



Determinants of Savings Capacity among Agribusiness Entrepreneurs in Benue State, Nigeria

¹Okeke, Anayo Michael & ²Mbanasor, Jude Anayochukwu

¹College of Management Sciences, University of Agriculture, P.M.B.2373, Makurdi, Nigeria.
Tel: +2347031316191 E-mail: anayomichaelokeke@gmail.com

²College of Agricultural Economics, Rural Sociology and Extension, Michael Okpara University of Agriculture P.M.B 7267, Umuahia, Nigeria
Tel: +2348062327145 E-mail: judembanasor@gmail.com

ABSTRACT

The determinants of savings capacity among agribusiness entrepreneurs in Benue State of Nigeria were examined. The specific objectives of the study were to describe the types of savings prevalent among agribusiness entrepreneurs; and identify and analyse the determinants of savings decision among agribusiness entrepreneurs. Data were collected from 288 agribusiness entrepreneurs in six local government areas and 24 wards, using a multi-stage sampling technique. The sample comprised agribusiness entrepreneurs that are engaged in yam production, distribution/marketing of yam, yam chips production, and yam flour production. Structured interview schedule was used to collect the data. Data collected were analysed using frequency distributions, percentages, and logit model. The results indicate that socio-economic characteristics of agribusiness entrepreneurs significantly influence the probability that they will save; agribusiness entrepreneurs prefer saving their money in conventional bank. It was recommended that policies to improve savings should inculcate the socio-economic characteristics of these entrepreneurs; campaigns to promote the benefits and dangers of not saving should be encouraged; and banks should set up more branches in the areas of these agribusiness entrepreneurs.

Key words: Determinants, Savings Capacity, Agribusiness Entrepreneurs, Benue State

1. INTRODUCTION

In recent years, the importance of the agribusiness sector has grown significantly, as agricultural development strategies shift their focus from production-oriented approach to a broader systems view that emphasizes agrifood chain coordination, value creation and the institutional setting under which chains operate (Konig *et.al.*, 2013). Seen as an engine for growth, agribusiness and its related industries are receiving increased attention in policies and strategies that aim to promote investments in agro-enterprises and develop agro-based value chains.

In Nigeria, the scenario is quite different as agribusiness and its related industries have not received the attention required for their development. As noted by Mbanasor (2012), the neglect and perceived under development of the agribusiness sector is the greatest constraint to poverty reduction in the country. This scholar further pointed out that the relative inability to develop the agribusiness sector in Nigeria limits the scope for industrialization which has equally resulted to failure to benefit from opportunities to add value and create jobs.

Sustainable growth in any sector of an economy is premised upon capital accumulation and increased individual and household savings. Savings to a large extent determine the growth rate of the productive capacity and output. Regrettably, the relative poverty of the rural agribusiness entrepreneurs in Nigeria hampers savings and investment potentials and this together with the poor attention from the government have continue to perpetuate low growth and productivity in the food and agricultural sector of the country.

This limitation to the savings potentials of agribusiness entrepreneurs is attributed to several factors. Rogg (2000) pointed out that in developing countries, lack of access to, and insufficient trust in, formal financial institutions prevents individuals from depositing savings and as an alternative, some liquidity is maintained by holding cash at home, while most income that is not consumed is invested in durable goods, gold, jewelry or livestock in the case of rural households.

According to Egwu and Nwibo (2014), the lack of access to productive resources and low returns to agricultural production as well as the bureaucracy involved in opening bank account are some of the limitations to the saving capacity of agribusiness entrepreneurs. In a bid to save, some of these entrepreneurs prefer to loan out their cash after sales to reap interest, invest in livestock, store their produce after harvest when prices are low and sell during lean period when prices will rise (Egwu and Nwibo, 2014). Others have involve themselves in informal ways of savings such as *isusu* (rotational contribution) and money lending (Nwibo and Mbam, 2013) while majority have resorted to consumerism (Egwu and Nwibo, 2014).

These informal channels of savings do not engender the needed growth and development in the food and agricultural sector of the country as Uneze (2013) revealed that savings locked up in informal mechanisms have limited divisibility, liquidity, and ability to be channeled into productive forms. Having recognized the importance of savings in the growth and development of an economy, it becomes imperative to look at the determinants of savings capacity of agribusiness entrepreneurs in the country in an effort to develop the food and agricultural sector. The understanding of these determinants will spur innovative decisions from stakeholders in the country responsible for agribusiness development to come up with strategies that will improve the sector's performance.

