International Journal of Agriculture, Food and Biodiversity IJAFAB

Determinants of Venture Capital Financing among Micro-Agro Enterprises in Abia State, Nigeria

Ogbe, S. E[1*], Osayi, C. P.[2] and Amadi, F.[1]

[1]Department of Entrepreneurial Studies, Michael Okpara University of Agriculture Umudike
[2]Federal University Wukari, P.M.B 1020, Taraba State Nigeria

*Corresponding Author's Email: talk2samogbe@yahoo.com

Abstract

The study analyzed the determinants of venture capital financing among micro-agroenterprises in Abia State, Nigeria. The specific objectives were to determine; the socioeconomic characteristics of the respondents, the financing needs of the respondents, the criteria for accessing venture capital financing among the respondents, and the factors influencing venture capital financing among the respondents. A simple random sampling technique was used in selecting 175 micro agroenterprises. Data were analyzed using simple descriptive statistics such as means, percentages, frequency distributions, and regression models. The study revealed that the majority of the respondents selected for the study were young ($\bar{X}$ =30 years), males (57%), single (61%), educated (91% had post-secondary school education), and were well experienced micro-agro enterprise operators ($\bar{X}$ =7 years). The study concluded that the high incidence of non-crop-based agro enterprises in the study could be due to the quick financial inflows and their less risky nature. Also, the financing needs were mainly the payment of rents ($\bar{X}$ = ₦ 70,333.3), Business diversification ($\bar{X}$ = ₦ 66,315.8), and the purchase of inputs ($\bar{X}$ = ₦ 47, 066). In addition, the respondents indicated the ability to share portfolio (73%), 72% and 67% having a functional bank account (72%) and business plan (67%) were major criteria for accessing venture capital financing. Age, education, income, assets, and enterprise types were the variables affecting venture capital financing among the respondents. The study recommends that venture capitalists should support more young, educated, and experienced non-crop micro enterprises to ensure their financial investment is realized on time. Moreover, venture capitalists should fund micro-agro enterprises with major input requirements. Finally, venture capitalists should support micro-based enterprises with the capacity to generate continuous cash inflows.

Keywords: Access, venture, capital, financing, micro-agro enterprises, creditworthiness

Introduction

Micro-agroenterprises constitute the major component of the Nigerian economy (Ukoha *et al*., 2021). They provide a means of livelihood for an estimated 65% - 70% of the country's population (Akpabio, 2019). It is the major driver of the non-oil sector of the economy, contributing about one-third of annual economic growth (Akpabio, 2019). Generally, micro-enterprise irrespective of the sector, has no single definition, but the common feature of these definitions is the micro level. Micro-enterprise is conceptualized as an enterprise that is relatively small in size, capital, and operations. These are the commonest enterprises in our present-day society, which contribute positively to the growth and development of society.

Therefore, micro agroenterprises are enterprises producing agricultural outputs and in other cases use agricultural inputs on a small scale for further productivity in attaining food security, employment, poverty reduction, and industrial vitalization. Micro-agroenterprises having their roots in agriculture, are reputed for their resilience and support to the Nigerian economy (Ukoha *et al*., 2021). The contributions of agriculture to GDP was 64% in 1960, declined to 35% in 1988, and presently, the agricultural sector in Nigeria contributes less than 30% to GDP, with crop production accounting for an estimated 85% of this total, livestock 10%, with forestry and fisheries contributing the remaining 5% (Awotide and Akerele, 2010).

However, the records showed that budgetary allocation to agriculture has plummeted from about 5.41 percent in 2008 to a paltry 1.2 percent in 2018 (Adefeko, 2018). These figures do not align with the AU-Maputo Declarations of Comprehensive Africa Development Program CAADP which requires African countries to allocate at least 10% of their annual budgets to agriculture and achieve 6% annual growth in Agricultural GDP. It is no surprise therefore that Agriculture contributes less than 30% to Nigeria's GDP (Adefeko, 2018). Based on the above situation and more especially the tremendous agricultural potential in Nigeria, the government has accepted the view that the country should resolve

©2023 International Journal of Agriculture, Food and Biodiversity (IJAFAB)

most unequivocally to make agroenterprises the springboard of the mainstay of the economy (Awoyinka, 2009). Again, Awoyinka (2009) states that agroenterprise development means among other things increasing agricultural productivity to generate substantial surpluses.

