



Achieving Sustainable Development in Business Productivity in Nigeria: An Equity Financing Model Approach

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Abstract

Equity financing is one of the sources of funding available to non-bank financial institutions which is quite prevalent in developed financial markets for small or start-up firms. This study empirically determined the effect of the Equity Financing Scheme on a sustainable increase in productivity of agro-allied small businesses in Nigeria. Data for this study were elicited through the use of a questionnaire structured in a five-point likert scale. The evaluation of the relationship between the dependent and independent variables was performed using the Ordinary Least Square regression technique. The study revealed that the equity financing scheme had a positive and significant effect on the sustainable productivity of agro-allied small businesses in South-South Nigeria. The study recommended that efforts should be made to educate the small business entrepreneurs on the benefits of equity financing as a viable option towards business growth and expansion and that the government through the various intervention agencies should restructure the long-term loan policies to give access to more growth-oriented agro-allied businesses, to increase their presently low capacity to procure heavy-duty technology to increase productivity and achieve food security in Nigeria. Small business owners should take advantage of the membership of cooperative societies and as well maintain good business relationships with suppliers; this will guarantee a continuous supply of needed materials and uninterrupted operations of the business.

Keywords: Equity financing scheme; Sustainability; Business productivity.

1. Introduction

1.1. Background of the Study

Equity Investment schemes provides fresh capital to generally small and young companies. Often innovative start-ups, they have a strong growth potential, but at the same time have a business model with a high level of uncertainty. Being the equity provider, venture capital accepts more risk than banks offering loans: creditors are expected to be paid before owners in case of company's failure. Since the success of an equity financed firm is directly linked to the success of the underlying companies, venture capital firms (unlike traditional debt providers) usually provide important non-financial support to these companies including consultancy services, financial advice, marketing strategy, training among others.

Equity investment (Venture capital) can be supplied in a number of ways including public or regional organisations, banks, corporations and their affiliates. But organised venture capital is much more highly significant and highly sophisticated than business angels funding (Adios, 2018). The main difference is that venture capital firms, being large pools of capital, can contribute very large amount of finance for business development. Depending on their investment strategy, they may invest in various industry sectors, or various geographical locations, or various stages of a company's life.

Financing programmes have attracted more attention than other known SME constraints because every enterprise requires funds for its capitalization, working capital and rehabilitation needs, as well as for the creation of new investment. It is observed that the major gap in Nigeria's industrial development process in the past years was of the dearth of long-term finance for SMEs Thus, the importance of the Small and Medium Industry Equity Investment Scheme (SMIEIS) stems from the economic role of the real sector, which engages in actual production of which SME subsector, is a major element in economic growth.

The Small and Medium Industry Equity Investment Scheme (SMIEIS) is an innovative way of financing the real sector and it has a considerable developmental potential Consequently, the approval of the Bankers' Committee on

June 19, 2001 and subsequent launching of SMIEIS on August 21, 2001 gave impetus to the commencement of the Scheme in Nigeria. Funding was provided under the scheme for equity investment in eligible industries. This reduced the burden of investment and other financial charges expected under normal bank lending, as well as provide financial, advisory, technical and managerial support from banking industries (Akinwumi, 2007).

The concept of SMIEIS in Nigeria was the initiative of the Central Bank of Nigeria with the voluntary support and efforts of the Bankers' Committee. The primary objectives of the Scheme, among others include facilitating the flow of funds for the establishment of new SMIs and reactivation, expansion or restructuring of on-going projects in this sub-sector, stimulating economic growth, development local technology and generating employment, management and stimulation of corporate governance in the SMIs (Central Bank of Nigeria CBN, 2008). Equity investment activity generally includes two distinct investment situations: investments in new and young rapidly-growing, often technology-based companies (Akinwumi, 2007); and financing company restructuring through Management buy-Outs (MBOs) -- which enable existing management to acquire a business - and management buy-ins (MBIs) -- which enable managers from outside a company to buy-in to a company.

1.2. Statement of the Problem

Over the last two decades, owing to the rapid and steady decline in strategic and creative thinking, decline in proper decision making by entrepreneurs and policy makers, and the absence of the capacity of small business owners to simultaneously exploit opportunities innovatively to create competitive advantage for business sustainability, emphasis in entrepreneurship literature has centred on basic managerial skills for entrepreneurs; later came the advocacy for accounting skills needed to boost entrepreneurial competencies. However, reports of high rate of business failures owned by entrepreneurs with adequate funds, accounting and managerial abilities calls for further investigations.

