



**ENTREPRENEURIAL RISK-TAKING PROPENSITY AND PERFORMANCE OF AGRO-ENTREPRENEURS IN OBIO  
AKPOR LGA, RIVERS STATE**

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**Accepted: December 11, 2021**

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**ABSTRACT**

*This study examined the relationship between entrepreneurial risk-taking and performance of Agro-Entrepreneurs in Obio Akpor LGA, Rivers State. The study adopted a cross sectional survey research design. Data for this study were collected from primary source with the aid of structured questionnaire. The population of the study was ninety agro-entrepreneurs who are registered with the Agricultural Development Board in Obio/Akpor LGA and are involved in Fish farming, rice farming, poultry, oil palm processing etc. The reliability of the instrument was achieved by the use of the Cronbach Alpha coefficient with all the items scoring above 0.70. The hypotheses were tested using the Spearman's Rank Order Correlation Coefficient with the aid of Statistical Package for Social Sciences version 23.0. The tests were carried out at a 0.05 level of significance. The findings revealed that there is a significant relationship between entrepreneurial risk-taking and performance of Agro-Entrepreneurs in Obio Akpor LGA, Rivers State. This study concluded that entrepreneurial risk taking significantly influences performance of agro-entrepreneurs in Obio-Akpor LGA of Rivers State. The study thus recommended that agro-entrepreneurs should always aggressively exploit potential opportunities regardless of the uncertainty. They should be willing to accept a certain level of risk to ensure success in their entrepreneurial ventures.*

**Keywords:** *Entrepreneurial Risk-Taking, Performance, Agro-Entrepreneurs*

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**CITATION:** Adim, C. V., Mezeh, A. A., & Basseyy, U. L. (2021). Entrepreneurial risk-taking propensity and performance of agro-entrepreneurs in Obio Akpor Lga, Rivers State. *The Strategic Journal of Business & Change Management*, 8 (4), 953 – 965.

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## INTRODUCTION

Nigeria is endowed with natural resources, large fertile farmlands, wide range of crops, and rivers amongst others. Despite its abundant natural resources it is faced with poor food situation. The poor food situation is traceable to the decline in the agricultural sector. The problem of feeding and provision of natural resources is increasing by the day. However several efforts are being made to improve the standard. Agriculture is a major contributor to Nigeria's gross domestic product (GDP) and small scale farmers play a dominant role in this contribution (Rahji & Fakoyode, 2009). But their productivity and growth are hindered by limited access to credit facilities (Odomenem & Obinne, 2010).

Agriculture is uniquely positioned in the Nigerian economy. Agriculture provides food and nutrition to a population estimated at 190 - 200 million and creates employment opportunities through forward and backward linkages to support 70% -75% of the Nigerian working population. This implies that agriculture and the economy are synonymous; one cannot modernise the economy without starting with agriculture (Juma, 2011). That is not all; about 20.9% of Nigeria's total GDP was contributed by agriculture in the first quarter of 2016 (National Bureau of Statistics). Furthermore, Nigeria is endowed with factors that support agricultural development; these agricultural development drivers include a large population (190 – 200 million) and an increasing urbanised middle class with “good” disposable income, among others. These economic fundamentals are strong, as the level of political support for food security is high. The macro-economic policy of the Federal Government of Nigeria is hinged on agriculture being the pillar of the policy framework and drive for diversification from oil and gas. These facilitative factors provide opportunities to Nigerians in agriculture.

Agro processing SMEs, in particular, contribute significantly to value added creation, maximize the efficiency of the resource allocation and enhance

distribution by mobilizing and utilizing local human and material resources (Cunningham & Rowley 2007). Despite their importance, agro processing SMEs are faced by global competition, market liberalization, rapid technological advances and the introduction of stricter quality and safety regulations (Da silva, Baker, Shepherd, Jenane & Miranda da Cruz, 2009). Today's dynamic environment requires SMEs to be entrepreneurial if they are to survive, grow or have superior performance (Fairoz, Hirobumi & Tanaka, 2010). Firm - level entrepreneurship is key to enhancement of firm performance of small firms (Wiklund & Shepherd, 2003; Lumpkin & Dess, 1996; Patel & D'Souza, 2012). Empirical studies done in developed and transition economies suggest that risk taking as a firm - level strategic posture has constitutes a potential source of competitive advantage and has positive, long-term effect on growth and financial performance of SMEs (Wang & Poutziouris, 2010).

