value Added, Enterprise development, Private Equity Finance

**JEL codes:** G14, G15

### Abbreviations:

SME: Small and Medium Enterprises; LE: Large Enterprises; VC: Venture Capital; SMEEIS: Small and Medium Enterprises Equity Investment Scheme; EVA: Economic Value Added; NASME: National Association of Small and Medium Enterprises; MAN: Manufacturers Association of Nigeria; ANE: Association of Nigerian Exporters; NASSI: National Association of Small Scale Industrialists; NACCIMA: National Association of Chambers of Commerce, Industries, Mines and Agriculture; SMEDAN: Small and Medium Enterprises Development Agency of Nigeria.

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## I. INTRODUCTION

The failure of previous financial policies of governments to achieve desirable economic growth was a concern that demands restructuring of the system, especially in the glare of an ailing economy. The introduction of the Structural Adjustment Programme (SAP) in 1986 and the privatisation programme in 1989 were in response to failed institutional measures to promote and galvanise the SME sector over a long period of time. The prevailing economic conditions in the first few years of SAP (1986-1988) such as rationalization of government expenditure, import restrictions, and financial liberalization saw a spread of Small and Medium Enterprises (SMEs) and a positive attitude reorientation towards *made in Nigeria* goods, as there was emphasis for consumers and producers to look inward, driven by an import substitution orientation. Indeed that era saw the emergence of Nnewi auto technology and Aba shoe production SME clusters.

Unfortunately, SAP became history even before the gains were consolidated, and the financing windows opened to provide relief for SMEs lacked continuity and sustainability. These windows were also incapacitated by public sector bureaucracy, so that they were neither proactive nor problem-oriented. Thus, there was a perceived retrogression in the real sector due to inappropriate financing strategy for SMEs, which led to very low profitability. More also, the public-enterprises were becoming out-placed in the private-sector driven economies, in which case, the economy suffered from obvious hollow of Large Enterprises (LEs) and the corresponding loss of scale economy. Incidentally, this phenomenon was partly responsible for the impaired growth of SMEs in the past as they depended on the same LEs for outsourcing, reciprocity and other forms of business linkages. For instance, the success of SMEs in the High-Performing-Asian-Economies (HPAEs) was the result of the linkages they enjoyed with LEs, Yumkella (2002); Brautigam (1998). The Japanese economy, for example, is characterised by a strong vertical relationship known as *Keiretsu* between SMEs and large enterprises, Ito (1997).

One remedy is to promote SMEs as springboards towards building viable LEs via the application of more sustainable equity-based financial strategy. More so, facts that emerged from the appraisal of the various past financing schemes and initiatives for SMEs showed that finance is by no means the only or most important constraint to SME development. Other constraints include inadequate entrepreneurship and managerial skills, financial indiscipline, enabling environment for investment, and weak monitoring mechanism, Sanusi (2003). This appraisal led to a change in financing structure from debt to equity financing. This new strategy is known as the Small and Medium Enterprises Equity Investment Scheme (SMEEIS). At inception, this scheme was applauded as the solution to the entrepreneurial problem in Nigeria because it is considerably different from previous windows that were debt-based. It was hoped that this window would galvanize Nigeria's real sector, provide the pillar for a diversified economy and ensure the emergence of Nigerian *Chaebols*.

Precisely, this scheme involves the use of venture capital (VC) financing, and financial history shows that many large corporations that encompass the world today actually started out with VC financing, e.g. Frederick Smith, Founder of FedEx started out with VC funding of \$72 million in 1973, Hisrich and Peters (1998). VC is a subset of private equity capital, which brings bright ideas and breakthroughs to reality. In other words, Nigerian SMEs that work closely with venture capitalists could transform to large enterprises within an acceptable period of time given the essential ingredients of VC financing. Again, entrepreneurs could receive VC financing at different stages (seed, start-up, expansion, development or bridge finance), implying that VC financing can sustain an enterprise to the point of initial public offer (IPO).

This study explores the effect of VC resources on the economic value added of Nigeria's SMEs such that they could add value to the various strata of the Nigerian economy. The essential feature of this new window is its commitment towards effective delivery of financial resources, managerial skills and technical expertise. Could this be a reality or another myth in Nigeria, and how would it affect the society? These are some questions that require answers after a reasonable period of stock-taking since the commencement of SMEEIS in Nigeria.