There are several studies on the determinants of savings capacity such as those of Egwu and Nwibo (2014); Nwibo and Mbam (2013); Odoemenem *et.al.* (2013); Shitu (2012); Uneze (2013); Ike and Umuedafe (2013); Babatunde *et.al.* (2007); Obayelu (2012); and Akpan *et.al.* (2011). The uniqueness of this study is that in addition to the socio-economic characteristics of agribusiness entrepreneurs, it examined how rate of return, perceived capital loss, safety of capital, and ease of accessibility of capital affects their capacity to save and also looked at savings capacity as a dichotomous variable rather than a continuous variable.

The main objective of this study was to examine the determinants of savings capacity among agribusiness entrepreneurs in Benue State. The specific objectives were to describe the types of savings prevalent among agribusiness entrepreneurs; and to identify and analyse the determinants of savings decision among agribusiness entrepreneurs.

2. METHODOLOGY

2.1 Study area

The study was conducted in Benue State located in the north-central part of Nigeria (latitudes 6^o25'N and 8^o8'N and longitudes 7^o47'E and 10^oE). The Local Government Areas covered were Gwer-East, Gwer-West, Obi, Oju, Tarka, and Ukum. Agribusiness entrepreneurs abound in the state such as suppliers of farm equipments, agro-chemicals etc. Also agribusiness entrepreneurs who are engaged in arable crop production like yam abound as well as those involved in processing yam, cassava etc.

2.2 Sampling technique and data collection.

In order to understand the determinants of savings capacity in the study area, a well-structured interview schedule was used to elicit information from 288 agribusiness entrepreneurs that are engaged in yam production, distribution/marketing of yam, yam chips production, and yam flour production selected using multi-stage sampling technique.

2.3 Data analysis

Field data collected in 2015 were analysed using descriptive statistics such as frequency distribution, percentages to describe the types of savings prevalent among respondents. Logit model was used to realize the determinants of savings decision among respondents.

2.4 Model specification

The logit model was explicitly expressed as follows:

$$P(Y = 1) = \frac{\exp(a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_9x_9 + b_{10}x_{10} + \mu)}{1 + \exp(a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_9x_9 + b_{10}x_{10} + \mu)} \text{ where:}$$

$P(Y = 1)$ = the probability that a respondent deliberately save

\exp = the base of natural logarithm

a = the constant of the equation

b_1 - b_{10} = the coefficients of the predictor variables

x_1 = gender (male = 1; female = 0)

x_2 = household size

x_3 = educational status (years)

x_4 = annual income (Naira)

x_5 = membership of cooperative (member = 1; non-member = 0)

x_6 = risk of capital loss (perceived = 1; do not perceived = 0)

x_7 = years of experience (years)

x_8 = rate of return (perceived = 1; do not perceived = 0)

x_9 = safety (perceived = 1; do not perceived = 0)

x_{10} = ease of accessibility (perceived = 1; do not perceived = 0)

μ = stochastic error term

The *a priori* expectation was that the coefficient household size will be negative while those of gender, educational status, years of experience, annual income, membership of cooperative, rate of return, risk of capital loss, safety, and ease of accessibility will be positive.

3. RESULTS AND DISCUSSIONS

3.1 Types of savings prevalent among respondents

The distributions of agribusiness entrepreneurs according to their most preferred institutions to save with are presented in Table 1.

Analysis of Table 1 shows that majority (54.1%) of agribusiness entrepreneurs saw conventional banks as their most preferred institution to save their money. The preference of agribusiness entrepreneurs to save in conventional banks can be attributed to the safety and ease of accessibility of their money, and easy transaction between them and their customers which they attach to saving with such banks. This finding is corroborated by Haruna (2011) who in a study on the determinants of saving and investment in deprived district capitals in Ghana, reported that people prefer saving in banks to “*isusu*” groups due to high security, trust and proximity.

In addition, analysis of Table 1 shows that 46.0% of agribusiness entrepreneurs saw “*isusu*” as their second most preferred saving institution beside conventional banks that had 54.1% of the respondents as their most preferred institution to save with. Agribusiness entrepreneurs prefer saving with *isusu* as there are no conventional banks within their locality, provides them with benefits such as loans, meat at the end of the year etc, provides them the opportunity to know one another, perception of *isusu* as a way of life, their low literacy level, their lack of trust for the bank system, and the ease of operation associated with *isusu*. This finding is justified by Odoemenem *et.al.* (2005) who reported that farmers make use of informal financial sector to mobilize savings and develop their rural communities because it gives them access to loans that they cannot get from formal financial institutions due to lack of collateral. This finding is also supported by Amu (2008) who reported that the overwhelming confidence and preference of families for informal savings outlets as against the formal ones could be attributed to the unavailability of the formal financial intermediaries in their area as well as the low interest that is paid on money saved with formal savings outlets like banks.