Risk-taking is often used to describe the uncertainty that results from entrepreneurial behaviour (Tajeddini, 2010). The risk-taking dimension of entrepreneurial orientation captures the extent to which the firm's processes involve and/or ignore risks (McMullen & Shepherd, 2006). Risk taking involves engaging in calculated and manageable risks in order to obtain benefits, rather than taking daring risks which are detrimental for firm performance (Dess & Lumpkin, 2005; Morris, Kuratko & Covin, 2008). Firms that adopt a modest level of risk taking are high performers when compared to those firms that assume very high or very low levels of risk taking (Kreiser, Marino & Weaver, 2002; Otieno, Bwisa & Kihoro, 2012). Risk taking also entails a willingness to commit significant resources to opportunities having a reasonable chance of costly failure and a willingness to break away from the tried-and-true path (Wiklund & Shepherd, 2005; Okpara, 2009). Therefore, the purpose of this study was to examine the relationship between entrepreneurial risk-

taking and performance of Agro-Entrepreneurs in Obio Akpor LGA, Rivers State.

## LITERATURE REVIEW

### Theoretical Foundation

#### Traits Model of Entrepreneurial Orientation

The traits model assumes that personality traits are the basis for individual differences. Personality traits are defined as characteristics of individuals that exert pervasive effect on a broad range of trait-relevant responses (Ajzen, 2005). The trait approach to entrepreneurship has been pursued by many researchers in an attempt to separate entrepreneurs from non-entrepreneurs and to identify a list of character traits specific to the entrepreneur. For instance Rauch and Frese (2009) suggest that need for achievement should be higher in people who start a business. Similar result appears for locus of control Innovativeness, competitive aggressiveness, and autonomy, protestant work ethic beliefs and risk taking (Begley & Boyd 2007), among others.

In the trait model, personality traits are seen as the determining factors of behaviour that make a person perform in a relatively consistent way across various circumstances. (Bird, 2009) observed that traits are significantly associated with entrepreneurial motivation and intentions. The traits models rely on the assumption that entrepreneurs possess certain traits that distinguish them from others. These psychological traits, also called entrepreneurial characteristics, include achievement motivation, locus of control, risk-taking propensity, tolerance of ambiguity, self-confidence, innovation, energy level, need for autonomy and independence, etc. There is no agreement however on the number of traits, specific to the entrepreneur, or their validity.

An individual's risk-taking propensity can be defined as their inclination to accept risk comfortably. Stewart and Roth (2011) looked at the risk propensity differences between entrepreneurs and managers in a meta-analysis of twelve studies of

entrepreneurial risk-taking propensity. Five of the studies showed no significant differences, with the remaining seven supporting the notion that entrepreneurs are moderate risk-takers. Entrepreneurs have been found to have a higher need for independence and autonomy, which arises from fear of external control from others (Kirby, 2013). They dislike rules and tend to work out how to get around them. They are therefore considered deviants who desire to be independent of everyone and in total control. They value individualism and freedom more than the general public or managers even if those values imply some inequalities in society (Stewart & Roth 2011). The need for autonomy has been stated by entrepreneurs as one of the most frequent explanations for new venture creation and has been supported in studies by several authors (Lawrence & Hamilton, 2007; van Gelderen & Jansen, 2016). Thus, desire for autonomy is a central feature of entrepreneurship although its causal order is difficult to explain.

Need for achievement in relation to entrepreneurs refers to their need to achieve as a motivational factor. Past evidence suggests that entrepreneurs see profits as a measure of success and not just as a goal. It is the prospect of achievement (not money) that drives them. In his study, McClelland found that entrepreneurs rated high on need achievement and were very competitive when their results were measured. Individuals demonstrating a high need for achievement are focused, committed, and have a real desire to do well in all they do in life (Kirby, 2013). This is important and relevant for entrepreneurship educators to understand in the development of entrepreneurship pedagogy. Notwithstanding the significant contribution made by McClelland to the psychological traits in entrepreneurship research, as with other entrepreneurial characteristics, consistent causal associations are yet to be proven (Brockhaus, 2012).

#### Entrepreneurial Risk- Taking Propensity

According to Mautra (2018) entrepreneurship and risk-taking mindset are not two different things. Every entrepreneur is a natural risk-taker, because

playing secure is not the character of an entrepreneur. An entrepreneur takes these risks which an average person would simply refuse to take. This is because he operates between opportunities, and to exploit it. An average person remains average because he likes to remain in a comfort zone with least amount of risks but risk taker thinks differently. Forlani and Mullin (2000) reflects the degree of uncertainty and prospective losses associated with the outcomes, which may be gotten from a given behaviour or a set of behaviours. Similarly, Dhliwayo and Vuuren (2007) see risk taking as an important element of the strategic entrepreneurial mindset. This is because risk-taking is essential for the success and growth of a business, which is based on how entrepreneurs perceive and manage the risks in their environment (Asenge, Diaka, & Soom, 2018).

