

Globalisation and Its Impact on Food Processing Industry's Export in the Nigerian Economy, 1990 – 2015

M.A. Loto*

Department of Economics, University of Lagos, Akoka, Nigeria

Abstract

The study investigated the impact of globalization on the food processing industry's export performance in the Nigerian economy between 1990 to 2015. Export demand equation model was used to analyse the impact. Time series data was collected from 1990 to 2015. The data were fitted to Least Square Method Regression Model (OLS) for analysis. The long-run stability of the variables used was tested by making use of the unit-root test using the Augmented Dickey Fuller test. To know whether the variables used moved along the same path, this was tested by making use of the co-integration test by Johansen. To detect the speed of adjustment to equilibrium in case there is any sudden shock or destabilization of the equilibrium of the system, the error correction test was performed. The outcome of the test performed, based on the coefficients of the variables are as follows. The impact of globalization on the food processing export performance shows mixed results. For example, the coefficient of the foreign income carries a wrong sign. The same thing is with the openness coefficient; while some important variables such as import value of capital goods, and relative price shows positive result. The main outcome of the study is the fact that the food processing is far from benefiting from globalization. The major hindrances are: the production technology is still crude, competitive prices in the international market is still difficult to achieve.

Keywords: *food export, globalisation, cointegration, Nigeria*

1 Introduction

Food industry is one of the very important sectors in every economy. Food is life, strength, energy productivity and moving things forward. Without food for human consumption, the economy will not exist. In any nation, food industry is always earmarked as a viable industry. The development of the food industry is very important. In as much as the citizen must eat to keep life going, the output of the food industry can also be used as input in other industries. This means that, the product of this industry (food) could be exported to other countries in order to earn foreign currencies. This shows that the development in this industry should be of paramount importance to any nation.

*Corresponding author Tel.: +2348165926969
E-mail address: mloto@unilag.edu.ng

In Nigeria, a very large percentage of food producers remain at a very small and medium enterprise. The method of production is still very crude with old appliances that are very slow in terms of technology for production. It is possible for this industry to expand and be productive in terms of productivity growth. The sector is endowed with abundance of almost everything, such as: labour, raw materials in the economy. The advantages that a nation can derive from the food industry are enormous. These include: it has export potentials, high local content, generation of foreign exchange, employment of labour, very strong and solid backward linkages with the agricultural sector; it improves the income of the unskilled labour that does not need any basic education to work. So many countries are devoting strength and energy to improve their food industries in order to take advantage of its potentials.

Food production is now taking wider dimension and the incomes of the companies are growing. It can increase their incomes both locally and internationally. They are able to do these by introducing new products, brand strengths, acquisition, and international expansion. Food industries continue to grow either in terms of bringing new products or by demand from other industries for food products as inputs. These gave room to many entries into the food industry, new segment continue to emerge, such as: quick snacks for busy people, readymade meal for heating in the microwave, low fat, low calorie food for dieters, special food for babies and the elderly, health foods for fitness oriented among others.

Fred Weston and Susan Chiu (2014) observed that food industry is now making drastic efforts in terms of cost control, more innovative products, reduced prices, and new methods of distribution which includes: teleshopping, and bypassing traditional retailing outlets by selling end-products in amusement parks, restaurants etc.

It was also established that food production processes are less capital intensive as compared to automobile or steel. The main element of the manufacturing process in the food process industry is sterilization and placing of food in containers for distribution. The idea that the food industry has relatively low capital intensity method of production could be established based on the new types of food preparation, distribution and packaging.

For instance, Bangkok Bank (2001) stressed the point that while even researcher tends to research on food industry, they pointed to its benefits which they enumerated as strong backward linkages with the agricultural sector, generation of high level of employment among the unskilled labour. Also, Lekuthar (2007) analysed and discussed the development of the food industry in Thailand.

He came up with the conclusion that the strength of the food industry in Thailand lies largely on the availability of abundant raw materials and labour. He went further to discover the weak point in Thailand food industry, which he stressed that the industry lack value chain management and has a loose network particularly on the supply chain, that causes fluctuation in prices and quality of raw materials.

