

# Wealth Allocation and Determinants of Venture Capital among Poultry Agribusiness Entrepreneurs in Abia State, Nigeria

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#### Abstract.

This study examined wealth allocation and determinants of venture capital among poultry entrepreneurs in Abia State, Nigeria. It specifically examined the socio-economic characteristics of poultry agribusiness entrepreneurs, sources of venture capital, entrepreneurs' wealth status, and factors influencing wealth allocation, factors influencing venture capital and finally examined the relationship between wealth allocation and venture capital. A simple random sampling technique was used to select forty (40) poultry agribusiness entrepreneurs and information was solicited via the use of well structured questionnaire. The tools for data analyses were descriptive statistics, pie chart, coefficient of correlation and multiple regression analyses. The result revealed that most of the respondents were young, married and had household size ranging from 6 - 10 persons with business experience of 11 - 20 years. Sources of venture capital were mainly formal source of venture capital. Farm size, access to credit, and value of stock, equity shares were significant and positive variables influencing wealth allocation while personal savings, value of assets and source of capital from financial institution were obvious variables influencing venture capital negatively. There was a strong relationship between wealth allocation and venture capital. It is recommended that government and other stakeholders involved in the agribusiness sector should provide a better market for the enhancement of the entrepreneurs' stock value with respect to sales of product. Further, hitch free and adequate access to credit will to greater extent improve the wealth allocation statues and venture capital volume of the entrepreneurs.

## Introduction:

Venture capital entrepreneurs raise money from individuals and institutions to invest in businesses that have a potential for yielding high returns on high risk investments (Gompers and Lerner, 1999). Venture capital funds usually have limited lifetimes that are determined when the fund is formed (typically ten years, which can be shortened or lengthened by one year increments for up to three years (Gompers and Lerner, 1999). Investing in animal husbandry is risk prone but has the potential of yielding high returns. It is more risky to invest in poultry agribusiness given the attendant high rate of mortality and diseases incidence that can occur. However, the increasing marginal rate of returns in the activity cannot be over emphasized and importance of poultry enterprises cannot be neglected despite the risk involved.

Animal protein is crucial for normal physical and mental development of the human beings and its deficit has serious adverse effects on the economic development of the country in terms of reduction in human productivity, incidence of high infant mortality, malnutrition and related diseases (food and Agricultural organization; 2005). The major sources of animal protein in Nigeria are cattle, fish, sheep, goat, pig, and poultry. Poultry production has great potentials for increase protein supply in Nigeria. This is ascribed to the fast grow rates and prolificacy of the animal. Poultry also offer short-term investment opportunities and thus help to increase meat availability thereby improving the living standard of the people especially, agribusiness entrepreneurs (Onyeweaku, 2009). An earlier report by Okonkwo (2001) shows that about ten (10) percent of the Nigeria population are engaged in poultry production mostly on subsistence and small or medium scale farms. Presently, the industry had been adversely affected by high production costs, low profit margin, high feed bills and stringent government economic measures (Oloyide, 2006). On the other hand, wealth allocation enables the poultry entrepreneurs to



effectively channel their resources into various sectors of the firm to increase the output of the enterprise. The major problem of wealth allocation of poultry enterprise is the management problem caused by inability of channeling financial material and human resources required to maintain the long term plans of the poultry firms (Brunel, 2006). Hence, venture capital is important enough to help the small and medium scale poultry agribusiness enterprise. Venture capital is an important source of funding for startup firms. It is closely linked with creativity, innovation high growth and high profit. Venture capital is also regarded as the launching pad to innovative entrepreneurship by which adequate boost is given to convert novel business ideas to commercially viable ventures. Agribusiness entrepreneurs are seen as agents for accelerating the socio-economic development of a country. They are regarded as the nation builder and wealth creators (Higgins, 2005). They are economic agents who play a vital role in the economic development of a country. This agribusiness entrepreneurs usually source for startup capital (venture capital) which will be used to financing the business firms. Also, major factors affecting the venture capital financing of poultry agribusiness entrepreneurs included the farm size, age of the firm, source of capital, value of the herds. These will immensely contribute to enhancement of output realization of poultry operators and there economic well being.

