



# Venture Capital Utilization among Peri-Urban and Rural Entrepreneurs in Benue State, Nigeria.

Adu, V.M<sup>1\*</sup>; Okpeke, G.A<sup>1</sup>; Okoli, N.G<sup>2</sup>

- 1- Department of Agribusiness, Joseph Sarwuan Tarka University, Makurdi. PMB 2373, Makurdi, Benue-State, Nigeria
- 2- Department of General Studies, Science and Technology, Federal Polytechnic Ohodo. Enugu State, Nigeria.

## ARTICLE INFO

Article No.: 112823145

Type: Research

Full Text: [PDF](#), [PHP](#), [HTML](#), [EPUB](#), [MP3](#)

Accepted: 30/11/2023

Published: 01/01/2024

### \*Corresponding Author

Adu, V.M

E-mail: [aduvivian247@gmail.com](mailto:aduvivian247@gmail.com)

**Keywords:** Intensity, Venture Capital, Utilization, Peri-Urban, Rural, Entrepreneurs.

## ABSTRACT

This study assessed venture capital utilization among peri-urban and rural entrepreneurs in Benue state. The three agricultural zones in Benue state were purposively selected and one local government each was purposively selected from the three zones. A sample proportion of 10 percent was used to select 134 and 120 of peri-urban and rural entrepreneurs respectively. Data were collected using structured questionnaires and were analyzed using descriptive statistics and inferential statistics like multiple linear regressions. The result further revealed that most (26.1%) of the peri-urban entrepreneurs source of capital is from mortgage banks while most (28.3%) of the rural entrepreneurs source of capital is from bam (local contribution). The established extent of venture capital utilized via Gini Coefficients of 0.78 and 0.83 for peri-urban and rural entrepreneurs respectively, implied inequality in the utilization of venture capital among peri-urban and rural investors. The established regression coefficients for cost of rent and cost of transportation were significant positively influencing their turn over at 10 and 5 percent levels of probability. This implies that a unit increase in cost of rent and transportation will increase the turn-over of peri-urban by their estimated coefficients. Relatively, for rural entrepreneurs cost of rent and variable stock value were the variables influencing the turn-overs. Specifically, value of variable stock coefficient was significant and positively influenced entrepreneurs turn-over at 1 percent while coefficient of rent was significant and negatively influenced entrepreneurs turn-over at 1 percent. Rural entrepreneurs are most likely to increase their returns and profit by increasing the values of variable stock and reducing their rent cost in order to optimize their operations. The study recommends: instituting informal finance sectors to assist entrepreneurs in sourcing venture capital; banks should undertake promotional activities which include; identification, development and packaging of viable enterprises. Federal Government should set up strategies that will improve access to venture capital.

## 1.0 INTRODUCTION

Capital is a type of good that can be consumed now, but if consumption is deferred an increased supply of consumable goods may likely be available later. Adam Smith (1993) defined capital as "that part of a man's stock which he expects to generate revenue or wealth. In economics, capital goods, real capital, or capital assets are already produced durable goods or any non-financial asset that is used in production of goods or services. Capital is distinct from land (or non-renewable resources) in that capital can be increased by human labor. In classical economic schools of thought, particularly in Marxist political economy, (encyclopedia of Marxism, 2013) capital is money used to buy something only in order to sell it again to realize a financial profit. According to Neva (2003) there are five types of capital namely; Natural Capital, Produced Capital, Human Capital, Social Capital and Venture Capital. Different forms of capital exists, the focus here is on venture capital as our base or focal point. Venture capital is funding provided to early-stage, high-potential growth, start-up enterprises. The venture capital fund earns money via equity in the companies it invests in, which usually have a business model in high technology industries, such as biotechnology and information technology. There has been emergent acknowledgement that a sustainable economic transformation in Nigeria can be facilitated within the framework of entrepreneurial-driven activities. Indeed, the small businesses created by innovative entrepreneurs have proved to be the most significant contributors to the growth of national wealth (Antai and Agnes, 2012). Entrepreneurship is the willingness and ability of an individual to seek for investment opportunities, to establish and to run an enterprise successfully (Suleiman, 2006). Utilization of capital can take place through variations in the duration of working time, given intensity of working time, given duration or both. The latter can take the form of variations in speed or in the use of inputs that are complements of capital relative to some maximum or optimum (Beaulieu & Matthey, 1998). Capital utilization is given different interpretations in economic literature. If a machine is available for use during, the day, then the various levels of utilization can be obtained by varying the duration of operations within the day. For any fixed duration within the day, however it is also possible to vary the machine's rate of utilization by varying its speed. In each case there is variation in capital utilization, but both physical and economic characteristics differ widely. Moreover, even with duration and speed constant within the day, some writers define variations in capacity utilization via variations in the inputs employed with a given machine per day relative to some maximum or optimum daily output (Chatterjee, 2005). Financing early stage business involves special problems and is fundamentally different from

investments in matured and well established companies (Keuschnigg and Nielsen, 2000).