A review of extant literature showed relationship between production capabilities and development of small-scale manufacturing enterprises (Unam and Unam, 2013); entrepreneurial skills in resource acquisition strategies and profitability of SMEs (Mohammed and Nzelib, 2014); however, there is no available literature within the strategic entrepreneurship management construct, focusing on resource mobilisation capacity as it affects productivity of agro-allied small businesses in Nigeria.

1.3. Objective of the Study

This study empirically determined the effect of Equity Financing Scheme on sustainable increase in productivity of agro-allied small businesses in South-South Nigeria. The significance of this study was premised on two major pedestals – first, that agriculture has remained the most crucial sector of the Nigerian economy upon which nearly all other sectors depend for growth and development; and secondly the contemporary nature of the study, since the government is presently seeking ways to improve the productivity of the sector and diversify the economy. Hence, the findings and recommendations of this study would be of enormous benefits to academic works, as it is a significant and major contribution to the body of knowledge, which fills the gap in contemporary literature on the strategic entrepreneurship management and development of sustainable agro-allied small businesses in Nigeria.

2. Literature Review

2.1. Conceptual Framework

Equity investment is a type of venture capital 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 equity investment (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 (Adesoye, 2015). Venture capital (equity investment) is an investment in a start-up or growing SME that is perceived to have excellent growth prospects. Efendioglu (2010), asserted that, equity investors raise and manage funds which are a pool of money raised from both public and private investors. Venture capitalists identify entrepreneurs with promising new ideas and assist with funding and professional management. Venture Capital is one source of non-bank financing, which is quite prevalent in developed financial markets for small or start-up firms. Awotide *et al.* (2015), averred that, equity investors assist SMEs access capital to finance expansion of business while maintaining control. The expertise and extensive relationships of the venture capitalist through its network add value to the company and increase credibility with customers, and finally, the company gain access to the equity investor's knowledge in accounting, budgeting, computer systems, and back-office operations Chauvin *et al.* (2012). In equity capital financing agreement, the investor firm will provide financing to enable a business to undertake a project and in return the financing company gets an ownership stake in the business.

In Nigeria, the Small and Medium Enterprises Equity Investment Scheme (SMEEIS) represents the major institutional framework for the promotion of Venture Capital financing. Castillejo *et al.* (2012), asserted that a review of the impact of equity investments 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 equity investment 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.

Productivity is one of the key determinants of high and sustained growth and in fact a key determinant of long term growth. It remains a vital economic driver for developed and developing countries and would play a critical role in eradicating poverty especially in low income countries. The agricultural sector generates a substantial level of revenue while increasing real income (Chen and Tang, 1987). It not only employs an estimated 70 percent of the work-force in low income countries, but it is also a major contributor to Gross Domestic Product (GDP) estimated at approximately 30 percent (World Bank, 2007).

Productivity can be defined as the index of the ratio of the value of total output to the value of the total inputs used in the agro related production (Druffel and Garfield, 2010). Productivity is measured by analyzing records of production volume by product line, type and production time, while the productivity of the main processing lines is compared with data for main competitors where possible (Elikwu, 2018). Productivity in the agricultural sector is measured by value added. By definition, agricultural productivity is the primary source of economic growth and poverty reduction in most agriculture-based economies. The expansion of smallholder farming can lead to a faster rate of growth, by raising the incomes of rural cultivators and reducing food expenditure, and thus reduces income inequality.

The argument that firm growth causes higher productivity is based on the assumption that economies of scale exists; meaning that firms experience a decline in average costs as output increases (Amulu, 2014). The flaw in this argument becomes clear when one considers that SMEs tend not to operate in industries where economies of scale are present, precisely because these are not industries where they are likely to be competitive. On the other hand, economic theory supports the premise that higher productivity causes small and medium enterprise growth, since productivity can be a source of competitive advantage such as low cost production. Adopting the framework presented above and its treatment of the role of capabilities in small and medium enterprise growth, the causal model would go something like this: factors such as education and experience can directly increase the capabilities of SMEs owners and employees; these individuals are then more likely, to adopt or create practices that heighten productivity levels, and this added productivity then contributes to growth. In reality, both of the arguments presented above appear to hold some truth (Amulu, 2014).