Micro agroenterprise development often involves expenditure on capital inputs. These expenditures require funding. Hence, the provision of funds is fundamental to micro agroenterprise development (Nwajiuba, 1989). Its importance is particularly glaring in a developing economy like Nigeria where land and labour resources are relatively abundant, and the industrial sector is poorly developed. Micro-agroenterprise financing has proven to be a powerful instrument against poverty reduction and development in rural areas. Ololade and Olagunju (2013) in their opinion stated that agroenterprise credit is very important for sustainable micro-agroenterprise development to be achieved in Nigeria. Therefore, micro-agroenterprise operators are particularly in need of such instrument (i.e. finance), because of the seasonal pattern of their activities and the uncertainty they are facing. Micro-agroenterprise financing enhances productivity and promotes the standard of living by breaking the vicious cycle of poverty of small-scale farmers. Access to agro-financing facilities by these micro-agro enterprises that mostly reside in rural areas, has the potential of making the change between crushing poverty and economically secured life as well as improving agricultural productivity (Ajah *et al.*, 2017). Furthermore, micro-agroenterprise financing has been recognized as an essential tool for promoting micro, small, and medium-scale enterprises (Ogah-Alo *et al*., 2019).

Formal financial institutions perceive micro agroenterprises as high risk and commercially unviable, as a result only a few of these micro agroenterprises access credit from formal financial institutions in the country. Various types of assistance have been provided to micro agroenterprises and other SMEs to boost their growth and development by making them more profitable (UN, 2020). Several Organizations including business associations, voluntary organizations, and other non-governmental organizations have set up programs to enhance the factors that influence the development of SMEs especially as it relates to enterprise growth and development.

The types of assistance these organizations offer vary with some giving financial assistance, others training and extension services, pre-constructed commercial shades, or assisting in the marketing of products (Admati, and Pfleiderer, 2004). Hence, venture capital is one source of non-bank financing, which is quite prevalent in developed financial markets for small or startup firms (Keuschnigg 1998). Venture Capitalists are organized providers of financing for winning but risky business proposals by small and medium firms that have a promising but unproven idea. If Venture Capitalists are convinced that a business idea is promising, they will take an ownership stake in the business and provide the needed funds while sharing the risk. It is expected that many of the country's small businesses whose growth has been constrained by the shortage of capital or increased cost of borrowing will have another source of finance.

There is empirical evidence of the participation of venture capitalists in the industrialization of developed countries. In the United States of America, the role of venture capital has been instrumental throughout its industrialization; however, it became institutionalized after the 2nd World War. Before World War II, venture investment was a monopoly led by wealthy individuals, investment banking syndicates, and a few family organizations with a professional manager (Hisrich and Peters, 2002). For example, over the years, the Rockefeller family has made the initial capital contribution to several successful businesses. The first step towards institutionalizing the Venture Capital industry took place in 1946 with the formation of the American Research and Development Corporation (ARD). The next major development was the Small Business Investment Company Act of 1958 which married private capital with government funds. It was led by professionally managed Small Business Investment Companies (SBIC) to provide capital to start-ups and growing businesses with tax advantages and incentives. During the late 1960s, small private Venture Capital firms emerged and were formed to provide investment funds. The organizers behind the partnership could raise capital from institutional investors such as insurance companies, pension funds, and Bank Trust Departments.