Furthermore, analysis of Table 1 shows that majority (64.5%) of respondents rated microfinance banks as their least preferred institution to save their money. The poor rating of microfinance bank as an institution to save with by agribusiness entrepreneurs can be attributed to the unavailability of such microfinance banks within the locality of these entrepreneurs as well as the popularity of commercial banks and *isusu*. This finding is corroborated by Sukhdeve (2008) who in a study on informal savings of the poor:

prospects for financial inclusion, reported that majority of households park their saving in banks while the remaining save their money in informal ways which offer easy access and convenience.

3.2 Determinants of savings decision

The logit model was used to investigate the effect of socio-economic characteristics of agribusiness entrepreneurs on their decision to save. The estimated relationship is presented in Table 2

From the analysis, the model chi-square was 102.768 which were significant 1% thus rejecting the null hypothesis that there is no difference between the model with only a constant and the model with independent variables. In other words, the existence of a relationship between the socio-economic characteristics of agribusiness entrepreneurs and their savings decision was supported.

The Nagelkerke R square was 0.560 thus indicating a strong relationship of 56.0% between the predictors and the predictions. The analysis also revealed that none of the independent variables had a standard error (S.E) greater than 2.0 thus confirming the absence of numerical problem such as multicollinearity among the independent variables.

The prediction success overall was 83.1% (90.4% for does not deliberately save part of earnings and 62.5% for deliberately save part of earnings) which was substantially higher than the accuracy attainable by chance alone (76.5%). Thus, the independent variables could be characterized as useful predictors distinguishing survey respondents who have deliberately saved part of their earnings from survey respondents who have not deliberately saved part of their earnings.

Analysis of the result reveals that the coefficient of gender was significant at 5% and positively related to savings decision. The positive sign of the coefficient is in consonance with the *a priori* expectation, implying that if an agribusiness entrepreneur is a male, he is 2.580 times more likely to save part of his earnings. Male agribusiness entrepreneurs often engaged themselves in other income generating activities which increases their income and thus their savings when compare to the female agribusiness entrepreneurs who devote much of their earnings on their families, clothes, and jewelries. This finding agrees with Asghar and Ahmad (2004) who indicated that female heads spends their money on the purchase of jewelry, clothes, and crockery etc which reduces their income and subsequently their savings. However, this finding is at variance with Shitu (2012) who revealed that rural women save more than their male counterpart.

The coefficient of household size was significant at 1% and negatively related to savings decision. The negative sign of the coefficient correlates with the *a priori* expectation, implying that as the household size of agribusiness entrepreneurs increases, they are 0.640 times less likely to save part of their earnings. Large household size implies high dependency ratio and increase in non-farm business expenses such as hospital bills, children's school fees, social events or household consumables which translates to low savings among agribusiness entrepreneurs. This finding is affirmed by Hafeez *et.al.* (2010) who posited that large family size is among the major causes of fewer savings. Also Kibet *et.al.* (2009) in Nwibo and Mbam (2013) posited that an increase in household size will bring about increase in dependency ratio and as such is bound to cause a decline in saving.

The coefficient of educational status was significant at 5% and positively related to savings decision. The positive sign of the coefficient agrees with the *a priori* expectation, implying that as the educational level of agribusiness entrepreneurs increases, they are 1.113 times more likely to save part of their earnings. Education enables one to understand and appreciate the benefits of saving and thus, agribusiness entrepreneurs who are well educated are more likely to save than those who are non-educated. This finding is corroborated by Haruna (2011) who posited that the higher one's educational level, the better his/her understanding and appreciation of the benefits of saving and hence translates to higher saving.

The coefficient of annual income was significant at 10% and positively related to savings decision. The positive sign of the coefficient conforms to the *a priori* expectation, implying that as the income of agribusiness entrepreneurs increases, they are 1.000 times more likely to save part of their earnings. *Ceteris paribus*, as the income of agribusiness entrepreneurs increases, their productivity increases owing to their access to more productive resources which translates to more income and savings. This finding is supported by Bime and Mbanasor (2011) who posited that the higher the income, the more revenue the farmer generates from his produce and hence, the more he is encourage to save part of his earning.