All the potentials discussed above are equally available in Nigeria. The international market is open to every nation. We are now in the globalization era, that is, the borderless economy, whereby every nation can showcase their products freely and also to take advantage of what they have and know what to do best. Since the international market is open, Nigeria is also free to export her food products.

The performance of the food industry in this era of globalization is very essential to our growth and development. Globalization has been variously defined in the literature. Globalization, according to Todaro and Smith (2008) is referred to as the increase in openness of the economies to international trade. Akano (2005) sees globalization as a unification of geographically distinct markets around the world under what appears to be a uniform set of operating rules: which is known as the Laissez – faire philosophy.

It was also defined by Obadan (1999) as a borderless economy. A situation whereby the world's markets are so integrated. One of the advantages of globalization is that it recognizes effective and efficient way of doing things which will bring about reduction in the unit price of goods and services.

The focus of the paper then is on how Nigeria has been able to benefit from globalization, through the exportation of food products in terms of greater food production increase in export and increase in foreign exchange earnings.

The study focused on food industry for many reasons:

- i. There is shortage of food supply generally in the world market and most especially during the global meltdown.
- ii. Statistics shows that food industry does not suffer from the world economic meltdown, as a result, the supply prices of food items went up, and this made some countries to be better-off in terms of foreign exchange earnings.
- iii. The benefits that will accrue to the countries that are efficient in their food production.
- iv. It is an industry that can source locally up to 90% of its inputs that gives a comparative advantage over others.

2 Literature Review

Globalization's impact on food industry and economic growth in any nation have severally been analysed by authors in the literature. Marwa (1999) has described globalization as a mechanism that is having transforming power in a nation. He said it can transform any economy or any sector within the economy. The definition of globalization in the literature includes: the integration of countries in terms of the free trade agreements, international financial market and transnational corporations, which eventually will lead to a positive effect on the economy. According to Kabir (2012), it brings about closeness of nations through technological transfers of information at a very high speed. This benefit associated with globalization is not automatic. It depends on how integrated a country is. This is to say that globalization can by-pass a nation.

Obadan (1999) stressed some points that are challenges to globalization which has to do with the effectiveness of governance that is linked to globalization. According to Obadan, he itemized the challenges above as:

- 1) Trade liberalization
- 2) Liberalisation of the capital market.
- 3) Internalisation of corporate production and distribution must be increased.
- 4) Barriers to international tradability of goods and services must be removed.
- 5) There must be good outward oriented policy reforms.
- 6) Conducive environment for export and foreign investment (Obadan, 1999).

Industries in an economy benefit from globalization more than each other. Those industries that are able to source a high percentage of their inputs from within their locality will benefit more than those that depends on imported inputs. Food industry belongs to the category of those industries that can source locally their inputs. The food industry is having that advantage of benefiting all things been equal from globalization. Nigeria has both absolute and comparative advantage in some of the food crops that could be processed for export and earn foreign currency. Even in this era of global meltdown, there is shortage of food supply, which gave rise to increase in prices of food items. Exporters of food products will surely gain at this point in time (Kabir, 2012).

Williams and Johanes (2008) analysed the Danish food industry and concluded that the Danish industry over a long period of time has been consolidated substantially and that there is great potential in terms of value addition.

Baker (2003) in his own study stressed that the consolidation of food processing firms has been more pronounced in Denmark than other parts of Europe. According to him, consolidation of the food processing industry has impacted on the profitability of the Danish food processing firms and also has value addition. Cornnor (1988) pointed out that value addition to the food processing firms started substantially right from the 1980, when the food companies started to launch new products at a rate of over 11,000 per year and the rate has increased tremendously in the 1990s, and also to the present day. Gray and McDermolt (1989) supported the points raised by Cornnor (1988), and they believed that the reason for the tremendous increase could be due to the fact that the food processing firms has become international in scope.