Despite the large number of assistance programs, the growth and development of micro agroenterprises and other SMEs have not been satisfactory. Ventures have collapsed as soon as assisting organizations pull out of the project, and the remaining ones have remained small. What then contributes to this kind of scenario? Much literature exists on the effect of venture capital financing on small and medium enterprises but nothing or little has been done as it relates to micro agroenterprises. So, this research will focus on the effect of venture capital financing on micro agroenterprises performance in Abia State, Nigeria. The main objective of this study is to determine the effect of venture capital financing on micro agroenterprises performances in Abia State, Nigeria. The specific

Galley Proof

objectives include determining; the socioeconomic characteristics of respondents, the financing needs of the respondents, the criteria for accessing venture capital financing among the respondents, and the factors influencing venture capital financing among the respondents.

METHODOLOGY

Abia is a state in the southeastern part of Nigeria. The capital is Umuahia, and the major commercial city is Aba, formerly a British colonial government outpost in the region and one of Nigeria's most populated areas. Abia state was created in 1991 from part of Imo State, It is one of the constituent states of the Niger Delta region. It's also the 5th most industrialized State in the country with the 4th highest index of human development in the country, with numerous economic activities and fast-growing populations as recorded by the United Nations in early 2018. Abia State occupies about 6,320 square kilometers and is bounded on the north and northeast by the states of Anambra, Enugu, and Ebonyi. To the west of Abia is Imo State, to the east and southeast are Cross River State and Akwa Ibom State respectively and to the south is Rivers State. The southern part of the State lies within the riverine part of Nigeria, it is a low-lying tropical rainforest with some oil palm brush, the southern portion gets heavy rainfall of about 2,400 millimeters (94 in) per year and is especially intense between April and October. The State population is 4,143,100 (NPC, 2022). This study used the primary source of data collection, and the structured questionnaire was used to collect data from the respondents. First, 5 Local Government Areas were purposively selected from the 17 Local Government Areas of Abia State. This is due to the high concentration and activities of these micro agroenterprises. Second, 5 recognized micro-agroenterprise associations were purposively selected from each of the selected LGAs. Third, 7 micro agroenterprises were randomly chosen from each of the selected micro agroenterprise associations. This gave a total sample size of 175 micro agroenterprises. The list of micro agroenterprise associations was sourced from the Micro, Small, and Medium Scale enterprise offices in each Local Government Area. Data were analyzed using simple descriptive statistics such as means, percentages, frequency distributions, and regression model. The Implicit form of the regression model is stated as follows:

$Y = f(X_1, X_2, X_3, X_4, X_5, X_6, X_7)$

Where;

Y = Amount of venture capital received in naira
X_1 = Age of the respondents measured in years
X_2 = Years of experience
X_3 = Level of education measured by the number of years spent in acquiring formal education
X_4 = Income (naira)
X_5 = Assets measured in naira
X_6 = Marital status (married= 1, Others= 0)
X_7 = Enterprise type (Crop based=0, non-crop based=1)

RESULTS AND DISCUSSION

Socioeconomic characteristics of the respondents

The distributions of the socioeconomic characteristics of the respondents is presented in Table 1. The Table shows that 63.4% of the respondents had ages ranging between 21-30 years. The mean age was 30 years. This means that the majority of the respondents were young, energetic, and enterprising. Being enterprising could mean that respondents would not be constrained by physical energy in carrying out their agro-enterprise activities and would have the willingness to adapt to financial innovations. This corroborates the work of Ogbe and Ejim (2019) that willingness to adopt financial innovation could position the respondents to access financial assistance.

Table 1 shows that 56.6% of the respondents were males while 43.4% were females. This means that the majority of the respondents were males. The involvement of more males in this study could be linked to the basic responsibility as the breadwinners of their homes. Being the breadwinners of their homes could facilitate activities and processes that can promote their functionality and financial prosperity. Table 1 shows that 61% of the respondents were single, while 39% of the respondents were married. This means that the majority were singles and therefore stand a chance to convince venture capitalists of their availability, resourcefulness, and willingness to utilize financial assistance effectively. Table 1 shows that all the respondents had one form of education or another. However, 91% of the respondents completed post-primary education. The implication could mean that respondents stand a chance to convince the venture capitalist of their mental abilities to implement all financial contracts and present relevant financial records when needed. Table 1 shows that respondents had different years of agro-processing experience. However, 99% of the respondents had experience in agro-business ranging from 1 – 12 years. The mean years of agro-business experience was about 7 years. This means that the majority of the respondents are well-experienced agro-enterprise operators. Experience could indicate the ability to solve problems with ease since the

Copy Print

respondents might have acquired practical knowledge over the years.