Although several related studies have been carried out on venture capital utilization such as; Okplala, 2012; Dossani and Kenney, 2002; Oma-Williams, 2003; Amitet *al.* 1999 among others. Most of the literature have neither paid adequate attention to the needs of the entrepreneurs, the main beneficiary of the stakeholders nor described the environmental conditions in terms of the process of new venture creation and venture capital utilization in the production process. Specifically, the research intends to:

- i. identify and list the sources of venture capital available to the rural and peri-urban entrepreneurs in the study area.
- ii. Determine the intensity to which venture capital is being utilized between peri-urban and rural entrepreneurs in the study area.
- iii. Analyses the effect of venture capital utilization on the rural and peri-urban entrepreneur's turn over in the study area.

## 2.0 METHODOLOGY

### 2.1 The study area

The study was conducted in Benue State which is located in the middle belt of Nigeria with its capital in Makurdi. The state was created in 1976 from the former Benue-Plateau State. The state is named after River Benue which is the prominent feature in Benue State. Benue State consists of 23 Local Government Areas. The State is located between latitudes  $6^{\circ} 30'$  and  $8^{\circ} 10'$  north and longitudes  $6^{\circ} 35'$  and  $10^{\circ}$  East (Online Nigeria, 2003). Benue State covers a land mass of 32,518 square kilometers with a total population of 4,253,641 people which is made up of 2,144,043 males and 2,109,598 females (National Population Commission, 2006). Benue State experiences two distinct climatic conditions, the wet and dry seasons. The wet season starts in April and terminates in October, while dry season spans from November to March (Benue, 2012). Its mean annual rainfall is 1,500mm while its temperature ranges from  $24^{\circ}\text{C}$  to  $36^{\circ}\text{C}$ . There exist a wide range of soil types which include clay, sandy and loamy soils. The major occupation of the people is predominantly farming. Several crops are grown in Benue State. Among the crops cultivated in this area are yams, rice, cassava, soya beans, maize, millet, citrus (oranges), mango, cashew and vegetables. Livestock that are reared in Benue State include goats, sheep, pigs, cattle and poultry. These wide ranges of crops and animals produced in Benue give the State recognition as the Food Basket of the Nation (Otene, 2014). The prominent ethnic groups in the study area are Tiv,

Idoma and Igede. Other ethnic groups include Igbo, Etulo, Hausa, Jukun, Yoruba, Igala etc.

### Experimental Design and Data Collection

Primary data was used to collect information from the sampled respondents of the study which comprises of peri-urban and rural entrepreneurs. The sampling frame of 2553 was obtained from Benue State Ministry of Commerce and Industry. Purposive multi-stage selection procedure was employed in selecting Rural and Peri-urban Entrepreneurs in Benue State. In the first stage Zones, A, B and C were purposively selected from the three agricultural zones. In the second stage one Local Government Area namely, Katsina-Ala, Gboko and Otukpo from each zones were purposively selected based on the intensity of venture capital and availability of peri-urban and rural entrepreneurs in the area. Four enterprises with uniform spread intensity were used for the purpose of sample selection. These include retail businesses, business transporters, educational service providers and primary health care service providers. The final stage in the sampling exercise involved a sample proportion of 10 percent to select 134 and 120 respondents comprising of peri-urban and rural entrepreneurs respectively to form the 254 respondent's sampled Benue State, Nigeria.

### Model Specification/Data Analysis

Descriptive statistic was used to analyze objective (i) while the Gini Coefficient was used to determine the intensity in the use of venture capital in objective (ii) and multiple regression analysis was used to analyze objective (iii). Specifically the model was specified as follows:

#### 2.2.1 Gini Coefficient Model

The Gini coefficient measures the inequality among values of a frequency distribution. Gini coefficient is given as:

$$GC = 1 - \sum XY$$

Where;

GC= Gini Coefficient.

X= Percentage of the Venture Capital Users.

