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MACRO ENVIRONMENT AND PERFORMANCE OF MULTINATIONAL AGRICULTURAL ENTERPRISES: A CASE FROM NIGERIA

Purpose. *The objectives of the study are to determine if macroeconomic environment has a significant effect on performance of multinational agricultural enterprises and also to examine if there is a significant relationship between macroeconomic variables and multinational agricultural enterprises profitability.*

Methodology / approach. *The study adopted survey method, the Yamane formula and Cronbach Alpha for test retest reliability. 114 copies of questionnaire were administered to employees of AGRIC International Technology & Trade Ltd Lagos Nigeria to get primary data that treated and tested appropriate research questions and hypotheses accordingly. SPSS was also employed in testing the research hypothesis.*

Results. *The study found out that macroeconomic environment has a significant effect on Multinational agricultural enterprises performance and there exists a significant relationship between macroeconomic variables and multinational agricultural enterprises profitability.*

Originality / scientific novelty. *The results of regression analysis revealed that variance in multinational agricultural enterprise performance can be explained by service macroeconomic environment and that there is exist a significant relationship between macroeconomic variables and multinational agricultural enterprise profitability. Therefore, it is important for multinational agricultural enterprises to understand all type of macro factor and their implications on organizational performance of their business. Constant monitoring and conducting environmental scanning of theses macro environment factor should be the concern of multinational agricultural enterprise.*

Practical value / implications. *Based on the above findings, it is recommended that all macroeconomic variables must be well understood and monitored by multinational agricultural enterprises to enhance greater profitability and sustainability. Moreover, multinational agricultural enterprise must demonstrate through their marketing tactics that their effort to sustain local economy and the labor market within a foreign market makes them a valuable contributor to the prosperity of their operating region.*

Key words: macro environment, performance, multinational agricultural enterprise, PESTLE, macroeconomic factors, profitability.

Introduction and review of literature. Ferrel et al. (2011) postulates that multinational agricultural enterprises serve as catalysts for conceptualizing organization-environment. Shah and Yaday (2014) states that a macroeconomic factor influences the economic activities of such complex company networks. The major changes or developments in the macro-environment are usually outside the business control. It's essential that managers of multinational agricultural enterprises

are able to anticipate the impact of these changes on either the business itself or on its market before they actually happen so as to be able to adjust the business products or processes accordingly (Flamholtz et al., 2011). In order for multinational agricultural enterprises to cope with the dynamic and rapidly changing International business environment, there is need to develop and implement appropriate strategies that would safeguard their operations and yield the desired results (United Nation, 2015).

The concept of multinational agricultural enterprises and performance. Thompson et al. (2012) posit that multinational agricultural enterprises are enterprises that involves in agriculture products or services that maintain overseas direct investments in order to control or possess value-added assets in more than one country. The need to take into account macro environment variable must not be forgetting because it determines the performance of multinational enterprises (Tuselmann, Sinkovics and Pishchulov, 2016). Performance could be related to some factor as increasing profitability, increase service delivery or obtaining the best result in important area of multinational activities. Satisfaction is an important result of performance (Osuagwu, 2001). Multinational organization faces turbulent and rapid changing environment such as delays in availability of resources, political interference and variations in the economic situations have been attributed to poor organizational performance (Larosi, 2011).

Porter (2008) postulate that macro environment influence organization processes differently and that the macro environment has influence on multinational performance.

The macro environmental factors. Managers of agricultural multinational enterprises must understand the macroeconomic factor and its influence on performance of these enterprises (Beugelsdijk, Nell and Ambos, 2017). This paper focuses on the following macroeconomic factors:
- political factors;
- economic factors;
- social factors;
- technological factors;
- legal factors;
- environmental factors.

Political factors. Ongeti (2014) observed that political factors are the government regulations on business. Political instability has ramification on planning, for example no organization want to set up business in a country where the trade relationship are not relatively defined and stable. A good instance is June 12, 1993 crisis in Nigeria that really affected many organizations due to political instability. Legal system defined what an organization should or not to do (Murgor, 2014). Political Factor is one of the major determinants that should be considered by Multinational Agriculture Enterprises in determining the profitability and efficiency (Flamholtz et al., 2011).

Economic factors. Ongeti (2014) in his write up stressed much on the overall health of the economic system in which many agricultural multinational operate.