In the study of entrepreneurship, risk-taking attitudes of entrepreneur are well established drivers of business performance (Boermans & Willebrands, 2017). Risk attitude is defined as a broad description of the way the decision maker deals with risks (Blais & Weber, 2016). Palich and Bagby (1995) in their study, finds that entrepreneurs have a tendency to evaluate business situations more-positively than non-entrepreneurs because they focus more on the weaknesses and threats. Risk-taking helps an enterprise form an organization atmosphere of tolerance and risk. It is also a way to encourage the experiment, which speeds up the acquisition, learning and absorbing of the new external technology and ultimately improve the enterprise's technology innovation performance (Lina, Sun & He, 2009).

Risk taking mindset is rare compared to all other qualities of an entrepreneur (Mautra 2018). A real risk-taker works at a much higher level above all others. An entrepreneur cannot take risk until he acquires all the basic facets, because the confidence of a risk-taker comes from their basic qualities. Risk-taking mindset is above all other traits, in fact, it is the final deciding characteristics property of a

person that qualifies him as an entrepreneur (Mautra, 2018). According to the definition of entrepreneurship and everyday observation, entrepreneurs are perceived as more risk prone than other people (Macko & Tyszka, 2009). As Warneryd (1988) put it, there seems to be general agreement that risk bearing is necessary prerequisite for being called an entrepreneur.

Lumpkin and Dess (1996) identified three types of risks that businesses face in pursuing entrepreneurial activities; business risks associated with entering new markets or supporting unproven technologies; financial risks relating to the financial exposure required and the risk/return profile of the new venture. It may include borrowing heavily or committing large proportions of their resources and Personal Risks referring to the reputation effects of success or failure in the business. Success to the business entails giving the entrepreneur considerable effect over the future direction of the firm and failure can have the opposite effects. Risk taking is commonly associated with entrepreneurial behaviour and the general successful entrepreneurs are risk takers. Callaghan (2009) argued that entrepreneurs are not typically risk seekers rather like any other rational individuals, they take steps to minimize risks, and this may involve developing strategies that entail a higher tolerance for risk, but the calculation of risks.

Firms that adopt EO are often characterized by high risk taking behaviour such as taking on large debts or making large resources commitment to projects with a view to make huge returns based on available opportunities. In seizing opportunities in the marketplace, risk-taking concerns firms' tendency to take bold actions such as venturing into unknown markets, committing a substantial amount of resources to ventures with uncertain outcomes, as well as the tendency to borrow heavily hoping to reap high returns (Etebang, Harrison & Ernest, 2010). They go on to posit that managers and organizations are confronted with three types of risk, namely: Business risk-taking (i.e. venturing into the unknown without knowing the



probability of success). Financial risk-taking (i.e. when a company needs to borrow heavily or commit a large portion of its resources in order to grow). Personal risk taking (i.e. the risks that an executive assumes in taking a stand in favour of a strategic course of action). Therefore, in pursuit of organizational innovation, strategic renewal and venturing efforts as part of organizations' growth strategies, organizations may follow the risk-taking path by making decisions and taking action in the context of uncertainty as well as making substantial resource commitments without knowing what the consequences of their decisions and behaviours will be.

### **Performance of Agro-Entrepreneurs**

Kim and Patel (2017) describe performance as an action or achievement considered in relation to how successful it is. Looking from the Kim and Patel (2017) definition, it can be reasonably concluded that performance is synonymous to success. What connotes performance varies from one organization to another (Jamil & Mohamed 2011). According to Chepngetich (2016), performance of small enterprises is viewed as its ability to contribute to job and wealth creation through enterprise start-up, survival and growth. This research study adopts subjective measures of SME performance targeted on performance indicators such as profitability, sales, net profit, asset and market share.

The ability for the entrepreneur to build a relationship of trust with their customer and suppliers and the ability to successfully partner or network with suppliers and other people encourages flexibility in production and other business activities. The ability to think quickly of solutions to problems encourages creativity and taking of calculated risk (Solesvik, 2012). The ability to coordinate and organize activities in the firm ensures smooth running of activities within the firm. The ability to set goals, execute plans and evaluate actions enables the entrepreneur to use his resources to achieve competitive advantage. The SME sector is a main device which inspires the increase of jobs and formation of wealth in the

country. Performance of SMEs represent a noteworthy part that is linked to the consolidation and progress of the nation (Enila & Ektebang, 2014). Performance and progress of the SMEs in manufacturing, services and agriculture, has been perceived as the paramount drive and has immensely add up to Nigeria economy. Sustainable progress and the proliferation of SME performance, will open abundant doors for employment openings (Enila & Ektebang, 2014).

However, most agro-entrepreneurs are afraid of taking risks and trying out new set of ideas. They are comfortable with their old way of doing things for fear of losing money. Ukoha (2011) observed that most farmers are very conservative in nature and therefore find it difficult to embrace change. This notwithstanding, when the content of a technology is distorted, it makes it difficult for agro-entrepreneurs to accept such and conflicting information from various sources which can also discourage the receivers.