Y= Cumulative Percentage of Venture Capital Users

#### 2.2.2 The Linear Regression Model

The model equation and the specification of variables used in this research are shown below:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Where,  $i$  represents the number of observations and  $X_1, X_2, X_3, \dots, X_5$  are the explanatory variables. Furthermore,

$Y$  is the dependent variable,  $\alpha$  represent the estimated intercept,  $\epsilon$  is the normally distributed error term and  $\beta$  is the estimated parameter (Agresiti and Finlay, 2009).

Where,

$Y$  = Venture Capital Utilization (Equity stock/Quantum maximum)

$X_1$ =variable stock value (Naira)

$X_2$ =Rent (Naira)

$X_3$ = Tax (Naira)

$X_4$ =Labour (Man/days)

$X_5$  = Transportation cost (Naira)

A Priori expectation: the coefficients of  $X_1, X_2, X_3, X_4, X_5, > 0$

## 3.0 RESULTS AND DISCUSSION:

### 3.1 Sources of Venture Capital Available to Peri-Urban and rural Respondents

The result in Table 1 indicates sources of venture capital available to peri-urban and rural entrepreneurs. The result shows that most (26.1%) of the peri-urban entrepreneurs started their venture with capital from mortgage financing, 21.6% started their venture with personal savings, 20.1% started their venture with bank loan while 18.7% started their venture with money obtained from bam. This finding implies that respondents obtain their start-up capital mostly from formal lending services and personal savings thus seeking 'smart money' (huge money) for start-up capital and for this reason business angels and banks are valued ahead of other funding sources (Lindström & Olofsson, 2001; Sætre, 2003). This finding does not agree with Terungwa, (2011); in a study carried out by the Nigerian institute for social and economic research (NISER). NISER findings show that about 73% respondents obtained their funds from personal savings while only about 2% obtained their funds from the financial institutions. Relatively, the result also revealed that most (28.3%) of the rural entrepreneurs started their business with money obtained from bam (local contributions), 20% started their business with personal savings, 20% started their business with money obtained from mortgage financing, 18.3% started their business with money obtained from informal borrowing (family and friends) while 13.3% started their venture with capital from bank loan. This finding implies that bam is the most common source of venture capital in the rural area but gives out only small amount of money that is insufficient in establishing large scale business. Anigbogu *et al.* (2014), in their studies found that respondents in Anambra state agreed that their sources of fund for financing their SMEs include Promoters funds, Family and Friends. This culminated in to Venture capital with a weighted mean of N 3.7684, N 3.0324, and 3.1265 Naira respectively.

**Table 1: Sources of Venture Capital Available to Peri-Urban and Rural Respondents**

Sources	Peri-Urban		Rural	
	Frequency	Percentage	Frequency	Percentage
Personal Savings	29	21.6	24	20
Bank Loan	25	18.7	16	13.3
Informal Borrowing	27	20.1	22	18.3
Mortgage Financing	35	26.1	24	20
Bam	18	13.4	34	28.3
Others	-	-	-	-
Total	134	100	120	100

Source: Data Analysis, 2016.

### 3.2 Intensity of Venture Capital Utilization between Peri-Urban and Rural Respondents

The intensity of venture capital utilized between peri-urban and rural entrepreneurs is summarized in Table 2 and 3 respectively. The results of the Gini coefficient of 0.78 and 0.83 for peri-urban and rural entrepreneurs respectively showed that there is high inequality utilization of venture capital in the study area. Also, the mean venture capital utilized in the peri-urban was N 2,

471, 786.75, while the mean venture capital utilized in the rural area was N 710, 607.08. For both peri-urban and rural entrepreneurs the value of Gini coefficient implied a high level of inequality utilization of venture capital. This finding agrees with Aylward (1999) that the volume of venture capital finance in developing countries has followed a steeply rising trend in recent years, with longer a history in Asia. The low utilization of venture capital could be as a result in the amount of money available in starting up their business.

Table 2: Intensity of Venture Capital Utilization of Peri-Urban Respondents.

Venture Capital	Frequency	% Entrepreneurs	Total Amount of V.C Utilized	% Value of V.C Utilized	Cumm % of Total V.C Utilized (Y <sub>i</sub> )	$\sum X_i Y_i$	Mean V.C Utilized
1-500000	43	32.1	10682050	0.321	0.032	0.0103	<b>2471786.75</b>
500001-1000000	39	29.1	28352000	0.291	0.086	0.025	
1000001-1500000	18	13.4	20965475	0.134	0.0633	0.0085	
1500001-2000000	4	3	7219900	0.029	0.0218	0.0006	
>2000001	30	22.4	264000000	0.224	0.7970	0.1785	
<b>Total</b>	134	100	331219425		100	0.2229	

Source: Data Analysis, 2016.