The importance of strategic finance mobilisation (access to credit) in agricultural production cannot be overemphasised. According to Igbokwe *et al.* (2016), adequate capital access facilitates finance of vital production costs such as labour and purchase inputs prior to the actual realization of production, which implies that access to credit has an indirect impact on productivity through its positive influence on agricultural technologies adoption (Eze, 2010), increased capital for farm investment, hired labour and improved household welfare through improved health care and better nutrition (Ijeoma and Aronu (2013).

In addition, Otto and Ukpere (2011) posited that credit allows farmers to satisfy the cash needs induced by the production cycle which characterize agriculture; land preparation, planting, cultivation, and harvesting are typically done over a period of several months in which very little cash revenue is earned, while expenditure on materials (Lall, 2015), purchased inputs, and consumption need to be made in cash. Thus, access to credit may affect farm productivity because farmers facing binding capital constraints would tend to use lower levels of inputs in their production activities compared to those not constrained (Nikiforos, 2011). Agricultural production is strongly conditioned by the fact that inputs are transformed into outputs with considerable time lags and available technology, access to credit as a key determinant of adoption of most agricultural innovations, promotes the adoption of risky agricultural technologies and enables farmers and entrepreneurs to diversify by undertaking new investment.

In a study by Monday *et al.* (2015), on the application of entrepreneurship and strategic management on operational performance of SMEs; the study shows that over 80% of the respondents indicated that entrepreneurship and strategic management boosts their firms' production efficiency (reduces costs and increases productivity), aids timely delivery of the products of the firms and also aids the utilization of human and material resources.

2.2. Theoretical Framework

Empirical research has showed that the founding of new firms is more common when people have access to financial capital (Meeusen and Van de Broeck, 1977). By implication this theory suggests that people with financial capital are more able to acquire resources to effectively exploit entrepreneurial opportunities, and set up a firm to do so (Muritala *et al.*, 2012). However, other studies contest this theory as it is demonstrated that most founders start new ventures without much capital, and that financial capital is not significantly related to the probability of being nascent entrepreneurs (Obayi and Egbiremhon, 2015; Otto and Ukpere, 2011). This apparent confusion is due to the fact that the line of research connected to the theory of liquidity constraints generally aims to resolve whether a founder's access to capital is determined by the amount of capital employed to start a new venture Otokiti (2005). In his view, this does not necessarily rule out the possibility of starting a firm without much capital. Therefore, founders access to capital is an important predictor of new venture growth but not necessarily important for the founding of a new venture (Umebali *et al.*, 2014).

This theory argues that entrepreneurs have individual-specific resources that facilitate the recognition of new opportunities and the assembling of new resources for the emerging firm. Research shows that some persons are more able to recognize and exploit opportunities than others because they have better access to information and knowledge (Castillejo *et al.*, 2012; Igbokwe *et al.*, 2016; Mwangi and Namusonge, 2014).

2.3. Empirical Review

Uwaleke *et al.* (2017), evaluated the effects of equity investment financing on operational capacity development of SMEs in Nigeria. The descriptive – survey research design was employed, while the posited hypotheses were tested with a sample size of 327 respondents, using the ordinary least square logistic regression. The findings reveal that, there is a significant effect of equity investment financing on operational capacity (productivity) of SMEs in Nigeria. Hence, it is recommended that, for effectiveness of equity capital financing as a credible means of developing operational capacity (production efficiency and output) of SMEs, the government should put in place adequate infrastructures to reduce the cost of doing business in Nigeria, which will reduce volatility in cost of capital. Also, In order to achieve operational capacity (productivity) and growth, owners of SMEs should acquire basic technical and managerial skills; this will help them effectively utilize sourced funds.

Rahim and Bakar (2014), in a study investigated the impact of financial resources management on SME performance, both in the context of young and small enterprises and the process of launching new products which will eventually have an impact on performance. The sample size consisted of 500 SMEs producing diversified products and services with total respondents of 270 SMEs. The findings revealed that, financial resources management is a critical aspect of an entrepreneur's human capital that is valuable in the discovery and exploitation of opportunities. Prudent financial resources management has significant impact on the increases of a firm's stock, access to information, acquisition of skills for productivity and organizational performance.