Table 1: Socioeconomic characteristics of the respondents

Socioeconomic characteristics	Frequency	Percent
Age		
21 – 30	111	63.4
31 – 40	29	16.6
41 – 50	13	7.4
51 – 60	9	5.1
61 – 70	13	7.4
Total	**175**	**100**
Mean ($\bar{x}$)	**30**	
Sex		
Female	76	43.4
Male	99	56.6
Total	**175**	**100**
Marital status		
Single	107	61.2
Married	68	38.8
Total	**175**	**100**
Education		
Primary	16	9.1
Secondary	82	46.8
Tertiary	77	44.0
Total	**175**	**100**
Experience		
1-4	60	34.3
5-8	56	32.0
9-12	50	38.6
13-16	9	5.1
Total	175	100
Mean ($\bar{x}$)	6.7	

Source: Field survey, 2021

Type of Enterprise

Distribution based on the type of enterprise is presented in Table 2. Table 2 show that 67.4% of the respondents were non-crop-based agro enterprise operators while 32.6% of the respondents were crop-based agro enterprise operators. This means that the majority of the respondents were non-crop-based. The high incidence of non-crop-based agro enterprises in the study could be due to the quick financial inflows and their less risky nature.

Table 2: Distribution of respondents based on type of enterprise

Agroenterprises	Frequency	Percentage
Crop based	57	32.6
Non-crop based	118	67.4
Total	175	100

Source: Field survey, 2021

Venture capital needs of the respondents

The distribution of financing needs of the respondents is presented in Table 3. Table 3 shows that the respondents had different financing needs. The Table shows that the majority indicated payment of rents ($\bar{x}$ = ₦ 70,333.3) as their main financing need. This may not be out of place as landed property owners demand higher payment on their facilities, linking it to the general increase in the price of goods and services. This is closely followed by the financing need for diversification ($\bar{x}$ = ₦ 66315.8). Business diversification could represent full exploitation of the value chain lines of their various micro-agroenterprises. Also, the majority indicated the purchase of inputs ($\bar{x}$ = ₦ 47,066). Inputs are major materials used in every production/service process to generate outputs that can meet people needs. Another financing need among the respondents was transportation expenses ($\bar{x}$ = ₦ 39, 093.8). Paying for the transportation of goods and services is an essential aspect of every efficient production or service process, particularly in an economy with minimal subsidies on Premium Motor Spirit (PMS), commonly referred to as petrol. The purchase of food ($\bar{x}$ = ₦ 29,304.3) was another item mentioned by the respondents that required financing. This could be due to the place of good and balanced food requirements for healthy living that will ultimately translate into productive micro agroenterprises. Furthermore, power supply ($\bar{x}$ = ₦11, 853.2) was identified as another input requiring financial support. Its funding will significantly transform the enterprises.

Table 3: Venture capital needs of the respondents

Venture capital needs items	Mean amount needed (Naira)	Ranking
Dues/tax payment	7679.7	8th
Purchase of Food	29,304.3	5th
Purchase of inputs	47, 066.0	3rd
Payment of rents	70,333.3	1st
Purchase of packaging materials	11,142.9	7th
Power supply	11,853.2	6th
Transportation expenses	39,093.8	4th
Business diversification	66,315.8	2nd
Dues/tax payment	7679.7	8th
Purchase of Food	29,304.3	5th
Purchase of inputs	47, 066.0	3rd

Source: Field survey, 2021

Criteria for accessing venture capital financing among respondents

The distribution of criteria for accessing venture capital financing is presented in Table 4. Table 4 shows that all the respondents indicated one form of criteria or another for accessing venture capital financing. However, 73% of the respondents indicated ability to share portfolio was a major requirement for accessing venture financing.