In 2001 when SMEEIS was introduced, the Nigerian economy was experiencing crises of negative performance in all four macroeconomic indicators: price stability, employment, economic growth and external trade equilibrium. It was believed that SMEEIS would revive the SME sector. Similar contributions of VC financing to economic performance were confirmed in Europe, USA and Asia, Martin (2002); Wright et al. (2002); and Pandey (2001). For instance, in Britain, VC firms created 46 new jobs per VC-backed Company with an overall investment of £12.5 billion in 2002, and in the USA, VC-backed companies were responsible for 10 million jobs and \$1.8 trillion in sales in 2003. In other words, Nigerian SMEs could achieve competitive advantage through innovation, quality, cost and speed.

Thus, the thrust of this study is to compare the economic value added (EVA) of VC-backed and non-VC-backed SMEs in order to establish the effectiveness of the new equity financing window, and the key significance of the study is the assessment of EVA as an alternative to profit in evaluating the performance of SMEs using the three dimensions of time, Agyeman (2001).

## **II. THEORETICAL FRAMEWORK**

In every economy, the real and financial sectors complement each other in order to maintain a progressive balance. This is important as a deficiency in one sector impairs developments in the other. For instance, Sharpe et al (1995) argue that there exists a strong relationship between highly developed financial sector and real investment. In Nigeria, however, evidence shows that both sectors are not so symbiotic such that the financial sector milk-dries the real sector, Soludo (2004) and Sanusi (2003). Banks declare huge profits even as factories close down, simply because Nigerian banks were less responsive to long term financing than they were to short-term trade financing and foreign exchange deals. This includes even the investment banks that were traditionally structured for long-term financing. Indeed,

this remains the reason why Nigeria's real sector is largely infantile despite several interventions.

### **A. Between Debt and Equity financing**

The capital structure of a firm involves decisions about debt and/or equity financing, and the implication that higher leverage increases value seems to be more applicable to large corporations than to fledglings. Usually, at the early stage preference is given to survival and sustainability, in which case the first rule is to employ the structure that does not expose the enterprise to overbearing financial obligation during period of low cash flow and low return on assets. Long term financing decision for SMEs favours private placements Grinblatt and Titman (1998). Similarly, Longenecker et al (1997) argue that capital structure decision depends on the type of business, the firm's financial strength, and the current economic environment. It also involves tradeoffs about potential profitability, financial risk, and voting control. Debt financing involves fixed-interest bearing instruments, the payment of which takes precedence over other financial claims to the enterprise Price and Allen (1998) and Hisrich and Peters (1998). Equity investment simply means shareholders' fund or sweat money. Two strands of equity investment exist: public and private equity investments. Public equity investment involves raising share capital directly from the public through the stock exchange, while private equity involves investment in a private company by a few investors or institutional investors.

It has been proved severally that the value of a firm increases more with increasing leverage, Durand (1959) and Ezra (1963). Perhaps, this explains why there is still strong emphasis on the use of debt despite the overwhelming contribution of Franco Modigliani and Merton Miller (MM) in 1958 on the irrelevance of capital structure. However, MM position in a world of taxes (which is a more realistic assumption) implies that the expected return on equity increases as the debt-equity ratio increases. Therefore shareholders can not be indifferent to increased leverage when it increases expected return, Brealey and Myers (1996).

Debt financing is cheaper only with mature businesses or businesses with high initial cash inflow. It implies that past institutional enterprise promotion with debt finance was inappropriate, thus the outcomes were disappointing. Therefore, private equity/venture capital finance is more strategic. In any case, the failure of the debt regime could be due to factors other than its inappropriateness for fledglings such as unnecessary implicit, informal or off-records costs as well as technical and managerial incompetence. Taking a decision on capital structure without the benefit of the firm's position is unacceptable if one is not indifferent to the debt/equity debate. An indifference or irrelevance stance presumes no value optimisation or sub-optimisation irrespective of the stage of an enterprise. To functionalise this concept, some grandiose assumptions aimed at creating an artificial world and to evoke the conventional economic *ceteris paribus* conditions were placed by the proponents, Franco Modigliani and Merton Miller in 1958 to explain away the near impossible phenomenon, Tanous (1997).