Otokiti (2005), in a study investigated financial effects and firm performance in Chinese manufacturing firms. The study employed a large panel of Chinese manufacturing firm data in 1998-2007 and established productivity models applying both direct and indirect approaches. The findings revealed that financial factors are highly decisive to firms' total factor productivity and production productivity. Increases of the availability of finance to firms can directly improve productivity at firm level. The effects of finance on productivity are also related to firm's liquidity, ownership, export status, state share, foreign investment and sensitivity of cash flow to productivity.

Olagunju (2013), explored the structure, the financial viability of agro-processing industries and the effect of credit access on value addition (value chain financing) by different agro-processing units in Oyo State, Nigeria. A multistage random sampling method was used to select a sample of 160 credit and non-credit agro-processors by using proportional allocation method. The data were analysed using descriptive statistics. The extent of value addition has been about 34% and 20% for credit and non-credit users in the cassava mill sector respectively. The maximum value addition has been observed in fruits/vegetable processing (103%) followed by cashew based units. The results obtained for the processors with credit indicated that they are efficient than their counterparts producing without credit. This result points to the positive impact of credit on value chain activities. There was under capacity utilization in almost all types of processing industries in the state due to lack of adequate supplies of raw material, bottlenecks in market penetration and marketing strategies, inadequate credit. The break-even output is very low hence the agro industries in the state were running into loss due to low capacity utilization. Improvement in basic infrastructure like developing railway links, metallic roads, cool chains, adequate/ uninterrupted power supply, disposal of sewage/ industrial effluents, housing, control of traffic congestion can bring a positive change on resource utilization.

Unam and Unam (2013), in a study assessed the role of Microfinance Banks (MFBs) in promoting the production capabilities and development of small-scale manufacturing enterprises in Nigeria. Data for the study was obtained through structured questionnaire administered to 40 small-scale manufacturing enterprises. This was complemented with an interview on five officials of MFBs. The results showed that MFBs provided both financial and social intermediation services which had significant effect on the productivity of the small-scale businesses. This study recommended that MFBs should intensify in the provision of social intermediation services, and Nigerian government should develop infrastructure like power and transport systems in order to reduce the cost of production.

3. Methodology

3.1. Research Design

The research design used in this study was the cross-sectional survey design, associated with the deductive approach used for descriptive research purpose. On the basis that it involves sampling of elements selected from the population of interest, collection of quantitative data to be measured at a single point in time.

3.2. Population of the Study

The population of SMEs for this study consisted of all agro-allied SMEs in the selected States, of the South-South region registered with the states' MSME development agencies and the states' Ministries of Trade Commerce and Industry; with a minimum capital base of N1, 000,000. The population therefore comprised a total of eleven thousand, six hundred and seventy three (11,673) agro-allied small scale businesses operating within the agricultural sector, of which 4,212 are registered.

3.3. Sample and Sampling Technique

The determination of the sample size for obtaining respondents' responses was premised on statistical estimation model considering degree of confidence (Unam and Unam, 2013) expected from this type of study. As already indicated, there were six states in the study area being the south-south geopolitical zone. For the purpose of determining the minimum returnable sample size from the given population, the Eze (2010) sample size estimation technique was employed.

Based on the applied sample estimation technique, a sample size of three hundred and eighty seven (387) was arrived at, as the sample size of agro-allied small and medium scale enterprises registered. However, in order to achieve a minimum response rate of 65% as posited by Nikiforos (2011) and Lall (2015) the oversampling procedure is employed.

Furthermore, for the purpose of this study, the multistage random sampling techniques were adopted. This was because the study captured multi-chain aggregate study groups which formed different clusters (firms in various stages of the value chain); hence, the multistage sampling technique. The stratified sampling was adopted to select only SMEs in Agricultural related businesses

3.4. Instrument of Data Collection

For the purpose of this study, both primary and secondary data were collected for the purpose of analysis and test of postulated hypotheses. The primary data for the study were collected through the administration of a structured and close-ended questionnaire, which served as the instrument for data collection. The questionnaire being an instrument of primary data collection based on stated research questions was structured in close-ended five-point Likert scale and sub-divided into four main sub-sections. The reliability of the items in the instrument was established using Cronbach’s Alpha.