### **Risk-Taking and Performance of Agro-Entrepreneurs**

The importance of risk taking and its influence on firm performance has been highlighted in both theoretical discussions and empirical research. At the theoretical level, the willingness to engage in relatively high levels of risk taking behaviour enables SMEs to seize profitable opportunities in the face of uncertainty which leads to long term profitability (McGrath, 2001). Empirically, risk taking firms are able to secure superior growth and long term profitability in contrast to risk avoiders (Wang & Poutziouris, 2010; Ahimbisibwe & Abaho, 2013).

Furthermore, Rao (2012); Awang, Ahmed, Asgher and Subari (2010) establish that risk taking influences the firm performance of small firms The performance of agro processing SMEs could benefit from its owner/mangers being risk takers. Most of the SMEs face difficulties when it comes to intertwining risk practices and business processes (Gorzeń-Mitka, 2015). In this regard, SMEs are likely to increase their costs if they

fail to manage risks (Nanthuru, Pingfeng, Guihua & Mkonya, 2018). Therefore, risk management techniques that suit the need of SMEs should be in place (Kagwathi, Kamau, Njau, & Kamau, 2014). These techniques require the capabilities of SME owners/managers in foretelling potential hazards (Smit & Watkins, 2012). The SMEs are also required to adopt relevant instruments that can manage risks associated with the business operations in relation to the respective internal and external business environments. These instruments should be the drivers of SME performance (Belinskaja & Velickiene, 2015).

The adoption of risk-taking strategies can have great influence on SME performance (Wambugu, Gichira, Wanjau, & Mung'atu, 2015). These strategies are characterized as the readiness to invest in high risk businesses that expect significant returns (Wambugu, Gichira, Wanjau & Mung'atu, 2015; Fairoz, Hirobumi, & Tanaka, 2010), the capabilities of SMEs to take calculated risks, develop a backup plan, and the readiness to exploit opportunities in uncertainty (Maladzi, 2015; Fairoz, Hirobumi, & Tanaka, 2010).

It has been confirmed in prior studies that firms which are strong in innovation are more likely to introduce new and better products ahead of their competitors and enjoy product advantage (Li & Calantone, 1998). However, this advantage does not stem simply from meticulously planned innovation; the boldness of the firm to take the risk by breaking new ground in product development plays a decisive role in securing the advantage. Risk-taking, as a corporate-level phenomenon, is defined as "the degree to which managers are willing to make large and risky resource commitments – i.e. those which have a reasonable chance of costly failures" (Miller and Friesen, 1978: 923). Risk-taking is an essential element of EO and scholars generally believe that risk always exists in conjunction with innovation if the innovation is to be effectual (Dess & Lumpkin, 2005; Stam & Elfring, 2008). While risk is inherent to innovation as market potential of innovative products is highly uncertain; risk-taking

brings about innovation because without risk, innovation is unlikely to happen (Sethi & Sethi, 2009). Studies revealed that the failure rate of innovation attempts could be as high as 50 percent (Nakata & Sivakumar, 1996). However, entrepreneurial firms were not intimidated by the high risks involved and may devote up to one-fourth of their profits to the products developed in the most recent five years (Takeuchi & Nonaka, 1986).

### **Empirical Studies**

A study by Naldi, Nordqvist, Sjöberg and Wiklund (2009) in Sweden looked into the influence of risk taking and performance of family and nonfamily firm. The study found out that though family business (largely SMEs) do take risks as part of their entrepreneurial activities, they do it to a lesser extent than do nonfamily firms. The result of the study also indicated that the reason why family firms are less likely to take lower risk than other firms was because of contextual reasons such as governance structure likelihood of losing ownership of the business. In fact the finding of the study suggests that risk taking have a negative effect on family business.

A similar study by Olson et al., (2002) examined the impact of top management team risk taking propensity on firm performance in United Kingdom. The data was collected through a mailed survey questionnaire answered by the top executives of small to large firms. Performance was looked in terms of financial performance, innovation and stakeholders' performance. The study found out that firms with top management that are willing to take risk are able to achieve superior levels of both financial and non-financial performance.

Hughes and Morgan (2007) also evaluated risk taking based on perceptions towards the term risk taking and calculated risk, as well as based on a statement about exploration in business activities. Surprisingly, Hughes and Morgan (2007) found that risk taking had a negative impact on product performance and no impact on customer performance. The authors argue that the reason for

this finding may be that because risk taking is normally costly due to competitor responses, it may lead to drift and wastage of resources as firms in their early stages do not have the coordination mechanisms in place to direct the risk taking behaviour in the best possible way. They suggest that risk taking may be beneficial for more mature companies, but not beneficial at the embryonic stage. Based on the foregoing therefore, this study thus hypothesized that:

**Ho<sub>1</sub>:** There is no relationship between entrepreneurial risk taking propensity and performance of agro-entrepreneurs in Obio-Akpor LGA of Rivers State.