This seeming counterfactual analysis of MM *proposition 1* dismisses any thinking of sub-optimisation of market value resulting from more use of equity than debt. Therefore the critical assumption underlying this debate rests on some implicit or notional considerations rather than real cash. Venture capitalists offer a more comprehensive, enterprise-focused, and growth-oriented service, which may represent an incremental cost, yet could make a difference between stagnation and dynamism, between small-scale and large-scale, between fragility and sustainability, and between failure and success.

## **B. Venture capital**

Venture capital is a type of private equity finance involving investments in unquoted companies with growth potential. It is generally medium to long term in nature made in exchange for a stake in a company. The term venture capital is likely to be accepted as the generic term for business angels, mezzanine equity, institutional or any similar investments in early stages of business. In summary, it is “a professionally managed pool of equity capital” Hisrich and Peters (1998). According to Berlin (1998), venture capitalists take an active role in the management of the firm they fund and work in close collaboration with the stock market to take the firm they fund public. Therefore they place emphasis on the support they offer start-ups and the controls they might be granted as well as the exit strategy available. In all, they foster growth in companies through hands-on involvement in financing, management, and technical support. In Nigeria, Small and Medium Enterprises Equity Investment Scheme (SMEEIS) represents the major institutional framework for the promotion of VC financing.

A review of the impact of VC in various countries highlighted the following critical factors: creating attractive fiscal and legal framework, exercising stock option plans to attract and retain talents, providing a pool of management experts and business strategists that can support entrepreneurs to run VC-backed companies, establishing linkages and networks between research organisations and entrepreneurs, strongly protecting intellectual property rights, providing efficient exit mechanisms for investors to maximise their returns, offering second chance to entrepreneurs whose businesses went bankrupt, providing more funds by lifting participatory prohibitions, setting appropriate framework for the participation of VC limited partners, encouraging major corporations to embark on corporate venturing, dedicating research efforts for the development of high-technology industries without downplaying the strategic importance of the low-technology industries in our economy, etc.

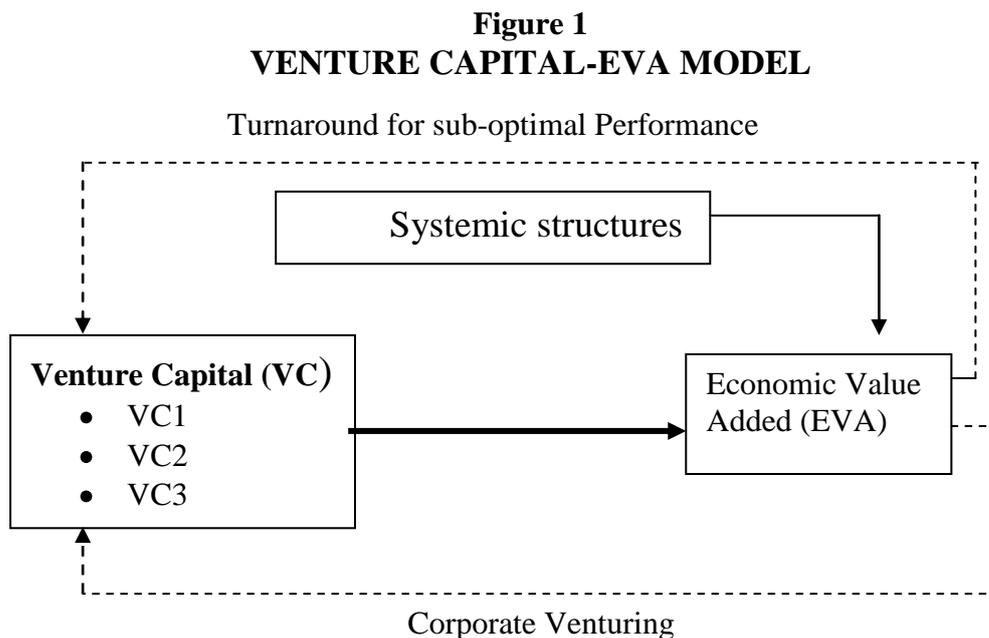
## **C. Economic Value Added**

It is one thing to compare profits, yet it is another to measure the efficiency or cost effectiveness of capital employed. Economic Value Added (EVA) is the residual income a company earns after capital costs are deducted, Van Horne (2002). It is operating profits minus the required (Naira) return for the capital employed. The required return is a market-determined Weighted Average Cost of Capital (WACC),