Table-1. Reliability Test Result

S/N	Questionnaire Constructs	Cronbach Alpha Reliability Result	Number of Items	Remark
1	Strategic Entrepreneurship Management (SEM)	0.776	6	Reliable
2	Sustainable Technological Advancement (STA)	0.825	5	Reliable
3	Sustainable Capacity Utilization (SCU)	0.769	5	Reliable
4	Sustainable Employment Generation (SEG)	0.792	5	Reliable
5	Sustainable Increase in Productivity Level (SIP)	0.920	5	Reliable
6.	Sustainable Financial Performance (SFP)	0.888	5	Reliable
7.	Sustainable Business Growth (SBG)	0.931	5	Reliable

Source: Researchers’ SPSS 22.0 computation

Reliability test was conducted for each of the latent variable based on the number item that measured it. The result indicated that all the variables are reliable and are certified for further analysis, as all the variables have values of the Cronbach Alpha above 0.7. A value of 0.7, Rahim and Bakar (2014) asserted is generally recommended, however, Igbokwe et al. (2016) stated that, an “Alpha score above 0.75 is generally taken to have a high reliability.

3.5. Analytical Tools

The evaluation of the relationship between dependent of sustainable business productivity and independent variables equity financing was performed using the Ordinary Least Square regression technique.

3.6. Model Specification

The coefficient of the variables measured the effect of the proxies of the independent variable (RMC) on the dependent variable proxies (SBP). Therefore, the general form for the model is given as:

$$Y = f(X_1, X_2, X_n) \dots\dots\dots 1$$

Where:

Y = dependent variable of Sustainable Development of Agro-Allied Small Businesses;

f = a function to be specified

X = independent variable of equity financing scheme

In specific form, equation 9 translates into equation 10 thus:

$$Y = a + X_1 + X_2 + X_3 + \dots\dots\dots + X_n + e \dots\dots\dots 2$$

Where:

Y = dependent variable (Sustainable Business productivity of Agro-Allied Small businesses)

a = constant

x₁, x₂, x₃,.....,x_n are independent variables

e = residual or stochastic term (which reveals the strength of x₁ ... x_n; if e is low, this implies that the amount of unexplained factors is low, then the residual R and R² will be high and vice versa.

$$RMC = f(FIC, HCC, PRC, RMS) \dots\dots\dots 3$$

Where:

FIC₃ = Financial Capacity

HCC₄ = Human Capital Capacity

PRC₅ = Production Capacity

RMS₆ = Raw Materials Sourcing Capacity

Sustainable Development of Agro-Allied Small Businesses (SAS) is proxied by Sustainable Productivity (SIP),

β₀ = Unknown constant to be estimated

β₁ = Unknown coefficients to be estimated

U_i = Error Term

$$\beta_1 > 0$$

The ‘a priori expectation’ in the model is that the independent variable is expected to have a positive relationship and effect on sustainable development of agro-allied small businesses, measured by sustainable technological advancement, sustainable capacity utilization, sustainable employment generation, sustainable productivity (output and efficiency), sustainable financial performance and sustainable business growth. The mathematical expression is represented as; $\beta_1 - \beta_5 > 0$ implying that a unit increase in the independent variables will lead to increase in Sustainable Development of Agro-allied Small Businesses by a unit.

4. Results and Discussion

Table-2. How resource mobilisation capacity increases productivity of agro-allied small businesses in South-South Nigeria

Variables	Agreement Scale				
	SA (%)	A (%)	UN (%)	D (%)	SD (%)
Equity Financing as an indicator of SEM can help achieve zero wastage level in operational process	36%	53%	2%	6%	3%
Equity Financing as an indicator of SEM can help production output meet market demand	38%	54%	2%	5%	1%
Equity Financing as an indicator of SEM can ensure available personnel are skilled and competent to achieve optimum operational efficiency	41%	57%	1%	1%	0
Equity Financing as an indicator of SEM can help maintain a minimum level of operational and overhead costs	33%	62%	3%	1%	%
Equity Financing as an indicator of SEM can help to achieve quality and target output of products	28%	65%	3%	2%	2%

Source: Field Survey (2020)