#### Literature Review

Profession in poultry management has assumed greater importance in improving the employment opportunity and animal food production in Nigeria (Oyo, 2003). Tedelle *et al* (2003) opined that only 32% of the animal protein needs of the household are supplied from poultry. Although, the small holder poultry production plays a significant role in the national as well as the rural and peri-urban economy, their contribution to farm household as well as national income are not as high as their number. The per capita chicken meat and egg consumption in the country were reported to be 2.85kg and 57 egg per annum (Alemu, 1997), with the higher meat consumption in urban areas than in rural areas. Poultry also provides off-farm employment and income generation opportunity and source of gifts and religious sacrifices (Gueye, 2003). Poultry industry in Nigeria is characterized by high production costs, low profit margin and high feed bills. Government measures had been pronounced on poultry production due to high level of sensitivity of the industry to management factor and resultant effect on live and productivity of the birds

## Methodology

The study area of this research work was Abia Sate Nigeria. Abia state was created out of former Imo state on August, 27<sup>th</sup> 1991. The poultry enterprises are randomly located in Ikwuano, Umuahia and Aba all is in Abia state, Nigeria. Abia state has a landmass of 700km² with seventeenth Local Government Area. It is situated north of the Equator between 30°N. It is bounded in the East by Cross-River State, on the west by Imo state and on the North by Enugu and Ebonyi, on the south by River state. Abia state consists of three Agricultural zones namely Aba, Ohafia and Umuahia. Abia state has a population of 2, 833s, 979 million people (According to National Population Commissions, Estimate 2006). A simple random sampling technique was used to select poultry entrepreneur and information was solicited via well-structured questionnaire. The data were analysed using descriptive statistics, correlation coefficient and multiple regression analyses.

The multiple regression analyses of the factors influencing wealth allocation and venture capital of poultry agribusiness entrepreneurs.

$$Y_1 = F(X_1 X_2, X_3, X_4, X_5, X_6, X_7) U = 0$$

Where  $Y_1$  = wealth allocation of poultry agribusiness entrepreneurs valued in naira;  $X_1$  = the farm size in hectare;  $X_2$  = Access to credit (access =1, non-access = 0);  $X_3$  = variable cost such as, cost of feed, drugs, water etc, valued in naira;  $X_4$  = labour in naira value;  $X_5$  = value of stock in naira value;  $X_6$  = Equality shares in naira value;  $X_7$  = fixed cost, such as plants, buildings, land etc. valued in naira.

$$Y_2 = F(X_1 X_2, X_3, X_4, X_5, X_6, X_7) U = 0$$

 $Y_2$  = Venture capital in naira value;  $X_1$  = age of the firm (years);  $X_2$  = registered with CAC (Registered = 1, Non – registered = 0);  $X_3$  = source of capital (financial institution = 1, others = 0);  $X_4$  = value of Assets in naira value;  $X_5$  = tax in naira value;  $X_6$  = Research and Development expenditure in naira value;  $X_7$  = personal savings in naira value.

## **Result and Discussions**

The result is presented in the order covering the socio-economic characteristics of poultry agribusiness entrepreneurs, wealth allocation status of the entrepreneurs and the determinants of the venture capital and the relationship between venture capital and wealth allocation.

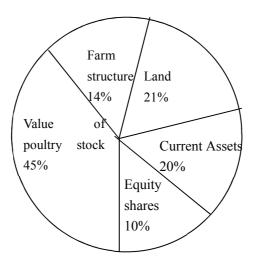


### Analyses of the socio-economic characteristics of the poultry agribusiness entrepreneurs

The analysis of the age of the poultry agribusiness entrepreneurs in table 1 shows that the age group of 40-49 years contributed the highest number of poultry agribusiness entrepreneurs than the other categories. This implies that the entrepreneurs are vibrant and energetic people, this would have provided vigour for the poultry business. This age range is seen as the prime age of productively (Onwumere and Alamba, 2012). Majority (40%) of the poultry agribusiness entrepreneurs are in the age range of 40-49 years. Further, majority (52.5%) of the poultry agribusiness entrepreneurs are married. This contributed labour and ideas in the growth of the business. The majority (62.5%) of household size for poultry agribusiness entrepreneurs have their sizes ranging from 6-10 persons. These household members provided cheap labour for the household business activities.

Educational level vividly revealed that majority (52.5%) of the poultry entrepreneurs has tertiary education as qualification to enhance new skills and technical know-how of decision making in their business. About 25% and 22.5% of the poultry entrepreneurs had primary and secondary school qualifications respectively. Also, the study revealed that majority (65%) of poultry entrepreneurs have years of business experience ranging from 11-20 years. This would immensely contribute positively to their poultry business output due to the wealth of experience acquired over the years of running the business. Distribution of respondents on membership of cooperative societies revealed that majority (60%) do not belong to co-operative society while 40% belonged. This would have been a disincentive loan for agricultural purposes. Finally, majority (75% of poultry entrepreneurs obtained their venture capital from formal source, 12.5% from informal source and 5% from both formal and informal source. The formal source would have boosted returns on investment in their poultry business.