### METHODOLOGY

The study adopted a cross sectional survey research design. Data for this study were collected from primary source with the aid of structured questionnaire. The population of the study was ninety (90) agro-entrepreneurs who are registered with the Agricultural Development Board in Obio/Akpor LGA and are involved in Fish farming, rice farming, poultry, oil palm processing etc. Since

the population was small, the entire population was used as a census. Hence, the entire ninety (90) agro-entrepreneurs were adopted as the respondents. The reliability of the instrument was achieved by the use of the Cronbach Alpha coefficient with all the items scoring above 0.70. After data cleaning, only data for fifty nine (59) respondents were used for data analysis. The hypotheses were tested using the Spearman's Rank Order Correlation Coefficient with the aid of Statistical Package for Social Sciences version 23.0. The tests were carried out at a 0.05 level of significance.

### DATA ANALYSIS AND RESULT

The tests for this section are two-tailed and as such emphasizes on no particular direction. The assessment of the bivariate relationships were carried out using the Spearman's rank order correlation with the precision for error fixed at 0.05 given the choice of the confidence interval of 95%. The decision rule which applies for all bivariate test outcomes is according to Bryman and Bell (2003), where:

**Table 1: Shows the description of range of correlation (Rho) values, as well as the correlative level of association**

Range of Rho (+ and – sign value)	Association strength
± 0.80 – 0.99	Very strong
± 0.60 – 0.79	Strong
± 0.40 – 0.59	Moderate
± 0.20 – 0.39	Weak
± 0.00 – 0.19	Very weak

**Source: Bryman and Bell (2003)**



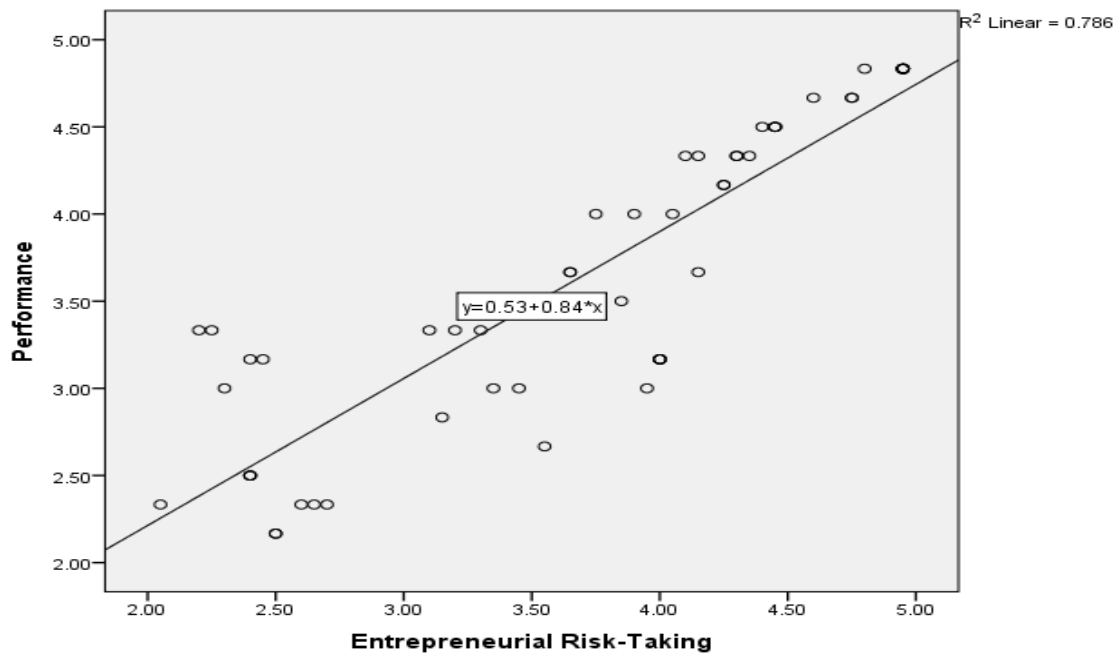


Figure 1: Scatter plot entrepreneurial risk-taking and performance

Source: SPSS Output

The scatter plot graph in figure 1 showed at  $R^2$  (0.786) linear line depicting a strong viable and positive relationship between the two constructs. The implication is that an increase in entrepreneurial risk-taking at the same time brings about an increase in the level of performance of agro-entrepreneurs. The scatter diagram has provided vivid evaluation of the closeness of the

relationship among the pairs of variables through the nature of their concentration. The positive relationship is evidenced by the pattern of the points moving upwards from left to right. This positive relationship indicates that a higher value of the dependent variable is associated with higher values of the independent variable.