which reduces bias of debt or equity lob-siding. In other words, a comparison of EVA between the two categories of SMEs would show the effect of the independent variables-propelled venture capital-backed SMEs. In a study of the effect of financial liberalization on the capital structure and investment decisions of Indonesian manufacturing firms, Harris et al (1994) used EVA to establish the difference between pre and post hoc performance of firms being studied. In calculating EVA, the following estimations were made from data on percentages of debt and equity gathered: The average capital structure of venture capital-backed SMEs is 90% equity and 10% debt; market rate of return on equity is 11%, and debt (interest rate) is 21%, return on preferred stock is ignored; therefore the weighted average cost of capital (WACC) for VC-backed investment is 12%; the average capital structure of non VC-backed SMEs is 60% debt and 40% equity (personal and family funds including capital gains from other equity investments); therefore the WACC for non VC-backed SMEs is 17%.

#### **D. Statement of Hypothesis**

The EVA of VC-backed SMEs is not significantly higher than that of non VC-backed SMEs.





**Table 1. Venture Capital Variables**

Code	Variable	Code	Variable	Code	Variable
VC <sub>1</sub>	Private Equity Finance EF	VC <sub>2</sub>	Management Support MS	VC <sub>3</sub>	Technical Support TS
EF <sub>1</sub>	Seed Finance	MS <sub>1</sub>	Business development	TS <sub>1</sub>	Training and Counselling
EF <sub>2</sub>	Start-up finance	MS <sub>2</sub>	Project appraisal and due diligence	TS <sub>2</sub>	Lobbying and advocacy
EF <sub>3</sub>	Expansion finance	MS <sub>3</sub>	Monitoring and Supervision	TS <sub>3</sub>	Business linkages and networks
EF <sub>4</sub>	Development finance	MS <sub>4</sub>	Strategic management	TS <sub>4</sub>	Engineering, production/operations
EF <sub>5</sub>	Bridge finance				

### III. THE MODEL

#### A. Methodology

Sample of 120 SMEs (60 VC-backed and 60 non VC-backed) was determined and randomly selected from VC firms under SMEEIS on the one hand and from panels of SME institutions such as NASME, MAN, ANE, NASSI, NACCIMA, and SMEDAN on the other hand. Paired t-tests for significance of the differences in dependent means (i.e. between periods 2003 and 2007) and independent means (i.e. between VC-backed and non VC-backed SMEs) were carried out to indicate differences in performance. Secondly, Multiple Regression Analysis was conducted for the dependent variable to investigate the proportion of variation in the dependent variable explained by the regression of the independent variables. Thus, both *f*-test and *t*-test were conducted, and the Multiple Coefficient of Determination R<sup>2</sup> was the basis for the *f*-value.

#### B. Specification of the Model

Given the interrelationships of the variables specified in the conceptual model, the following econometric model applies:

$$EVA = f(VC_1, VC_2, VC_3),$$

Where EVA = Economic Value Added

VC<sub>1</sub> = Private Equity Finance (EF, risk capital),

VC<sub>2</sub> = Management Support (MS)

VC<sub>3</sub> = Technical Support (TS)

Assuming a linear relationship between VC and EVA, the following regression line could be obtained:

$$EVA = a + \beta_1 (EF) + \beta_2 (MS) + \beta_3 (TS) \dots\dots\dots (1)$$

Where  $\alpha$  = the intercept of EVA axis;  $\beta_1, \beta_2, \beta_3$  = the parameters of the independent variables (EF, MS, TS). Bring in the random variable ( $\mu$ ), which conveys the same meaning as *ceteris paribus* in economic analysis, the so-called *other things* that must remain the same in order to

estimate the effects of the core independent variables correctly. Accordingly, the non-core independent variables are collectively branded *Systemic Structures*.

$$EVA = a + \beta_1 EF + \beta_2 MS + \beta_3 TS + \mu \dots\dots\dots (2)$$

And the estimate of the true parameters ( $a, \beta_1, \beta_2, \beta_3$ ) of the determinants ( $X_1, X_2, X_3$ ) is

$$\hat{E}VA = \alpha + \hat{\beta}_1 EF + \hat{\beta}_2 MS + \hat{\beta}_3 TS + \epsilon \dots\dots\dots (3)$$

Where  $\epsilon$  = estimate of the random variables  $\mu$ . Assumptions: No multi-collinearity, linear relationship between dependent and independent variables.