The analysis revealed that, 89% of the sample size agreed that, resource mobilisation capacity as an indicator of strategic entrepreneurship management can help achieve zero wastage level in operational process. The analysis indicates that, 92% of the sample size agreed that, resource mobilisation capacity as an indicator of strategic entrepreneurship management can help production output meet market demand. Analysis revealed that 98% of the sample size agreed that, resource mobilisation capacity as an indicator of strategic entrepreneurship management can ensure available personnel are skilled and competent to achieve optimum operational efficiency. Analysis revealed that 95% of the sample size agreed that, resource mobilisation capacity as an indicator of strategic entrepreneurship management can help maintain a minimum level of operational and overhead costs. Final analysis revealed that 93% of the sample size agreed that, resource mobilisation capacity as an indicator of strategic entrepreneurship management can help to achieve quality and target output of products.

4.1. Results

Table-3. Regression Result on resource mobilisation capacity of strategic entrepreneurship management and effect on sustainable productivity

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FIC	0.132630	0.136447	3.639007	0.0003
HCC	0.202404	0.243046	2.378915	0.0178
PRC	0.368742	0.341148	8.961455	0.0267
RMS	0.048259	0.024702	2.144025	0.2532
C	0.363193	0.306714	1.184139	0.2370
R-squared	0.734377	Mean dependent var		8.171548
Adjusted R-squared	0.265793	S.D. dependent var		3.130941
S.E. of regression	1.623890	Akaike info criterion		3.822062
Sum squared resid	1242.035	Schwarz criterion		3.883123
Log likelihood	-906.4727	Hannan-Quinn criter.		3.846068
F-statistic	217.0317	Durbin-Watson stat		1.754739
Prob(F-statistic)	0.008213			

Source: Researchers' E-views 9.0 Computation

$$SIP = 0.36 + 0.13 FIC + 0.2 HCC + 0.37 PRC + 0.05 RMS \dots\dots\dots$$

4

$$SEE = 0.31: 0.13, 0.24, 0.34 \quad 0.02$$

$$t^* = 1.18: (3.6; 2.3; 8.9, 2.1)$$

$$F^* = 217: \text{Prob (F-statistic)} = 0.0082$$

$$R^2 = 0.734: \text{Adj. } R^2 0.2657$$

4.2. Interpretation of Result

Since the calculated t-value (FIC 3.6 > 1.96; HCC 2.3 > 1.96; PRC 8.9 > 1.96 and RMS 2.1 > 1.96) are greater than the tabulated value (1.96), which implies that, all the indicators (FIC, HCC, PRC and RMS) of resource mobilisation capacity individually have significant effect on sustainable productivity; we therefore, reject the null hypothesis (H_0). Hence, we conclude that Equity financing scheme has significant effect on sustainable productivity of agro-allied small businesses in South-South Nigeria. Also, by examining the overall fit and significance of Sustainable Increase in Productivity (SIP) model, it can be observed that the model does have a good fit, as indicated by the relatively high value of the *F*-statistic, 217.8 and it is insignificant at the 5.0 per cent level; that is, the P Value (rho value) of 0.0082 being less than 0.05 probability levels implies that there is a 0.0082 chance that the equation as a whole is not significant. More so, the R^2 (R-square) value of 0.734377 shows that the model does have a good fit too. It indicates that about 73.43 percent of the variation in Sustainable Increase in Productivity is explained by FIC, HCC, PRC and RMS, while the remaining 26.57 percent is captured by the error term.

The test of hypothesis three as shown in Table 3, the calculated t-value for FIC is 3.6, HCC is 2.3, PRC is 8.9 and RMS is 2.1 (financial capacity, as indicators of resource mobilisation capacity of strategic entrepreneurship management); while the tabulated value is given as ± 1.96 , under 95% confidence levels. Since the calculated t-value (FIC 3.6 > 1.96; HCC 2.3 > 1.96; PRC 8.9 > 1.96 and RMS 2.1 > 1.96) are greater than the tabulated value (1.96), which implies that, all the indicators (FIC, HCC, PRC and RMS) of resource mobilisation capacity individually have significant effect on sustainable productivity; hence, the null hypothesis (H_0) is rejected and the alternate hypothesis accepted, which states that, equity financing scheme has significant effect on sustainable productivity of agro-allied small businesses in South-South Nigeria.