Galley Proof

Table 4: Criteria for accessing venture capital financing among the respondents

Criteria	Frequency	Percentage	Ranking
Business plan	118	67.4	3rd
Availability of financial records	105	60.0	6th
Willingness to repay	113	64.0	4th
Must have a functional bank account	126	72.0	2nd
Must not be owing any financial institution	111	63.4	5th
Ability to share portfolio	127	72.6	1st

Source: Field survey, 2021 Note: Multiple responses recorded

The ability and acceptance to share portfolio could mean a strong indicator of the willingness of the respondents to partner with prospective venture capitalist. Additionally, 72% and 67% of the respondents stated that having a functional bank account and a business plan are important criteria for accessing venture capital financing. The presence of a functional bank account may indicate the level of transparency and accountability of the respondents, and also ensures that their operations can be tracked in case of any deviation from the original plan.

Moreover, 64% and 63% of the respondents indicated that they were willing to repay and did not owe any financial institutions, as conditions presented to them by venture capitalists. The respondents' willingness to repay is a strong indicator of their creditworthiness, which must be assessed by the prospective venture capitalist, as it is subjective. Additionally, the respondents' non-financial commitment to any financial institution is another condition presented to them before accessing venture capital financing. This means that respondents should not be indebted to any creditor, as such a situation may indicate an additional financial burden.

Factors influencing venture capital financing among micro-agro enterprises

Factors influencing venture capital financing among micro-agro enterprises are presented in Table 5. The Table shows that the age of the respondents had a significant at 5% relationship with venture capital financing. This means that as the age of the respondent increases, venture capitalist financing also increased. Increased age could mean a greater level of maturity to handle financial resources effectively. The greater the ability to handle financial resources effectively, the greater the venture capital financing.

Level of education had a positive and significant at 10% relationship with venture capital financing. This means that as level of education increased, venture capital financing also increased. Level of education could mean greater human and mental capacity to comprehend and handle financial issues effectively (Ogbe and Igwemadu, 2021).

Table 5: Factors influencing venture capital financing among the selected agro enterprises

Variables	Coefficient	Std Error	t-value
Constant	1218373	118270.62	1.030
Age	3092.53	1593.92	1.928**
Experience	2365.66	5047.58	0.469
Education	23811.18	15358.7	1.55*
Income	0.222	0.120	1.846*
Assets	0.493	0.122	4.033***
Marital status	40873.38	35503.63	1.51
Enterprise type	105437.23	28874.573	3.652***
R^2	0.721		
R^{-2}	0.695		
F ratio	28.371***		

Source: Field survey, 2021

Income was significant at 10% and had positive relationship with venture capital financing. This means that as income increased, venture capital financing also increased. Increased income could indicate high level of financial performance and capacity of the respondents. The greater the financial performance and capacity of the respondents, the greater their level of creditworthiness. The greater the respondents level of creditworthiness, the greater their access to venture capital financing.

Assets was significant at 1% and had positive relationship with venture capital financing. This means that as assets of the respondents increased, venture capital financing also increased. Assets acquired by the respondents could indicate ability to absorb shock especially during off productions/processing periods. Enterprise type was significant at 1% and positively related to venture capital financing. This means that as non-crop based agroenterprises increased, venture capital financing also increased. The increase of venture capital financing to non-crop based agroenterprises could be due to production and sale of durable and less perishable items. The value of R^2 coefficient of multiple determinants of 0.721 indicates that 72.1% of the total variations observed in dependent variable (venture capital financing) is accounted for by the independent variables included in the model. The F-ratio value of 28.371 indicates that the model was statistically significant at 1% and suggests a significant effect of the independent variables on the dependent variable.

Copy Proof

Conclusion/Recommendations

The study concluded that the high incidence of non-crop-based agro enterprises could be due to the quick financial inflows and their less risky nature. Also, the financing needs were mainly the payment of rents, business diversification, and the purchase of inputs. In addition, the respondent's ability to share portfolio, having a functional bank account, and business plan were major criteria for accessing venture capital financing. Age, education, income, assets, and enterprise types were the variables affecting venture capital financing among the respondents. The study suggests that venture capitalists should invest in young, educated, and experienced non-crop microenterprises to ensure timely financial returns. Moreover, venture capitalists should invest in small agricultural businesses with significant input needs and assist those capable of generating consistent cash flow.