To be more specific, the multiple regression model involves the study 60 VC-backed SMEs for a period of 5 years, implying that a panel data model was envisioned, which was specified in the form:

$$\hat{E}VA_{it} = \alpha_i + \hat{\beta}_1 EF_{it} + \hat{\beta}_2 MS_{it} + \hat{\beta}_3 TS_{it} + \epsilon_{it} \dots\dots\dots (4)$$

Where  $i = 1, 2, 3, \dots, 60$ ; and  $t = 2003, 2004, \dots, 2007$

The panel model is assumed to be Random Effect Model (REM), where the  $\beta$ s are the coefficients of the variables but  $\alpha_i$  is the cross-section effect which was assumed to be random with a mean value of  $a$  such that  $\alpha_i = \alpha + u_i$  where  $i = 1, 2, 3, \dots, 60$ , and  $\alpha = 1/60 \sum \alpha_i; i = 1 \dots 60$ .

The model becomes:

$$\begin{aligned} \hat{E}VA_{it} &= a + \hat{\beta}_1 EF_{it} + \hat{\beta}_2 MS_{it} + \hat{\beta}_3 TS_{it} + u_i + \epsilon_{it} \\ &= a + \hat{\beta}_1 EF_{it} + \hat{\beta}_2 MS_{it} + \hat{\beta}_3 TS_{it} + w_{it} \dots\dots\dots (5) \end{aligned}$$

Where  $w_{it} = u_i + \epsilon_{it} \dots\dots\dots (6)$

The error term  $w_{it}$  is a sum of two parts, namely  $u_i$  and  $\epsilon_{it}$ . The first term  $u_i$  is the cross-section or firm-specific error component and the second term  $\epsilon_{it}$  is the combined time series and cross-section error component. The assumptions of REM are that  $u_i \sim N(0, \delta a^2)$ ;  $\epsilon_{it} \sim N(0, \delta \epsilon^2)$ ;  $E(u_i \epsilon_{it}) = 0$ ;  $E(u_i u_j) = 0$ ; ( $i \neq j$ );  $E(\epsilon_{it} \epsilon_{is}) = E(\epsilon_{it} \epsilon_{jt}) = E(\epsilon_{it} \epsilon_{js}) = 0$ ; ( $i \neq j$ ;  $t \neq s$ ), Gujarati and Sangeetha (2007). From the preceding, individual (firm) error components were not correlated with each other and were not auto-correlated across both cross-section and time series units.

## IV. DATA ANALYSIS

### A. Paired t-test of Dependent Means

The hypothesis for the Paired t-test for the significance of the difference in means is stated as follows:  $H_0: \mu_{03} = \mu_{07}$  i.e. there is no significant difference between the mean of year 2003 and that of year 2007. The decision rule is: Reject null hypothesis if  $t$ -value calculated falls outside the critical region of  $0 \pm 2.02$ .

The analysis indicates that the mean EVA of VC-backed SMEs in 2003 was N4.37 million. By 2007 it has shot up to N77.69 million. This represents a quantum growth within five years as shown in table 2. The  $t$ -value calculated was significant, and  $H_0$  was rejected. This implies a significant difference between the means of 2003 and 2007. In the non VC-backed SMEs category, the 2003 mean EVA of N9.84 million was not only higher than the mean EVA of VC-backed SMEs in the same period, but was also slightly higher than the mean EVA of non VC-backed SMEs for 2007 as shown in table 2. The  $t$ -value of 0.32 was not significant therefore  $H_0$  was not rejected, implying that there is no difference between the means of 2003 and 2007.

**Table 2. Summary of Paired t-test of Independent Means Between 2003 and 2007**

Statistics	VC-BACKED SMEs			NON VC-BACKED SMEs		
	EVA 2003	EVA 2007	t-test	EVA 2003	EVA 2007	t-test
Mean	4.37	77.69		9.84	9.53	
Variance	54.74	3817.51		20.66	26.21	
Observation	60	60		60	60	
Degree of Freedom			59			59
t-statistics			-9.09*			0.32
P(T<=t) one-tail			0.00			0.37
t critical one-tail			1.67			1.67
P(T<=t) two-tail			0.00			0.75
t critical two-tail			2.02			2.02