4.3. Discussion of Results

In respect to finance capacity, this finding is in agreement with the finding of Rahim and Bakar (2014), whose study revealed financial resources management, is a critical aspect of an entrepreneur's human capital that is valuable in the discovery and exploitation of opportunities. Hence, prudent financial resources management has significant impact on the increases of a firm's stock, access to information, acquisition of skills for productivity and organisational performance; and Otokiti (2005), whose findings showed that, financial factors are highly decisive to firms' total factor productivity and production productivity. Increases of the availability of finance to firms can directly improve productivity at firm level. The effects of finance on productivity are also related to sensitivity of cash flow to productivity.

5. Conclusion and Recommendations

5.1. Conclusion

Based on findings of hypothesis, the study concludes that, financial capacity, human capital capacity, production capacity and raw material sourcing capacity as indicators of resource mobilisation capacity of strategic entrepreneurship management, has significant effect on sustainable increase in productivity of agro-allied small businesses in South-South Nigeria. This is confirmed by the analysis of research question three which shows that, resource mobilisation capacity can help achieve zero wastage level in operational processes, help production output meet market demand, engage skilled and competent manpower to achieve operational efficiency and help achieve target output of quality products. Therefore, from the empirical analysis and findings, this study concludes that, strategic entrepreneurship management as indicated by various proxies has a significant effect on sustainable development of agro-allied small businesses in South-South, Nigeria.

5.2. Recommendations of the Study

Since the findings reveal the constraints being encountered in accessing long term finance to boost productivity, it is recommended that, efforts should be made to educate the small business entrepreneurs on the benefits of equity financing as a viable option towards business growth and expansion. Also, it is recommended that the government through the various intervention agencies should restructure the long-term loan policies to give access to more growth oriented agro-allied businesses, to increase their presently low capacity to procure heavy duty technology to increase productivity and achieve food security in Nigeria. Owing to the abundance but high cost of raw materials needed for uninterrupted operations, it is recommended that, small business owners should take advantage of the membership of cooperative societies and as well maintain good business relationship with suppliers; this will guarantee continuous supply of needed materials and uninterrupted operations of the business.

References

- Adesoye, A. F. (2015). *Effect of medium term expenditure framework on budgetary process and performance in Nigeria; A comparative analysis of the pre and post MTEF introduction era*. Nasarawa State University Keffi.
- Adios, A. I. (2018). *Effect of entrepreneurship practices on innovative performance of selected agro-allied businesses in Nigeria*. Michael Okpara University of Agriculture: Umudike.
- Akinwumi, J., 2007. "Road map to re-engineering cooperatives in Nigeria." In *A paper presented at the south west cooperative leaders conference, organized by cooperative federation of Nigeria South-west zone at Obisesan Hall, Ibadan*.