Food industry is a very important sector of any economy. Without food, there will be no strength, no energy to be productive. Emphasis on food production in any economy is efficiency. An efficient way of producing using modern technology and also to be competitive globally is a factor for penetrating the international market. The raw materials for food are normally sourced locally. It is an advantage for competitiveness. In the Nigerian economy, how has the production of food carried out and how integrated is the food production in Nigeria with other parts of the world economy, for foreign exchange earning? What is the impact of globalization on food production export of the Nigerian economy? We are in the world of increased global competition. Globalization on its own means, borderless economy. That is, free flow of goods and services with countries. It also promotes efficiency and allow nation to be competitive. In the Nigerian economy, how does globalization react to the production of food? Is globalization able to bring about improved wave of effectiveness and efficiency in the food industry export in Nigerian? All the above will spur the study to know the true impact of globalization on the food industry's export performance in Nigeria.

Authors in the literature that focused on other economies believed that the food industry needs to be promoted. The belief is that, the food industry has a strong backward linkage with agricultural sector. Bangkok (2001) pointed out that the food industry generates a high level of employment. Thaiprasert (2006) also talked about the economic structural transformation and agricultural development brought about by the food sector.

Industries that are fortunate enough to source their inputs successfully locally can easily benefit from globalization. The food industry is in this category. Food industry in Nigeria stands high in the categories of industries that can benefit from globalization. Through the food industry, Nigeria can participate effectively in international market. Nzeku (1999) stressed that for sectors to expand, there is always

a transition period. Some sectors expand faster than others, especially, when a sector is having comparative advantage and with better competitive edge.

The food industry in the Nigerian economy has the potential of benefiting from globalization. This inputs needed in the food industry could be sourced locally. The benefits of globalization for the Nigerian economy could be achieved through the food sector.

Increased globalization is proclaimed as integrating trade, investment and financial markets, but it is also integrating consumer markets. Economic integration has accelerated the opening of markets with a constant flow of new products (Radha, 2016).

The Danish food industry was analysed by Williams and Johanes (2008). It was pointed out that there has been substantial consolidation in Danish food sector over the period 1995 – 2000 (Baker, 2003). Baker (2003) stressed that consolidation of food processing firms has been more pronounced in Denmark than in other parts of Europe. According to him, the consolidation of the food processing industry has impacted the profitability of the Danish food processing firms. He believed that there is increasing rate at which the food processing firms add value to food products. The industry is very competitive, and is being enhanced by innovation.

The main objective of the study is to evaluate the impact of globalization on the food industry's export performance in the Nigerian economy.

3 Theoretical Framework and Methodology

Economic growth and development of a nation has been associated with opening up of an economy with the rest of the world. The mercantilist was the first to identify the promotion of trade as the backbone of the wealth of nations as a doctrine. It was later that the Adam Smith and David Ricardo's theses emerged. The next to the Adam Smith and David Ricardo was the neoclassical model of growth which was promulgated by the radical theorists. All of them focused on the fact that nations cannot isolate itself, that there must be interactions, integrations and exchange of goods and services among nations. In today's world, globalization is a key word. The world economy is rapidly integrating with each other. There is what we called borderless economy. The whole world can now shop in the same market. It also calls for efficiency in the production and distribution of goods and services for a nation to be properly integrated and benefit from other countries. The mercantilist believed in the promotion of trade as the foundation of the wealth of nations.

Trade theorists have explained a great deal of the phenomenon that has overwhelmed the world. They have advanced the thesis that says trade was very essential for the growth of nations.

Heckscher-Ohlin thesis was basically on the determinant and pattern of production, specialization and trade among regions which was actually based on the relatively availability of factor endowments and factor prices. It has been established that regions or countries have different factor endowment and factor prices.

The theory of absolute advantage developed by Adam Smith, suggests that a country should export those goods and services for which it is more productive than other countries, and import those goods and services for which other countries are more productive. The theory of comparative advantage developed by David Ricardo states that a country should produce and export those goods and services for which it is relatively more productive than others and imports those otherwise.

Every trade theorist believed in international trade as an engine of growth. It was emphasized that trade was essential for the growth of nations. The export-led-growth hypothesis is supported in the literature and is also what Nigeria believed in. It is assumed that when export is being stimulated there will be strong effect of these on the supply and the demand sides in an economy. Economic theory is in support of the positive impact of globalization on the growth of exports.

This present study is aimed at looking at the food industry, how it might have benefited from globalization, and thereby contribute to the development of the economy. To do this, the following analytical and model framework were used.