Otokiti and Awodun (2003) posit that the economic situation in Nigeria at some point has been hinted to be unfavorable for business activities. These factors have major impacts on how businesses operate and make decisions. For example, interest rates affect a firms cost of capital and therefore the extent to which a business grows and expands (Adeoye, 2013). Economic environment goes a long way to determine and define the opportunities for an organization; this is because an expanding economy provides operational scope for the organizational existence as well as for the establishment of new ones (Oldekop et al., 2016).

Social factors. Zurukskie (2006) pointed that analysis of cultural factors indicates cultural sensitivity which is of paramount importance in the business sphere, which extends to the marketing tactics of international companies. Customers' motivation for purchases of products and services often stems from the perceived importance of a product for their lifestyle (Flamholtz et al., 2011). Close examination of the traditions, values or social interactions between customers within a region can lead to more successful marketing messages and tactics developed by the international company in a new area (Ongeti, 2014). Brouthers et al. (2016) Postulates that there are very slim chances that all cultures will perceive a product and its benefits in an identical manner. Hofstede's cultural analysis of distinct regions informs companies of the most significant differences that international brands must keep in mind when globalizing their business (Zhou and Guillen, 2015).

Technological factors. Technology is understood as the systematic application of scientific or other organized knowledge to practical tasks (Kinnu, 2014). Technology changes fast and to keep pace with it, Multinational Agriculture Enterprises should be ever alert to adopt changed technology in their business (Gado and Nmadu, 2011). Access to modern technologies, as well as the degree of trust in using these technologies must precede the marketing efforts of international companies in new regions in order to guarantee success (Mintzberg, 2009).

Legal factors. According to Gado and Eze (2014) legal environment consist of laws and regulations that determine the levels of investment by agricultural multinational enterprises. This enhances more wealth, job creation and ultimately more poverty reduction.

According to Adelegan (2011) legal environment consists of the laws regulations and procedures of a country which agricultural multinational enterprises are anticipated to comply with in the course of their operations. These laws may facilitate successful business conduct as well as constitute handicaps to successful performance. Furthermore in carrying out their business operations, multinational, enterprises are required by law to pay taxes, value added tax, capital gain tax, education tax, import duties, excise duties among others (Kolk and Rivera, 2016).

Environmental factors. The attitude of consumers in the region towards environmental impact must be first and foremost analyzed before a company launches an extensive rebranding campaign that focuses on the green approach of the company in their operations (Selden and Sowa, 2004). Kim and Aguilera (2016) opined that the level of education and awareness of local consumers in relation to the

importance of firms' corporate social responsibility (CSR) contributes to the extent to which companies should be focusing on promoting their ethical behavior in a particular region. An international trade regulation is a great extent that imposed strict rules in relation to the impact of businesses on the environment. Marketing social responsibility is only relevant in some regions (Black, 2004).

The macroeconomic factors tend to impact on the performance of agricultural multinational enterprises in a number of ways (Stanford, 2011). The ability of macroeconomic variables to explain profitability rate of agricultural multinational enterprises have been a center of focus by many researchers. It is therefore important to determine the macroeconomic variables that might have adverse effect on the performance of agricultural multinational enterprises. Although several studies have discussed the relationship between performance and macroeconomic variables, none have looked at more than one variable.

The purpose of the article. The objectives of the study are to determine if macroeconomic environment has a significant effect on performance of multinational agricultural enterprises and also to examine if there is a significant relationship between macroeconomic variables and multinational agricultural enterprises profitability.

Data analysis. The study adopted survey method with inference to PESTLE analysis in the design of the questionnaire instrument. Also element of questionnaire was assigned quantitative numbering for proper measurement of variables. Primary and secondary data was employed for the study. The population of the study was the employees of Agric International Technology & Trade Ltd Lagos Nigeria. The questionnaires were structures in form of strongly agree (SA), Agree (A) Undecided, (U), Disagree (D) Strongly Disagree (SD). The study employed The Yamane formula. This formula is concerned with applying a normal approximation with a confidence level of 95% and a limit of tolerance level (error level) of 5 % (Easterby Smith et al., 2011; Creswell, 2009).

To this extent the sample size is determined by $[n = \frac{N}{1+N_{e^2}}]$,

where: n = the sample size; N = population; e = the limit of tolerance.