Table 2: Correlations for Entrepreneurial Risk-Taking and Performance

			Entrepreneurial Risk-Taking	Performance
Spearman's rho	Entrepreneurial Risk-Taking	Correlation Coefficient	1.000	.890**
		Sig. (2-tailed)	.	.000
		N	59	59
Performance		Correlation Coefficient	.890**	1.000
		Sig. (2-tailed)	.000	.
		N	59	59

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Output

**Ho<sub>1</sub>:** There is no relationship between entrepreneurial risk taking propensity and performance of agro-entrepreneurs in Obio-Akpor LGA of Rivers State.

From the result in the table above, the correlation coefficient (rho) shows that there is positive

relationship between entrepreneurial risk taking propensity and performance. The *correlation coefficient 0.890* confirms the magnitude and strength of this relationship and it is a very strong correlation between the variables. The correlation represents is significant at  $p\ 0.000 < 0.01$ . Therefore,

based on the study findings the null hypothesis earlier stated is hereby rejected and the alternate upheld. Thus, there is a significant relationship between entrepreneurial risk taking propensity and performance of agro-entrepreneurs in Obio-Akpor LGA of Rivers State.

### DISCUSSION OF FINDINGS

The study finding revealed that there is a significant relationship between entrepreneurial risk taking propensity and performance of agro-entrepreneurs in Obio-Akpor LGA of Rivers State. This finding corroborated with the empirical study by Olson *et al.* (2002) who examined the impact of top management team risk taking propensity on firm performance in United Kingdom and found out that firms with top management that are willing to take risk are able to achieve superior levels of both financial and non-financial performance. Similarly, the finding corroborates with Rao (2012); Awang, Ahmed, Asgher and Subari (2010) who established that risk taking influences the firm performance of small firms. The performance of agro processing SMEs could benefit from its owner/mangers being risk takers. Also, the study finding failed to align with Hughes and Morgan (2007) who evaluated risk taking based on perceptions towards the term risk taking and calculated risk, as well as based on a statement about exploration in business activities. Surprisingly, Hughes and Morgan (2007) found that risk taking had a negative impact on product performance and no impact on customer

performance. The authors argue that the reason for this finding may be that because risk taking is normally costly due to competitor responses, it may lead to drift and wastage of resources as firms in their early stages do not have the coordination mechanisms in place to direct the risk taking behaviour in the best possible way. They suggest that risk taking may be beneficial for more mature companies, but not beneficial at the embryonic stage. Additionally, the finding agreed with Wambugu, Gichira, Wanjau and Mung'atu (2015) and Naldi, Nordqvist, Sjöberg and Wiklund (2007) that the adoption of risk-taking strategies can have great influence on SME performance.

### CONCLUSION AND RECOMMENDATION

This study concluded that entrepreneurial risk taking significantly influences performance of agro-entrepreneurs in Obio-Akpor LGA of Rivers State. Implying that the performance of agro-entrepreneurs in Obio-Akpor is improved upon by the ability agro-entrepreneurs to take calculated risks in consideration of the dynamism of the business environment. Dynamic environments require a greater level of risk taking in strategic decision making and processes to more effectively and successfully respond to the invariable state of change. Based on the foregoing, the study thus recommended that agro-entrepreneurs should always aggressively exploit potential opportunities regardless of the uncertainty. They should be willing to accept a certain level of risk.

### REFERENCES

- Ahimbisibwe, G. M., & Abaho, E. (2013). Export entrepreneurial orientation and export performance of SMEs in Uganda. *Global Advanced Research Journal of Management and Business Studies*, 2(1), 56- 62.
- Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. In D. Albarracín, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 173-221). Mahwah, NJ: Erlbaum.
- Asenge, E., Diaka, H., & Soom, A. (2018). Entrepreneurial mindset and performance of small and medium scale enterprises in Makurdi metropolis, Benue State, Nigeria. *International Journal of Innovation*, 6(2), 124-146