3.1 Analytical Framework and Model Specification

The export-led-growth hypothesis is applicable here. Several studies in the literature believed in the export-led-growth hypothesis.

Thirlwall (2000), Ekpo and Egwallchil (1994), Olomola (1998), Ahmed and Kwan (1991), Okoh (2002). All the above authors believed that Nigerian economy export is very essential to the growth of the economy. They also suggested that the export-led-growth hypothesis is valid for the Nigerian economy.

The present study also believed in the export-growth relations. The analytical model is based on the export demand equation through which the present study will be analysed. The effect of globalization on food industry could be analysed through the export demand equation stated as:

$$TX_t = (RP)k^\alpha \dots\dots\dots (1)$$

Where:

- TX_t = value of exports in the food industry in time t.
- RP = P_{dt}/p_{ft}
- P_{ft} = the foreign price in time t
- P_{dt} = the domestic price in time t.
- K_t = foreign income in term t.
- α = income elasticity of demand for export.

Taking the log transformation of the variables will result into equation two as:

$$\ln TX_t = \ln y + \sigma \ln(RP) + \sigma \ln W_t + U_t$$

The capacity of the food industry to produce for export is proxy by the GDP emanating from the industry. For the export of the industry to grow, there is need for imported technology that will facilitate the degree to which export will increase. This means that the imported technology is a strong determinant of export increase. By so doing, imported technology should be added as one of the explanatory variables in the model. Other variable that could serve as a determinant of export of food industry could also be included in the model. Incorporating these variables into equation (2) will yield equation (3) as follows:

$$\ln TX_t = y_0 + y_1(\ln TX)_{t-1} + y_2(\ln RP_t) + y_3 \ln K_t + y_4 \ln(TX/GDP) + y_5 \ln GDP + y_6 \ln MC + U_t \quad (3)$$

Where:

- (TX/GDP) = the index of openness. This indicates globalization.
- y₂ = price elasticity of demand for export, that is, the relationship between the domestic price and the foreign price at time t. the outcome is expected to be < 0
- y₃ = income elasticity of demand for export.
- y₄ = export response to globalization > 0
- y₅ = Gross Domestic Product (GDP) emanating from the food industry > 0
- y₆ = import value of capital goods > 0
- U_t = dummy variable.

The whole aim of the study is to analyse critically the response of food processing industry's export in Nigeria to globalization. That is, does food industry export in Nigeria increase or decrease during this globalization era?

The hypothesis to be tested will be:

H0: The export of the food industry does not respond positively to globalization in Nigeria.

H1: There is a positive relationship between food industry's export and globalization in Nigeria.

Data Sources

Basically, secondary data were used. The data were sourced from the following sources:

- i. Central Bank of Nigeria (CBN) Statistical Bulletin (various years).
- ii. Central Bank of Nigeria (CB N) annual report and statement of account (Various issues).
- iii. Federal office of statistics (FOS) statistical bulletin.
- iv. Food industry's documents (various issues).
- v. Central Bank of Nigeria, Industrial Survey (Various issues).
- vi. World Bank Development Indicator

Types of Data Needed

Tx_t = value of export in food industry in time

$$RP_t = \frac{Pd_t}{Pf_t}$$

Pf_t = the foreign price in time t.

Pd_t = the domestic price in time t.

K_t = foreign income in time t.

$\frac{TX}{GDP}$ = the index of openness (globalization)

GDP = Gross domestic emanating from the food industry.

MC = import value of capital goods

The OLS method was used.

The long-run stability of the variables was tested by making use of the unit root test. If there are variables that are not stationary at levels, there will be need to test for co-integration. If there is at least one co-integrating vector, then we can set up the error correction model to test for the speed of adjustment to equilibrium when there is a shock or disturbance.