References

Adefeko, A. (2018). Agriculture-key to sustainable development in Nigeria. A keynote address presented at the Franco/Nigerian Chamber of Commerce and Industry in Nigeria on the 26th of March 2018.

Admati, A. R. & Pfleiderer, P. (1994). *Robust Financial Contracting and the Role of Venture Capitalists. Journal of Finance*, 49(2): 371–402.

Ajah, E. A.; Igiri, J. A. and Ekpenyong, H. B. (2017). Determinants of Access to Credit among Rice Farmers in Biase Local Government Area of Cross River State, Nigeria. *Global Journal of Agricultural Sciences* Vol. 16, 2017: 43-51

Akpabio, I. A. (2019). Sustainable Agricultural Development in the Era of Rural Insecurity. Keynote Address presented at the Society of Community and Communication Development Research 2nd National Conference, held 13-16 Aug. 2019 at Michael Okpara Uni. Agric. Umudike, Nigeria

Awotide, D.O. and Akerele, E.O. (2010). Commercial Agriculture in Nigeria: Prospects, Social Impacts, Constraints and Policy Issues. *In Commercial Agriculture, Banking Reform, and Economic Downturn: Setting a New Agenda for Agricultural Development in Nigeria.* Proceedings of the 11th annual National Conference of the National Association of Agricultural Economics (NAAE). Nov. 30th-Dec.3rd 1-5.

Awoyinka, Y. A. (2009). Effect of presidential initiatives on cassava production efficiency in Oyo State, Nigeria. *Ozean Journal of Applied Sciences.* 2(2):185-193.

Hisrich, D. R and Peters, P. M. (2002). Entrepreneurship. New York: McGraw–Hill Publishing Co. Ltd.

Keuschnigg, Christian (1998), Investment Externalities and a Corrective Subsidy, International Tax and Public Finance 5, 449-469.

National Population Commission (NPC) (Web) (2022). Annual Population Change [2006 - 2022] Abuja.

Nwajiuba, U.C. (1989). Factors in Commercial Banks Lending to Agriculture in Nigeria: 1970-1988. An unpublished M.SC thesis. Department of Agric. Economics, UNN.

Ogah-Alo, L. O.; Ikpor, I. M. and Eneje B.C (2019). Financing Small and Medium Enterprises through Micro-Credit Lending in Nigeria: Environmental Consequences. *International Journal of Applied Environmental Sciences* 14(2):171-196.

Ogbe, S. E and Ejim, P (2019). Willingness to adapt to financial innovation could position the respondents to access credit. *Journal of Agricultural and Rural Development*. 22(2). 4414-4419.

Ogbe, S. E and W. C. Igwemadu (2021). Perception of small and medium scale enterprise operators in Abia State, Nigeria on Nigerian Incentive-based Risk Sharing System for Agricultural Lending (NIRSAL) Bank financing on enterprise development in Abia State, Nigeria. *Journal of Community & Communication Research*, Vol. 6 No.2 Pp.199-207.

Ololade, R. A and Olagunju, F. I. (2013). Determinants of Access to Credit among rural Famers in Oyo state Nigeria. *Global Journal of Science Frontier Research* 8(2):1-7.

Ukoha, J.C.I., Nwadike, F.C. and Akpabio, N.G. (2021). A paradigm shift in agricultural entrepreneurship skills acquisition education in Nigeria's Secondary Schools: A post-pandemic measure. Proceedings of 3rd Biennial Conference of Society for Communication & Community Development Research (SCCDR), Held at Michael Okpara University of Agriculture, Umudike Abia State Nigeria, on 5-6 October 2021, 129-139.

United Nations (2020). Recovering better: economic and social challenges and opportunities. Department of Economic and Social Affairs New York, New York 10017, United States of America.

Early Proof