The coefficient of membership of cooperative society was significant at 1% and negatively related to savings decision. The negative sign is at variance with the *a priori* expectation, implying that agribusiness entrepreneurs who are members of cooperative society are 0.180 times less likely to save part of their earnings. Cooperatives offer its members the opportunity to increase their monthly income which translates to more savings through the social networking platform it provides to its members. However, agribusiness entrepreneurs who are members of a cooperative society and are less likely to save are those that have large household size. This large household size implies low savings due to high consumption expenditure. This finding is corroborated by Giroh *et.al.* (2012), who posited that farmers with large household will likely channel more of their resources to food consumption expenditure rather than to save.

The coefficient of risk of capital loss was significant at 1% and positively related to savings decision. The positive sign of the coefficient is in consonance with the *a priori* expectation, implying that the perceived risk of capital loss among agribusiness entrepreneurs will make them 33.873 times more likely to save part of their earnings. Agribusiness entrepreneurs will likely embark upon precautionary savings to provide an emergency cushion in case of a sudden loss of income or an unexpected spike in expenditure. Khan and Hye (2010) in a study on the financial sector reforms and household savings in Pakistan corroborated this finding by reporting that greater uncertainty increases savings as risk aversion consumers set aside resources as a precaution against possible adverse changes in income.

The coefficient of years of experience was significant at 5% and positively related to decision to save. The positive coefficient is in agreement with the *a priori* expectation, implying that as the experience of agribusiness entrepreneurs increases, they are 1.067times more likely to save part of their earnings. As business experience increases, agribusiness entrepreneurs are expected to be more efficient in their business operations which translate to more income and saving as well as the willingness to save. This finding agrees with Nwibo and Mbam (2013) who in a study on the determinants of savings and investment capacities of farming households in Udi Local Government Area of Enugu State, posited that farmers with long experience in farming tend to have wider experience and are more inclined to saving and investment in agricultural activities whose rate of returns are higher.

4. CONCLUSION AND RECOMMENDATIONS

Evidence from the study indicates that socio-economic characteristics of agribusiness entrepreneurs significantly influence the probability that they will save. Also, the study indicates that majority of agribusiness entrepreneurs prefer saving their money in conventional banks.

On the basis of these findings, the following recommendations were made:

- Policies geared towards improving the savings of agribusiness entrepreneurs should inculcate their socio-economic characteristics in its formulation to ensure better result.
- Formal financial institutions like the banks should take advantage of the preference of agribusiness entrepreneurs to save their cash in conventional banks and set up more of their branches in the localities of these entrepreneurs.
- Campaigns geared towards promoting the benefits of savings as well as the dangers of not saving should be encouraged especially in the areas of these entrepreneurs.

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Table 1: Types of savings prevalent among respondents

Institution	Frequency	0 (%)	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)	6 (%)	7 (%)	Total
Conventional banks	255	3.5	54.1	3.5	1.6	2.4	2.4	2.4	30.2	100.0
Microfinance banks	231	3.5	3.0	6.5	3.0	3.5	2.6	13.4	64.5	100.0
Mobile bankers	232	3.9	3.0	2.6	8.2	8.6	8.2	11.2	54.3	100.0
Registered cooperative society	229	3.9	1.7	7.9	10.9	7.9	8.7	8.7	50.2	100.0
<i>Isusu</i>	237	1.3	46.0	21.1	12.7	5.5	3.8	2.1	7.6	100.0
Money Lending	225	4.0	0	4.4	10.2	10.2	6.7	10.7	53.8	100.0

Source: Field survey, 2015. Scale: 1 is the institution the respondents most preferred to save with while 7 is the institution the respondents least preferred to save with.

Table 2: Determinants of savings decision

Variables	β	Sig	S.E	Wald	Exp (β)
Gender (1)	0.948**	0.039	0.459	4.256	2.580
Household size	-0.447***	0.000	0.109	16.893	0.640
Educational status	0.108**	0.048	0.054	3.917	1.113
Annual income	0.000*	0.070	0.000	3.288	1.000
Membership of cooperative (1)	-1.713***	0.000	0.443	14.957	0.180
Risk of capital loss (1)	3.523***	0.001	1.072	10.791	33.873
Years of experience	0.065**	0.030	0.030	4.694	1.067
Rate of return (1)	1.028 ^{NS}	0.294	0.979	1.102	2.794
Safety (1)	-0.392 ^{NS}	0.480	0.555	0.499	0.675
Ease of accessibility (1)	-0.532 ^{NS}	0.272	0.484	1.209	0.588
Constant	-4.105**	0.017	1.724	5.670	0.016
Model Chi-square	102.768***	0.000			
Nagelkerke R square	0.560				
Percentage correct	83.1				

Source: Field survey, 2015. * Significant at 10.0% level; ** Significant at 5.0% level; *** Significant at 1.0% level; NS = Not significant.