4 Data Analysis and Findings

The OLS regression is the methodology used in this study. One of the problems associated with OLS is that the variables used might not be stationary. To take care of this problem, the study made use of the Augmented Dickey Fuller (ADF) 1989 unit root test. The regression equation for the test is of the form:

$$\alpha_0 + \alpha_1 + \alpha_{t-1} + \alpha_2 \Delta_{t-1} + \alpha_3 \quad (4)$$

The test for the unit root according to the equation 4 above is the test on the coefficient of α_{t-1} in the regression equation. The critical value for the determination of the order of integration is given by the Mackinnon critical values. The null hypothesis of the existence of a unit root is given as:

$$H_0: \alpha_{t-1}(1)$$

The test for the unit root is done by comparing the values of the Mackinnon critical values and the ADF statistics and on the basis upon which a decision either to reject or accept will be based. If the Mackinnon critical value is less than the ADF test statistics, then, we reject the null hypothesis that α_{t-1} contains a unit root. In this case, we accept the alternative hypothesis which means α_{t-1} is stationary. If the variables or some of them are not stationary at levels, they will undergo first or second differences, until stationarity is achieved. When we have variable(s) that is (are) not stationary at levels, there is need for co-integration test. If we discovered that there is at least one co-integrating vector, then there is need to set up the error correction model. The results of the unit root, co integration and error correction could be found in table 1, 2 and 3 below.

Table 1 Results of Test of Stationarity Unit Root Tests for the Variables Used

Variables	ADF Value	Mackinnon Critical Value at 1%	1 st Difference	Order of Integration	Proxy
EXPO	1.096969	3.724070			
DEXPO		3.73	-5.2028	1(1)	0.0003
FGDP	1.0993	3.73			
D(FGDP)		3.73	10.042	1(1)	0.0000
FYED	-0.4148	3.72			
D(FYED)			-4.374	1(1)	0.0023
IMVC	-0.1386	3.73			
D(IMVC)			-2.9067	1(1)	0.0054
Openness	1.3483	2.6857			
D(Openness)		2.68	-13.956	1(1)	0.0000
PED	0.772	2.66			
D(PED)		2.66	-7.8917	1(1)	0.0000

To test for the co-integrating or no co-integration vectors, the study made use of the Johansen Co-integrating test. This could be found in table 2 below.

Sample (adjusted) 1992 – 2015

Included observations 24 after adjustment.

Trend assumptions: Linear deterministic trend series. EXPO 1 FGDP FYED IMVC, OPENNESS PED

Lags interval (in first differences) 1 to 1

Table 2 Unrestricted Co-integration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigen Value	Trace statistics	0.05 Critical Value	Probability**
None *	0.93733	161.991	95.753	0.0000
At most 1*	0.87989	95.512	69.818	0.0001
At most 2	0.594197	44.646	47.856	0.0971
At most 3	0.43896	23.001	29.797	0.2460
At most 4	0.31637	9.129	15.494	0.3535
At most 5	0.31E – 05	0.001	3.841	0.9671

Trace test indicates 2 integrating equations at the 0.05 level.

* denotes rejection of the hypothesis at the 0.05 level.

** Mackinnon – Haug – Micheles (1999) P – values

Looking at the likelihood ratio as compared to the critical values at 5%, the hypothesis of no co-integration or the existence of at most one co-integrating vector was rejected on the ground that in the equation, there are two co-integrating vectors.

This is shown on table 2 above. In table two, it is revealed that there are two co-integrating equations (vectors) in the set of normalized co-integrating vectors.

The results that emanated from the test prompted the setting up of a parsimonious error correction model (ECM). This is shown in table three (3) below.

Table 3 Parsimonious Encompassing Model

Variables	Coefficient	Standard Error	T-statistics	Probability
C	0.436452	0.150015	2.909392	0.0131
D(PED)	-0.031782	0.011452	-2.775193	0.0168
D(PED(-1))	-0.027535	0.009271	-2.969961	0.0117
D(openness(-2))	-0.014468	0.007036	2.056272	0.0622
Dlog(IMVC)	0.190315	0.192254	0.989912	0.3418
D(FYED)	-0.0107631	0.028622	-3.760413	0.0027
Dlog(FGDP(-1))	7.166804	1.563218	4.584647	0.0006
Dlog(FGDP(-2))	2.684123	0.825638	3.250968	0.0069
Dlog(Expo1(-1))	-0.787868	0.225771	-3.489672	0.0045
Dlog(Expo1(-2))	-0.345060	0.202716	-1.702188	0.1145
ECM(-1)	-.50000	9.180006	-1.408909	0.1842

R2 – 0.724321

Adjusted R-2 – 0.594589

F-stat – 31.93

Prob. F-Stat 0.031747

D-W – 2.05

5 Discussion, Limitations and Recommendations

The study investigated the food processing industry's export and its relationship with globalization. The study made use of time series data from 1990 to 2015 to look at the impact of globalization on the food processing industry's export. That is, the benefits that the food processing industry stands to gain from globalization. To carry out the analysis, the export demand equation model was used. This model was estimated with the following results.