Table 3: Intensity of Venture Capital Utilization of Rural Respondents.

Venture Capital	Frequency of Entrepreneurs	% Entrepreneurs	Total Amount of V.C Utilized	% Value of V.C utilized (X <sub>i</sub> )	Cumm % of Total V.C Utilized(Y <sub>i</sub> )	$\sum X_i Y_i$	Mean V.C Utilized
1-200000	18	15	2842550	0.15	0.033	0.005	<b>710606.08</b>
200001-400000	42	35	11427100	0.35	0.134	0.046	
400001-600000	19	13.4	9394150	0.16	0.11	0.017	
600001-800000	18	15	12181200	0.15	0.143	0.021	
800001-1000000	4	3.3	3481700	0.03	0.041	0.0013	
>1000001	19	15.8	45946150	0.16	0.54	0.085	
<b>Total</b>	120	100	85272850		100	0.17	

Source: Data Analysis, 2016.

### 3.3 Effect of Venture Capital Utilization on Peri-Urban and Rural Respondent's Turn over [Cumulative stock exchange per unit time]

#### 3.3.1 Effect on Peri-urban and Rural Entrepreneurs

Turn Over is an important factor that determines the rate of growth of an investment portfolio. In order to analyse it, causal effect model was employed. The turnover of rural entrepreneurs is 28753000 and that of peri-urban entrepreneurs is 1.86E08 ( $1.86 \times 10^8$ )

Multiple linear regression was fitted to determine the effect of selected regressors on rural and peri-urban entrepreneurs turn over as presented in tables 4 and 5. The result showed the coefficient of multiple determination  $R^2$  (0.5s2) and (0.49) for peri-urban and rural entrepreneurs respectively, implying that 52 and 49 percent of the variation of entrepreneur's turn-over was explained by value of variable stock, cost of paying rents, cost of taxes, cost of labour and cost of transportation. Cost of rent and cost of transportation were the variables that significantly affected the turn-over of peri-urban entrepreneurs. Specifically, the estimated coefficients of cost of rent and cost of transportation were positive and significant at 10 and 5 percent level of probability respectively implying that unit increase in cost of rent and cost of transportation will increase the turn-over of peri-urban entrepreneurs by their estimated coefficients. The sign of the coefficients of cost of rent and transportation were

contrary to the a priori expectation. This situation depicts capacity under- utilization or below scale operations. In contrast, the estimated coefficients of value of variable stock, labour and tax were not significant implying that the value of variable stock, labour and transportation had no significant effect on the turn-over of peri-urban entrepreneurs. There is a clear indication that peri-urban investors are making where-wind profits on their investments in Benue State, Nigeria.

Relatively for rural entrepreneurs, value of variable stock and rent were the variables that significantly affected the turn-over of rural entrepreneurs. Specifically; the coefficient of variable stock value was positive and significant at 1 percent level of probability implying that unit increase in the cost of variable stock will increase entrepreneurs turn over by the value of the estimated coefficient. Furthermore, the coefficients of rent was negative and significant at 1 percent level of probability implying that unit increase in the cost of rent will lead to a decrease in the rural entrepreneurs turn-over by the value of the estimated coefficient. The sign of the coefficients of cost of variable stock and rent were contrary to the a priori expectation. However, the coefficients of cost of taxes, labour and transportation were not significant therefore cost of tax and labour had no significant effects on rural entrepreneurs turn-over.

**Table 4: Regression Estimates of Factors Affecting Peri-Urban Venture Capital Utilization Turn Over.**

Variable	Linear
Constant	-957749.654 (-0.725)
Variable stock value (N)	0.497 (1.312)
Rent (N)	0.896 *(1.695)
Taxes (N)	-0.271(-1.241)
Labour (man-days)	-13.799 (-0.716)
Transportation (N)	739.85** (1.975)
<b>R<sup>2</sup></b>	<b>0.516</b>
Adjusted R <sup>2</sup>	0.497
F-Value	27.253***

Source: Data Analysis, 2016 \*\* , \* significant at 5% and 10% N.B Values in brackets are t values

**Table 5: Regression Estimates of Factors Affecting Rural Venture Capital Utilization Turn Over.**

Variables	Linear
Constant	215934.514 (2.589)
Variable stock value (N)	0.586***(8.653)
Rent (N)	-0.449 ***(-5.132)
Taxes (N)	-0.045 (-0.872)
Labour (man-days)	-0.354 (-0.115)
Transportation (N)	-4.141 (-1.568)
<b>R<sup>2</sup></b>	<b>0.493</b>
Adjusted R <sup>2</sup>	0.470
F-Value	22.126***