- Amulu, C. C. (2014). *Entrepreneurial development and growth of small scale industries in enugu state: A study of selected small-scale enterprises*. University of Nigeria Enugu Campus.
- Awotide, B. A., Abdoulaye, T., Alene, A. and Manyong, V. M., 2015. "Impact of access to credit on agricultural productivity: Evidence from smallholder cassava farmers in Nigeria." In *International Conference of Agricultural Economists, Milan Italy*. pp. 9-14.
- Castillejo, A., Barrachina, M., Llopis, A. and Samchis, J. (2012). *The role of process innovation on SME growth*. Spanish Ministry of Science and Technology.
- Central Bank of Nigeria CBN (2008). Statistical Bulletin.
- Chauvin, N. D., Mulangu, F. and Porto, G. (2012). *Food production and consumption trends in Sub-saharan Africa: Prospects for the transformation of the agricultural sector*. United Nations Development Program (UNDP), Regional Bureau for Africa, WP 2012-011.
- Chen, T. and Tang, D. (1987). Comparing technical efficiency between import substitution-oriented and export-oriented foreign firms in a developing economy. *Journal of Development Economics*, 26(1): 277-89.
- Druffel, K. and Garfield, M. (2010). Standardization and knowledge management: evaluating knowledge quality. *Journal of Knowledge Management*, 9(6): 104-13.
- Efendioglu, U. (2010). *Technology development and capacity-building for competitiveness in a digital society: A concept note*. UN Commission on Science and Technology: UNCTAD.
- Elikwu, M. I. (2018). *An empirical analysis of the effect of strategic entrepreneurship management on sustainable development of agro-allied small businesses in South-South*. Michael Okpara University of Agriculture: Nigeria Umudike.
- Eze, C. C., 2010. "Agricultural finance policies and rural development in Nigeria." In *Paper delivered at the 84th Annual Conference of the Agricultural Economics society Edinburgh 29-31st, March*.
- Igbokwe, A. C., Adedokun, A. S. and Elikwu, M. I. (2016). *Impact of cooperative society programmes on poverty alleviation of selected cooperative society members in Abuja, Nigeria: Managing national economy in transition*. Nasarawa State University, Keffi, Nasarawa State, Nigeria, November 16th and 17th, 2016,.
- Ijeoma, N. and Aronu, C. (2013). Effect of human resources accounting on financial statements of Nigerian banking. *Journal of Advancement in Research and Technology*, 2(8): 23-35.
- Lall, S. (2015). *The creation of comparative advantage: The role of industrial policy, trade, technology and international competitiveness*, economic development institute. World bank.
- Meeusen, W. and Van de Broeck, J. (1977). Efficiency estimation from Cobb-Douglas production function with compared error. *International Economic Review*, 18(2): 435-44.
- Mohammed, U. D. and Nzelibe, C. G. O., 2014. "Entrepreneurial skills and profitability of small and medium enterprises (SMEs): Resource acquisition strategies for new ventures in Nigeria." In *Proceedings of 25th International Business Research Conference 13 - 14 January, 2014, Taj Hotel, Cape Town, South Africa*.
- Monday, J. U., Akinola, G. O., Ologbenla, P. and Aladeraji, O. K. (2015). Strategic management and Firm Performance: A study of selected manufacturing companies in Nigeria. *European Journal of Business and Management*, 7(2): 161-71.
- Muritala, T., Awolaja, A. M. and Bako, Y. A. (2012). Impact of small and medium enterprises on economic growth and development. *American Journal of Business and Management*, 1(1): 18-22.
- Mwangi, S. S. and Namusonge, M. J. (2014). Influence of innovation on small and medium enterprise (SME) growth: A case of garment manufacturing industries in Nakuru County, Kenya. *International Journal for Innovation Education and Research*, 2(6): 102-12.
- Nikiforos, M. (2011). On the desired rate of capacity utilization: Economics. Department working paper series, 16/2011. New York, NY: The new school for social research.
- Obayi, A. U. and Eigbiremhon, I. (2015). *Aspects of entrepreneurial potentiation: Cognition to practice*. Equity Ventures Publications: Owerri.
- Olagunju, F. I. (2013). Impact of credit access on value chain activities of Agro-processing industries in Oyo State, Nigeria. *International Journal of Agric-Science*, 3(8): 636-48.
- Otokiti, S. (2005). *Effects of microfinancing on micro and small enterprises in South-West Nigeria*. Covenant University: Ota, Ogun State.
- Otto, G. and Ukpere, W. (2011). Credit and thrifts co-operatives in Nigeria: A potential source of capital formation and employment. *African Journal of Business Management*, 5(14): 5675-80.
- Rahim, H. A. and Bakar, S. M. (2014). The impact of financial resources management on SME performance. *International Journal of Humanities and Social Science*, 4(9): 198-200.
- Umebali, E. E., Agu-Aguiyi, F. N. and Godson, C. U. (2014). Assessment of performance of thrift and credit cooperative societies (CTCS) in Ikeduru Local Government Area of Imo State, Nigeria. *Discourse Journal of Agriculture and Food Sciences*, 2(7): 203-16.
- Unam, M. J. and Unam, F. J. (2013). Promoting production capabilities of small-scale manufacturing business through microfinance banking in Nigeria. *JORIND*, 11(2): Available: www.transcampus.org/journals, www.ajol.info/journals/jorind
- Uwaleke, U. J., Elikwu, M. I. and Adio, A. I. (2017). Equity investment financing and operational capacity development of SMEs in Nigeria. *Journal of Educational Research and Entrepreneurship Development*, 1(1): 68-86.
- World Bank (2007). *Agriculture for development*, World development report 2008: World Bank, Washington DC.