Figure 1 Examination of the average wealth allocation status of the poultry entrepreneurs in the study



Considering the wealth allocation statuses of the poultry entrepreneurs in Figure one, it shows that an average investor has his wealth allocation comprising value of poultry stock (45%), current asset (20%), equity shares (10%), farm structure (14%), and land (21%). It is then observed that majority of the entrepreneurs were richest in terms of stock value but poorest in terms of farm structure. This account the reason why some entrepreneurs over stock the farm holding which often times result to poor performance due mortality.

## Analyses of the entrepreneurs with respect to farm structure location

The analysis of the entrepreneurs in terms of farm structure location is presented in table 2. The table reveals that majority (60%) of poultry entrepreneurs based in Aba had the highest percentage of wealth status. This would have been as a result of adequate market channels in Aba zone and high animal protein consumption demand in the zone. While umuahia and Ikwuano had 25% and 15% respectively representing a smaller and least wealth allocation statuses of the entrepreneurs.

## Analyses of relationship between wealth allocation and venture capital among poultry entrepreneurs

This is result presented in Table 3. The Pearson moment correlation coefficient shows that there was a strong



positive relationship between wealth allocation and venture capital among poultry entrepreneurs. Thus, as wealth status of the entrepreneurs increases, the venture capital increases consequently. The reason for the increase seen in venture capital is that the entrepreneurs wealth invested informs of equity or cash asset will eventually enhance the volume of available venture capital for venture operation.

## Estimation of the factors influencing wealth allocation among poultry entrepreneurs

From the analyses presented in Table 4, linear functional form was chosen as the lead equation based on the values of R<sup>2</sup> (coefficient of multiple determination), F-ratio and the conformity of the signs of the coefficient with a priori expectation. R<sup>2</sup> was 0.830 which indicated that 83.0% of the variables included in the model are significant determinants of wealth allocation. The F-ratio of 13.976 indicates that the model is statistically significant at 1%. Firm size, value of stock equity shares, fixed cost, labour and variable cost were significant and positively related to wealth allocation. Firm size was significant at 1% and positively related to wealth allocation. This implies that as firm size increased, wealth allocation also increased. Firm size could be the ability of the poultry operators to maximize the benefits of economics of scale. The more the maximization of the benefit of economics of scale, the more the output and productivity. Value of stock was significant at 1% and positively related to wealth allocation. This means that as value stock increased, wealth allocation also increased. Increase in value of stock could be the ability of the poultry entrepreneurs to realize reverence from the sell of the animal herds. The more the reverence realized from the sell of the herds, the more wealth allocation. Equity shares were significant at 1% and positively related to wealth allocation. This implies that as the equity shares increased, wealth allocation also increased. Increased in equity shares could be bonds, shares, debentures etc. Fixed cost such as structures, machines -incubators, land etc was significant at 1% and positively related to wealth allocation. This means that as the fixed cost increased, wealth allocation increased. Finally, labour was also significant at 1% and positively related to wealth allocation. This means, the more manpower and experience laborers are employed, wealth allocation also increased.

## Analyses of factors influencing venture capital financing among poultry entrepreneurs

From the analyses above presented in Table 5, Double log functional form was chosen as the lead equation based on the value of  $R^2$  (coefficient of multiple determination), F-ratio and the conformity of the signs of the coefficient with a priori expectation. The value of  $R^2$ , which was 0.844, means that 84.4% of the total variation in the dependent variable is accounted for in the model. The value of F-ratio which was 24.685 signifies that the model is statistically significant at 1%.

Financial institution, personal savings, taxation, value of asset were significant and positively related to venture capital, personal savings being positive and significant at 5% indicates that the higher the personal savings, the higher the output of the poultry entrepreneurs. The venture capitalist should be encouraged to save.

Taxation being positive and significant at 1% indicates that increase in tax will lead to resultant increase in the output level of the poultry operators. Value of assets was also positively significant at indicating that increased in value of assets will lead to a resultant increase in venture capital. Value of assets could imply that of equipment, incubators and borne-hole water for sanitizing the poultry pens. Financial institution was positively significant and related to venture capital. This implies that the higher the source of capital from financial institutions, the higher the venture capital of poultry entrepreneurs. Registration of corporate affairs commission (CAC) was significant at 5% and negatively related to venture capital. This implies that, majority of the poultry entrepreneurs do not register with corporate affairs commission and this result to the inability of financial institutions to grant credit facilities and loans to the poultry entrepreneurs.