Source: E-View (version 5) output

\* Statistical Significance for  $p < 0.01$

## B. Paired Two-Sample Test of Means

Here, the means of two samples (VC-backed and non VC-backed SMEs) were tested for significance, confirming if the differences between them could still hold if they were drawn from the same population. Again, for panel data, paired t-test for the significance of the difference in means would be appropriate. The hypothesis for the two-tailed *t*-test at 5% level of significance is:

1.  $H_0: \mu_1 = \mu_2$ ; There is no difference between the population means of VC-backed SMEs ( $\mu_1$ ) and non VC-backed SMEs ( $\mu_2$ )
2. Decision rule: Reject null hypothesis if *t*-value calculated falls outside the critical region of  $0 \pm 2.02$

The mean EVA of VC-backed SMEs in 2003 was less than that of non-VC-backed SMEs by N5.54 million. This had a *t*-value of -4.79, which was significant enough to reject  $H_0$ . The reverse was the case in 2007 as the EVA of VC-backed SMEs was N68.16 million higher. This also scored a high *t*-value of 8.4, thus  $H_0$  was rejected.

**Table 3. Summary of Paired t-test of Dependent Means Between VC-Backed and Non-VC-Backed SMEs**

Statistics	EVA 2003			EVA 2007		
	VC Backed	Non VC Backed	t-test	VC Backed	Non VC Backed	t-test
Mean	4.37	9.84		77.69	9.53	
Variance	54.74	20.66		3817.51	26.21	
Observation	60	60		60	60	
Degree of Freedom			59			59
t-statistics			-4.79*			8.40*
P(T<=t) one-tail			0.00			0.00
t critical one-tail			1.67			1.67
P(T<=t) two-tail			0.00			0.00
t critical two-tail			2.02			2.02

Source: E-View (version 5) output

\* Statistical Significance for  $p < 0.01$

### C. Multiple Regression Analysis of VC-Backed SMEs

The null hypothesis ( $H_0$ ), here, is  $\beta_1 = \beta_2 = \beta_3 = 0$ ; i.e. the net regression coefficients in the population = 0; the level of significance = 0.05; decision rule is to reject  $H_0$  if the  $f$ -value calculated is greater than the critical value of 2.84. It was also necessary to evaluate the individual regression coefficients to determine the one that contributed most to the corporate test. To do this, t-test was recommended (Mason et al, 1999; Cooper and Schindler 2001) with 0.05 level of significance (two-tailed); critical value of  $t = 0 \pm 1.684$  and null hypothesis ( $H_0$ ) is  $\beta_1 = 0$ ;  $\beta_2 = 0$ ;  $\beta_3 = 0$ : implying that the regression coefficient of  $\beta_1$  or  $\beta_2$  or  $\beta_3$  is equal to zero. The decision rule is to reject  $H_0$  if t-value calculated falls outside the critical values.

The result of regression run shows as follows:  $R^2 = 0.08$ , Standard Error of regression = 42.72, F-statistic = 8.86. This was significant and  $H_0$  was rejected, meaning that the net regression coefficients in the population were greater than zero, and the probability that this was significant = 0.000012. The t-values were:  $EF = 0.93$ ;  $MS = 5.00$ ; and  $TS = 1.64$ ; accordingly  $EF$  and  $TS$  were rejected. The implication is that only the regression coefficient of  $MS$  in the population was greater than zero, whereas those of  $EF$  and  $TS$  equalled zero, further implying that management support was the most significant predictor of variations in economic value added. Accordingly, one percent rise in management support would result in 2.7 percent rise in EVA.

**Table 4. Summary of Multiple Regression Analysis of VC-Backed SMEs**

Dependent Variable: Economic Value Added (EVA)				
Method: Panel EGLS (Cross-section random effects)				
Sample: 2003 through 2007				
Cross-sections included 60				
Total panel (balanced) observations: 300				
Swamy and Arora estimator of component variances				
Variable	Coefficient	Std Error	t-Statistics	Probability
C	23.78934	4.179600	*5.691774	0.0000
EF	0.075481	0.080483	0.937841	0.3491
MS	2.678840	0.535418	*5.003266	0.0000
TS	0.272378	0.165678	1.644019	0.1012
Effects Specification				
			Standard Deviation	Rho
Cross-section random			8.062945	0.0369
Idiosyncratic random			41.17564	0.9631
Weighted Statistics				
R-squared	0.082397	Mean dependent variance		33.56588
Adjusted R-squared	0.073097	S.D. dependent variance		44.38035
S.E. of regression	42.72754	Sum squared residual		540390.2
F-statistic	*8.859848	Durban-Watson stat.		0.689154
Prob(F-statistic)	0.000012			
Unweighted Statistics				
R-squared	0.092503	Mean dependent variance		36.64257
Sum squared resid.	563474.0	Durban-Watson stat.		0.660922