Therefore, $n = \frac{160}{1+160(0.05)^2} = \frac{160}{1+160(0.0025)} = \frac{160}{1+0.4} = \frac{160}{1.4} = 114$ respondents.

A sample of one hundred and fourteen (114) employees out of the one hundred and sixty (160) employee population of the AGRIC International Technology & Trade Ltd as calculated above. Cronbach's Alpha method was also used for measuring questionnaire reliability. SPSS was also adopted for the research in testing the research hypothesis. Reliability statistics are presented in the table 1.

Table 1

Reliability statistics

Cronbach's Alpha	N of Items
.745	20

Source: field survey, 2018.

Table 2
Distribution of respondents and response rate

Respondents Occupation	Questionnaire administered (sampled)	Percentage of total response (%)
Supervisory	45	50.0
Managerial	42	46.7
Executive	3	3.3
Total	90	100.0
Gender/Category	Questionnaire administered (sampled)	Percentage of total response (%)
Male	57	63.3
Female	33	36.7
No of Returned	90	78.95
No of Not Returned	24	21.05
Total no of questionnaires	114	100.0

Source: field survey, 2018.

Table 3
The descriptive statistics of macro environment and performance of multinational agricultural enterprise

Responses	Total (N)	Mean
Macro environment and performance of multinational agricultural enterprise		
The more complex such a company network, the more important the external influence factors become. And in this way, the cross-cultural differences become of critical importance	90	4.66
The macroeconomic variables jointly influenced the performance of multinational agricultural enterprise	90	3.88
Constant monitoring and conducting environmental scanning of macro environment factor should be the concern of multinational agricultural enterprise	90	3.82
Organizational structure and strategy adopted by the multinational agricultural enterprise determines differential in their performances?	90	3.79
Changes in the environment in which the multinational agricultural enterprise operates their responses to those changes and the enterprise's policy for investment determines the performance rate	90	3.66
Macroeconomic variables and multinational agricultural enterprises profitability	Total (N)	Mean
Concentration level of the market through conduct link determines the profitability of multinational agricultural enterprise	90	3.77
Market power is the main variable that causes profitability of firms to change	90	3.86
Multinational agricultural enterprises profitability depends on whether inflation expectations are fully anticipated	90	3.93
Inflation has a strong effect on profitability while multinational agricultural enterprise profits are not significantly affected by real GDP per capita fluctuations	90	3.97
Interference from board members, political crises, undercapitalization, and fraudulent practices are considered the most critical factors that impact the profitability of Multinational agricultural enterprises	90	3.88
All macroeconomic variables have significant relationship with multinational agricultural enterprises profitability, although their impacts and relation is not always uniform for domestic and International market	90	3.69

Source: field survey, 2018.

Results and discussion. Regression analysis was used to measure the effect of the independent variable to the dependent variable of hypothesis 1, while in hypothesis 2 Correlation analysis was used to measure the significance of the relationship between the dependent and independent variables. Below are the test of hypothesis, results and discussion of findings.

Test of hypothesis 1. H_0: Macroeconomic environment has no significant effect on performance of multinational agricultural enterprise. H_1: Macroeconomic environment has significant effect on performance of multinational agricultural enterprise.

Table 4

Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.721(a)	.519	.485	.64386

Source: field survey, 2018.

Table 5

ANOVA (b)

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	37.192	6	6.199	14.952	.000(a)
	Residual	34.408	83	.415	-	-
	Total	71.600	89	-	-	-

Source: field survey, 2018.

a) predictors (Constant): macroeconomic environment;

b) dependent variable: multinational agricultural enterprise performance.

Interpretation of results. The results from the tables above revealed that the extent to which the variance in multinational agricultural enterprise performance can be explained by service macroeconomic environment is 51.9 % i.e. (R square = 0.519) at 0.0001 significance level.