- Awang, A., Ahmad, Z. A., Asghar, A.R., Subari, K.A., & Kassim, S. A. (2011). Firm entrepreneurial orientation and knowledge/networking of agro based enterprises in Malaysia: The role of technology and strategy. *African Journal of Business Management*, 5 (22), 9685-9706
- Begley, T. M. & Boyd, D. P. (2007). Psychological characteristics of associated with performance in entrepreneurial firms and small businesses. *Journal of Business Venturing*, 2, 79-83.
- Belinskaja, L., & Velickiene, M. (2015). Business Risk Management: Features and Problems in Small and Medium-Sized Trading and Manufacturing Enterprises. *European Scientific Journal*, 2 (June Special Edition), 30-58.
- Bird, B. (1988). Implementing entrepreneurial ideas: the case for intention. *Academy of Management Review*, 13, 442–453.
- Blais, A. R., & Weber, E. U. (2006). A domain - specific populations. *Judgment and Decision Making*, 1(1), 33-47.
- Boaermans, M., & Willebrands, D. (2017). Entrepreneurship, risk perception and firm performance. U. S. E. Discussion Paper Series number, 17-04.
- Brockhaus, R. H. (2012). Risk Taking Propensity of Entrepreneurs. *Academy of Management Journal*, 23(3) 509 – 520.
- Chepngetich, P. (2016). Effect of Financial Literacy and Performance SMEs. Evidence from Kenya. *American Based Research Journal*, 5, 26–35
- Cunningham, L. X., & Rowley, C. (2007). Human resource management in Chinese small and medium enterprises. *Personnel Review*, 36(3), 415-439.
- Da Silva, C.A., Baker, D., Shepherd, A.W., Jenane, C., & Miranda-da-Cruz, S. (2009). *Agro – industries for Development*. Wallingford, United Kingdom: CABI Publishing.
- Dess, G. G., & Lumpkin, G.T. (2005). The role of entrepreneurial orientation in stimulating effective corporate entrepreneurship. *Academy of Management Executive*, 19(1), 147-156.
- Dhiwayo, S. V., & Vuuren, J. J. (2007). The strategic entrepreneurial thinking imperative. *Accounting Communication*, 7, 123-134.
- Eniola, A.A. & Ektebang, H. (2014). SME firms performance in Nigeria: Competitive advantage and its impact. *International Journal of Research Studies in Management*, 3(2), 75-86.
- Etebang, H., Harrison, R., & Ernest, C. (2010). Entrepreneurial orientation of public enterprises in Malaysia. *Business Strategy Series*, 11(2), 77
- Fairoz, F. M., Hirobumi, T., & Tanaka, Y. (2010). Entrepreneurial Orientation and Business Performance of Small and Medium Scale Enterprises of Hambantota District Sri Lanka. *Asian Social Science*, 6 (3), 34- 46.
- Forlani, D., & Mullins, J.W. (2000). Perceived risks and choices in entrepreneur's new venture decisions, *Journal of Business Venturing*, 15, 305-322.
- Hughes, M., & Morgan, R. E. (2007). Deconstructing the relationship between entrepreneurial orientation and business performance at the embryonic stage of firm growth. *Industrial Marketing Management*, 36(5), 651–661.

- Jamil, C. M., & Mohamed, R. (2011). Performance Measurement System (PMS) in Small Medium Enterprises (SMEs): A Practical Modified Framework. *World Journal of Social Sciences*, 1, 200-212.
- Juma, C. (2011). *The New Harvest: Agricultural Innovation in Africa*. New York: Oxford University Press
- Kagwathi, G. S., Kamau, J. N., Njau, M. M., & Kamau, S. M. (2014). Risks faced and mitigation strategies employed by small and medium enterprises in Nairobi, Kenya. *IOSR Journal of Business and Management*, 16 (4), 1-11.
- Kim, K.Y. & Patel, P.C. (2017). Employee ownership and firm performance: A variance decomposition analysis of European firms. *Journal of Business Research*, 70(C), 248-254
- Kirby, (2013). *Hunting the Heffalump, in Entrepreneurship and Economic Development*. The Free Press, New York.
- Kreiser, P., Marino, L., & Weaver, K. (2002). Assessing the psychometric properties of the entrepreneurial orientation scale: A multi-country analysis. *Entrepreneurship Theory and Practice*, 26(4), 71-95.
- Lawrence, N., & Hamilton, L. (2007). New wrinkles in the theory of age: Demography, norms, and performance Ratings. *The Academy of Management Journal*, 31(2), 309-337.
- Lina, J., Sun, Y., & He, J. (2009). The relationship between the entrepreneurial orientation and firm growth performance: under the action of absorptive capacity. *Soft Science*, 23, 135- 140.
- Lumpkin, G.T., & Dess, G.G. (1996). Clarifying the EO construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172.
- Macko, A., & Tyszka, T. (2009). Entrepreneurship and risk taking. *Applied Psychology: An International Review*, 58(3), 469-487.
- Maladzhi, W. R. (2015). Impact of risk-taking leadership on organisational performance and sustainability in SMEs. 2015 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM) (pp. 1752-1756). Singapore: IEEE.
- Mautra, A. (2018). Entrepreneurship and risk-taking mindset. <http://akhilmantra.com/2018/12/entrepreneurship-and-risk-taking-mindset>. Retrieved 04 April, 2019.
- McGrath, R. G. (2001). Exploratory learning, innovative capacity and managerial oversight. *Academy of Management Journal*, 44(1), 118-131.
- McMullen, J. S., & Shepherd, D. A. (2003). Extending the theory of the entrepreneur using a signal detection framework. In J. Katz & D. Shepherd (Eds.), *Advances in entrepreneurship, firm emergence, and growth*, 6: 203-248. Greenwich, CT: JAI Press
- Morris, M. H., Kuratko, D. F., & Covin, J. G. (2008). *Corporate Entrepreneurship & Innovation, 2nd ed.* Mason: Thomson Higher Education.
- Nakata, C., & Sivakumar, K. (1996). National culture and new product development: An integrative review. *The Journal of Marketing*, 6(1), 61-72,
- Naldi, L., Nordqvist, M., Sjöberg, K., & Wiklund, J. (2007). Entrepreneurial orientation, risk taking, and performance in Family firms. *Family Business Review*, 20(1), 33-47.