#### Conclusion

This study examined wealth allocation and determinants of venture capital among poultry entrepreneurs in Abia State, Nigeria. With respect to wealth allocation, an average poultry entrepreneur is wealthiest in stock value of his farm but poorest in farm structure. In terms of venture capital, majority of the entrepreneurs source their capital from the formal sources. It could be concluded from this study that poultry entrepreneurs were successful in their business and had value of stock, firm size and access to credit as obvious factors influencing wealth allocation while value of assets, source of capital and personal savings were factors influencing venture capital. There was a strong positive relationship between wealth allocation and venture capital



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Table 1: Distribution of the poultry agribusiness entrepreneurs according to socio-economic characteristics

Item	Frequency	Percentage
Age		
20-29	6	15
30-39	12	30
40-49	16	40
50-59	4	10
60 and above	2	5
Total	40	100
Marital status		
Single	3	7.5
Married	21	52.5



Widowed	7	17.5
Divorced	3	7.5
Separated	6	15
Total	40	100
Household size		
1-5	10	25
6-10	25	62.5
11-15	5	12.5
Total	40	100
<b>Education level</b>		
Non- formal	-	-
Primary	10	25
Secondary	9	22.5
Tertiary	21	52.5
Total	40	100
Years of experience		
1-10	4	10
11-20	26	65
21-30	6	15
31 and above	4	10
Total	40	100
Member, co-operative society		
Belong to co-operation	16	40
Do not belong to co-operative	24	60
Total	40	100
Source of venture capital		



Total	40	100
Both	5	12.5
Formal source	30	75
Informal source	5	12.5

Source: survey data, 2012

Table 2 Analyses of the entrepreneurs with respect to farm structure location

Zones	Frequency	Percentage
Ikwuano	6	15
Umuahia	10	25
Aba	24	60
Total	40	100

Source: survey data, 2012

Table 3: relationship between wealth allocation and venture capital among poultry entrepreneurs

Venture capital	Venture capital	Wealth allocation
Pearson correlation sig.(20 tailed)	1	0.175
Wealth allocation	0.175	1
Pearson correlation sig. (2.tailed)	0.281	



Table 4: Regression result of the factors influencing wealth allocation among poultry entrepreneurs

Variable	Linear	Exponential	Semi log	Double log
Constant	-253871.3	11.884	6.001	-895599.4
	(0.524)	(15.438)	(0.915	(-0161)
Firm size	3716.705	0.006	0.671	308328.37
	(3.473)	(3.615)	(2.835)	(1.534)
Access to credit	-43380.87	-0388	-0.161	106115.11
	(-0.327)	(-1840)	(-0.723)	(0.562)
Value of stock	9.789	1.77E-005	0.709	197887.33
	(2.936)	(1.757)	(1.668)	(0.548)
Equity shares	71.650	2.18E-005	-0.370	-538214.75
	(2.697)	(0.294)	(-0.885)	(-1.516)
Fixed cost	10.412	2.05E-006	-0.059	-88984.7
	(4.249)	(0.059)	(-0.218)	(-0.387)
Labour cost	249.757	0.115	0.220	378502.37
	(2.502)	(3.725)	(0.949)	(1.919)
Variable cost	0.45	-6.32E-007	0.228	91291.244
	(0.181)	(-0.178)	(2. 462)	(0.919)
$R^2$	0.830	0.765	0.755	0.670
R <sup>-2</sup>	0.771	0.683	0.755	0.678
F-ratio	13.976	9.311	8.819	6.014

Source: Survey data, 2012.

<sup>\* \* \*</sup> significant at 1 %

<sup>\* \*</sup> significant at 5%

<sup>\*</sup> Significant at 10%



Table 5: Regression result of factors influencing venture capital among poultry entrepreneurs

Variable	Linear	Exponential	Semi log	Double log
Constant	123.984	4.721	-550.277	-0.851
	(2.009)	(7.563)	(-2.884)	(-0.626)
CAC REG	-10.322	-0.116	6.978	-0.063
	(-1.840)	(-2.042)	(-1.175)	(-1.496)
FIN INST	38.482	0.383	-19.743	0.451
	(1.880)	(1.850)	(-0.939)	(3.000)
value of asset	0.986	0.016	21.214	0.203
	(0.770)	(1.210)	(0.396)	(0.533)
Age of firm	-0.407	-0.007	-15.340	-0.395
	(-0.154)	(-0.251)	(-0.554)	(-2.000)
Tax	0.051	0.000	54.633	0.751
	(2.689)	(2.422)	(2.606)	(5.021)
Personal saving	0.007	3.67E-005	40.220	0.115
	(1.520)	(0.840)	(1-839)	(0.736)
RαDs	25.868	0.357	-15.706	0.371
	(1.486)	(2-030)	(-0.613)	(2.027)
$R^2$	0.754	0.688	0.752	0.844
R <sup>-2</sup>	0.700	0.619	0.698	0.810
F-ratio	14.030	10.061	13.892	24.685

Source: survey data, 2012

<sup>\* \* \*</sup> significant at 1 %

<sup>\* \*</sup> significant at 5%

<sup>\*</sup> significant at 10%

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