Source: E-View (version 5) output

\* Statistical Significance for  $p < 0.01$

## V. DISCUSSIONS

Following the definition of EVA, net profit, tax payments, etc constitute the enterprise's value creation. The higher the residual value is, the higher is the EVA profile in terms of taxes to government, dividends to shareholders, and capital reserved for investments and social responsibility. The finding has capital structure implication; EVA could replicate valuation used to assess the impact of any financing strategy. By the MM proposition I, this assessment is irrelevant because whatever change in the value that is observed between VC-backed and non VC-backed is not the result of manipulation of any financing strategy. Outside MM proposition I, there would be need to put up a strong independent critical analysis of the outcome either in furtherance or in contention of a given financing strategy.

As shown in table 2 above, the percentage growth of average EVA by VC-backed SMEs from 2003 to 2007 was 1,678 percent, whereas there was a reduction in the average EVA of non VC-backed SMEs by 3.3 percent. Besides, the difference between the average of 2003 and 2007 was significant in the population of VC-backed SMEs, but assumed away as zero in the population of non VC-backed SMEs. Table 3 shows that the average EVA of

VC-backed SMEs in 2003 was N5.47 million less than that for non VC-backed SMEs, but 4 years after, in 2007, the average EVA of VC-backed SMEs had grown N68.7 million higher, which confirms a swift turn in the growth of VC-backed SMEs. The result of the multiple regression analysis presented in table 4 indicates that *management support* was the major driver in the high performance of VC-backed SMEs.

The insignificance of *equity finance* is perhaps an indication of lesser cash received by VC backed SMEs for other purposes in relation to *monetised management support*. Similarly, the insensitivity to *technical supports* by venture capitalists in Nigeria leaves much to be desired because research evidence abounds in favour of *technical support* to small firms by venture capitalists, Wright (2002); Autio (2003) and Kim (1997). Regulatory authorities also outline such supports for compliance as a measure of raising the standard of VC participation and for enriching the benefiting organisations' technical capacity to deliver, SEC (1999).

## **VI. CONCLUSIONS**

Specifically, the study shows that the EVA of VC-financed SMEs presents the most divergent performance in the debt-equity preference analysis as they grow at an increasing rate while that for non VC-backed SMEs grows minimally. The key driver of this distinctive performance is the *management support* offered by venture capitalists to their portfolio SMEs. Given that this trend in growth is sustained, VC-backed SMEs will contribute more to society in terms of taxes to government, profit to investors, provision for corporate social responsibility, and staff welfare.

## **VII. IMPLICATIONS FOR MANAGEMENT**

The fact that VC-backed SMEs outperformed non-VC backed SMEs in EVA is a clear signal for high level enterprise sustainability of the private sector in Nigeria. However, the following other factors are complementary to VC financing: Increasing local demand capacity, export promotion, continued promotion of private enterprises, opportunities for outsourcing and increasing local content in the operations of multinational corporations, tax incentives, improving information and communication technology, and supply of skilled labour. In order to sustain the meagre success of VC firms, the following steps are necessary: strengthened systemic structures like power supply, establishment of technology and industrial parks, reduction in the corruption index, attraction of Nigerians in diasporas, protection of intellectual property rights, efficient exit windows for venture capitalists, and reduction of inflation to a single digit, Nuechterlein (2003). For the individual SME, the outcome implies greater competition for customers, financial resources, and raw materials. This further implies that product qualities must be standardized, cost efficiency must be met, innovative strategies preferred, and consolidation exercises such as merger, acquisition or virtual scaling implemented.

Theoretically, the return on alternative investment, which defines the cost of capital, is a major determinant of value added. If cost of capital is high, value added reduces and vice versa. Keeping the operating income constant, the implication of higher value added therefore is that interest rate and the return on equity investment should reduce. But if

that happens, there is no incentive for investment in the local economy, thus inducing capital flight.

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