- Nanthuru, S. B., Pingfeng, L., Guihua, N., & Mkonya, V. L. (2018). An assessment of risk management practices of sme taxpayers in malawi and their impact on tax compliance. *International Journal of Management Science and Business Administration*, 4 (4), 7-17.
- Odoemenem, I.U., & Obinne, C. P. O (2010) Assessing the factor influencing the utilization of improve cereal crop production technologies by small scale farmers in Nigeria. *Indian Journal of science and technologies* 3(1)
- Otieno, S., Bwisa, H.M., & Kihoro, J. M. (2012). Influence of entrepreneurial orientation on Kenya's manufacturing firms operating under East African regional integration. *International Journal of Learning & Development*, 2(1), 299 – 320.
- Palich, L. E., & Bugby, D. R. (1995). Using cognitive theory to explain entrepreneurial risk-taking: challenging conventional wisdom. *Journal of Business venturing*, 10(6), 426-438.
- Patel, P., & D'Souza, R. (2009). Leveraging entrepreneurial orientation to enhance SME export performance. An Office of Advocacy Working Paper. No.337, 1-32.
- Rahji, M. A. Y., & Fakoyode, S. A (2009). A multinomial logit analysis of agricultural credit rationing by commercial banks in Nigeria. *International research Journal of finance and accounting*,
- Rao, S. (2013). The impact of entrepreneurial orientation and leadership styles on business performance: A study on micro, small and medium enterprises. *Journal of Entrepreneurship & Business Environment Perspective*, 2(1), 111-118.
- Rauch, A., & Frese, M. (2007). Let's put the person back into entrepreneurship research: A meta-analysis on the relationship between business owners' personality traits, business creation and success. *European Journal of Work and Organizational Psychology*, 16, 353–385
- Smit, Y., & Watkins, J. A. (2012). A Literature Review of Small and Medium Enterprises (SME) Risk Management Practices in South Africa. *African Journal of Business Management*, 6 (21), 6324-6330.
- Solesvik, M. Z. (2012). Entrepreneurial Competencies in Emerging Context. 17th Nordic Conference on Small Business Research, Helsinki, 23-25 May
- Stam, W., Souren, A., & Elfring, T. (2013). Social Capital of entrepreneurs and small firm performance: A meta-analysis of contextual and methodological moderators. *Journal of Business Venturing*, 4-22.
- Stewart Jr, W. H., & Roth, P. L. (2001). Risk propensity differences between entrepreneurs and managers: A meta-analytic review. *Journal of applied psychology*, 86(1), 145.
- Tajeddini, K. (2010). Effect of customer orientation and entrepreneurial orientation on innovativeness: Evidence from the hotel industry in Switzerland. *Tourism Management*, 31(2), 221 – 231.
- Takeuchi, H., & Nonaka, I. (1986). The New New Product Development Game. *Harvard Business Review*, 64, 137-146.
- Wambugu, A. W., Gichira, R., Wanjau, K. N., & Mung'atu, J. (2015). The relationship between risk taking and performance of small and medium agro processing enterprises in Kenya. *International Journal of Economics, Commerce and Management*, 3 (12), 441-455.
- Wang, Y., & Poutziouris, P. (2010). Entrepreneurial risk taking: empirical evidence from UK family firms. *Entrepreneurial Behavior & Research*, 16(5), 370- 388.



- Warneryd, K. E. (1988). The psychology of innovative entrepreneurship. In: W. F., Van Raaij, G. M., Van Veldhoven., & K. E. Warneryd. *Handbook of Economic Psychology*. Netherlands: Kluwer.
- Wiklund, J., & Shepherd, D. (2003). Knowledge-based resources, entrepreneurial orientation, and the performance of small and medium sized business. *Strategic Management Journal*, 24 (13), 1307-1314.
- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small firm performance: a configurational approach. *Journal of Business Venturing*, 20, 71-91.