Source: Data Analysis, 2016 \*\*\*, \* significant at 1% N.B Values in brackets are t values

## CONCLUSION AND RECOMMENDATIONS

This study was carried out to assess the intensity of venture capital utilization among peri-urban and rural entrepreneurs in Benue state, Nigeria. The study identified mortgage financing and bank as the main source of venture capital available to peri-urban and rural entrepreneurs. The study also revealed that there is inequality utilization of venture capital in the study area, the study further found out that venture capital utilization among peri-urban entrepreneurs can improve entrepreneurs turn-over by unit increase in payment of rent and tax. Similarly, venture capital utilization among rural entrepreneurs may improve their turn-over by buying more goods, paying rent and paying for transportation of goods. The study therefore recommends that the federal government should formulate policies such as instituting informal finance sectors that will encourage entrepreneurs to source funds from the capital market. In addition to providing financing, the banks are also expected to undertake promotional activities which includes; the identification, development and packaging of viable enterprises. Therefore a policy should be implemented to encourage the bank to willingly accept these responsibilities. Incentives should also be put in place which will include favourable legislation that encourages certain financial institutions such as pension funds to invest in venture capital firms. Tax incentives for investors in venture capital firms and similar fiscal measure should also be put in place.

## REFERENCES

Adam, S. (1993). Theory of Capital Efficiency, Cambridge University press. Pp232 -259  
 Amit, R., Brander, J. and Zott, C. (1999). Venture Capital Financing of Entrepreneurship Theory,

Empirical Evidence, and a Research Agenda, 2-40.  
 Anigbogu, T.U., Onwuteaku, C.I., Edoko, T.D and Okoli, M.I. (2014). Roles of Small and Medium Scale Enterprises in Community Development: Evidence from Anambra South Senatorial Zone, Anambra State. *International Journal of Academic Research in Business and Social Science, Vol. 4 (8) ISSN: 2222-6990*  
 Antai, A.S., Anam, B.E., Ita, J.J. (2012). Entrepreneurship as a strategy for the economic development of the Niger Delta region of Nigeria. *J. Business Management, 4(17)*.  
 Aylward, A. (1999). "Trend in Venture Capital Finance in Developing Countries," An International Finance Corporation Discussion Paper Number 36, The World Bank, Washington, D.C. Accessed in 2006 from [http://wbln0018.worldbank.org/html/.../ifcdp0036/\\$FILE/ifcdp0036.pdf](http://wbln0018.worldbank.org/html/.../ifcdp0036/$FILE/ifcdp0036.pdf)  
 Beaulieu, J. and Matthey, J. (1998). The work week of capital and capital utilization in manufacturing. *Journal of productivity Analysis, 10: 1999-2013*.  
 Lindström, G. and Olofsson, C. (2001). Early Stage Financing Of NTBFs: An Analysis Of Contributions From Support Actors. *Venture Capital: An International Journal of Entrepreneurial Finance, 3: 151-168*.  
 Neva, R.G. (2003). Global Development and Environment Institute: Working Paper. Tufts University, Medford MA 02155, USA.  
 Okplala, K.E. (2012). Venture Capital and the Emergency and Development of Entrepreneurship: A focus on Employment Generation and Poverty Alleviation in Lagos State. *International Business and Management Vol. 5(2): pp134-141*.  
 Oma-Williams, O. W. (2003). Entrepreneurship Development in Nigeria: Problems, Challenges

- and Prospects. *Nigerian Management Review*, 14(1&2): 1082-1093.
- Sætre, A. S., (2003). Entrepreneurial Perspectives on Informal venture capital. *Venture Capital: An International Journal of Entrepreneurial Finance*, 5: 71-94.
- Suleiman, A.S. (2006). The business entrepreneur: entrepreneurial development, small and medium enterprises, 2nd edn. Entrepreneurship Academy Publishing, Kaduna.
- Terungwa, A. (2011). An Empirical Evaluation of small and medium Enterprises Equity Investment Scheme in Nigeria. *Journal of Accounting and taxation*, 3(5): 79-90.

**Cite this Article:** Adu, VM; Okpeke, GA; Okoli, NG (2024). Venture Capital Utilization among Peri-Urban and Rural Entrepreneurs in Benue State, Nigeria. *Greener Journal of Business and Management Studies*, 12(1): 1-8.