Decision. The significance level below 0.01 implies a statistical confidence of above 99 %. This implies that macroeconomic environment as a significant effect on Multinational Agricultural Enterprise performance. Thus, the decision would be to reject the null hypothesis (H_0), and accept the alternative hypothesis (H_1). There is no doubt, based on the result of findings in this paper, that all the types of macro environment (economic, political, legal, socio-cultural, demographic, natural, technological, global, financial, social and competitive) have significant impact on organizational performance of multinational agricultural enterprises. It is also realized that there exists relationship between multinational agricultural enterprises and the environment in which it occurs. The importance of paying attention to the impact of a volatile macroeconomic environment on the competitiveness of the multinational Enterprises should be clear to most managers with experience of the economic turbulence of recent years. An experience that should make most companies willing to carry out analyses according to a comprehensive analysis built on a multivariate framework. Here, it has been argued that inside the agricultural

multinational enterprises most of the technical problems related to the measurement of the macroeconomic impact should be resolved to enhance performance.

Test of hypothesis 2. H_0: There is no significant relationship between macroeconomic variables and multinational agricultural enterprise profitability. H_1: There is significant relationship between macroeconomic variables and multinational agricultural enterprise profitability**.**

Table 6

Correlations

Indexes		X_1	X_2
X_1	Pearson Correlation	1	.408(**)
	Sig. (2-tailed)		.000
	N	90	90
X_2	Pearson Correlation	.408(**)	1
	Sig. (2-tailed)	.000	
	N	90	90

Notes. X_1 – All macroeconomic variables have significant relationship with multinational agricultural enterprise profitability, although their impacts and relation is not always uniform for domestic and international market;

X_2 – Interference from board members, political crises, undercapitalization, and fraudulent practices are considered the most critical factors that impact the profitability of multinational agricultural enterprise.

Source: field survey, 2018.

Coefficient of Determination (C.O.D)

C.O.D = $r^2 \cdot 100\%$,

where r = Pearson Correlation.

Thus: C.O.D = $(0.408)^2 \cdot 100\%$

C.O.D = 16.646 %

r = 0.408 which indicate 16.646 % shared variance between macroeconomic variables and multinational agricultural enterprise profitability.

Decision. {r = 0.408, p < 0.01, n = 90}. The study pointed out that there exist a significant relationship between macroeconomic variables and multinational agricultural enterprise profitability, thus the null hypothesis (H_0), is rejected and the alternative hypothesis (H_1) is accepted. The study results revealed that macroeconomic variables jointly influenced the multinational agricultural enterprise profitability. The objective of the study, which was to establish the relationship between macroeconomic variables and multinational agricultural enterprise profitability was therefore met. From the study results, it shows that the macroeconomic variables can indeed influence the multinational agricultural enterprise profitability. A review of the related literature revealed a general consensus from the theoretical and empirical studies that there is indeed a relationship between macroeconomic variables and multinational agricultural enterprise profitability. Empirical studies reviewed included Mintzberg (2009), Zhou and Guillen (2015), Ongeti (2014), Stanford and Naomi (2011), Larossi and Clarke (2011). The study found that favorable macroeconomic environment seems to stimulate higher profits.

Specifically, the macroeconomic environment (proxied by GDP growth, M3 and inflation) is observed to have a positive impact on multinational agricultural enterprises profitability. Higher growth rate of GDP seem to have a strong positive impact on the performance measure.

Conclusion. There is no doubt base on the result of findings of this paper that macro environment has an impact on organizational performance of multinational agricultural enterprises. The paper concluded that multinational agricultural enterprises must understand all type of macro factor and their implications on organizational performance of their business and update their knowledge understanding and skills to meet the predicted changes in realm of their enterprise. Constant monitoring and conducting environmental scanning of theses macro environment factor should be the concern of multinational agricultural enterprise always. The Nigerian macro environment is characterized by frequent changes and thereby negatively affecting multinational agricultural enterprises planning. Multinational agricultural companies can gain significant benefits from managing the macro environment and its associated risks and ignore the environment at their peril. Effective management of macro environment can enable multinational agricultural enterprises to tap new revenue streams through access to markets and joint ventures. The paper also concluded that without careful management of macroeconomic variable might seem too risky. Clear identification, measurement and management of risk can facilitate organizational buy-in for growth strategies that target emerging markets and "frontier" markets, while improving the performance of existing businesses.

Based on the above findings, it is recommended that all macroeconomic variables must be well understood and monitored by multinational agricultural enterprises to enhance greater profitability and sustainability. Constant monitoring and conducting environmental scanning of this macro environment factors should be the concern of multinational agricultural enterprises.

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