The coefficient of the multiple determination stood at 0.72 (72%). The interpretation of this is that the explanatory variables accounted for 72% of the total change in the dependent variable (ΔX_t). This is regarded as a good fit econometrically.

The significance of the R^2 was confirmed by performing F-statistics test with a statistical significance at even 1%, stood at 31.093. This result shows that the variation in the long-run export volume in the food processing industry could be attributable to changes in the independent variables. The test for the presence of autocorrelation was also performed by making use of the Durbin Watson statistics. The result of the Durbin Watson statistics shows that it is within the normal bound at 2.05.

The result of the error correction model where food processing industry export is the dependent variable is shown in table 3. This was estimated by OLS regression that was based on the co-integrating vector.

The ECM coefficient carries the expected correct negative sign and it is statistically significant at 0.05% or even at 10% level of significance with the speed of convergence to equilibrium of 50% of the past years deviation from equilibrium. The adjustment is very essential for the maintenance of long-run equilibrium.

The degree of openness does not follow the a priori expectation, that, it is negatively signed, but statistically insignificant. This outcome might be interpreted as the value of food processing export in the total export for the economy is very insignificant and low. The share is less than 1%. This means that this subsector of the manufacturing sector can be improved upon to take advantage of globalization.

The short-run coefficient of the world income (foreign income) was high, but wrongly signed and significant.

It is statistically significant even at 10% level of significance. The implication of this result shows that when foreign income is increasing, in the short-run, globalization is very likely to lead to decrease in the demand for the Nigerian processed food export. This could be due to either change in taste or the emergence of a strong competitor competing with Nigerian processed food or may be foreign countries have more believe in other countries food export than the one coming from Nigeria. It might also be due to better packaging and price superiority.

Import value of capital goods in the short-run contributes positively to export growth. The outcome is positive in terms of its contribution to food processing export growth and is quite significant. This outcome shows that globalization may actually contribute to the expansion or improvement in the Nigerian food processing export through importation of high technology capital inputs. This could also be explained from the fact that improvement in technology will reduce cost of production and then give room to international competitiveness. Modern imported technology gives room to efficiency which is a determining factor of competitiveness.

The relative price is negative and is significant at 2.775 t-statistics in its contribution to food processing industry's export performance in Nigeria. This shows that decrease in relative prices will bring about increase in food processing industry's export. Increase in export could be achieved through efficiency in production and economies of scale which will eventually bring about high productivity and a

reduction in unit price. This will lead to competitive price in the market which demand can positively respond to.

However, even though the study was able to achieve its purpose, there is still room for improvement for further studies. The technology used by the food company's can hinder the efficiency and expansion in this industry. Also, globalisation recognizes large firms that are already in the international market. Most food companies in Nigeria are small and fairly medium scale firms. Most small firms produced for home consumption and very little is exported which will hinder the positive effect of globalisation that the firms would have been able to enjoy and subsequently affect the economy negatively.

The outcome of the study is very crucial, and the findings are very useful for policy formulation. The food processing industry could stand as a source of foreign exchange earnings for the Nigerian economy. The industry need to be properly equipped in terms of technology for efficiency and for better participation in the international market.

This industry is having the potential of earning foreign currency for the economy. A good percentage of the inputs could be sourced locally. There is comparative advantage for this industry over other industries at home and internationally.

To take advantage of globalization, this industry needs to be encouraged by government herself in the area of reward for local sourcing of raw materials, reduction in local taxes, or tax holidays, and also grants for research and development to encourage modern.

6 Conclusion

For the food processing industry in Nigeria, the degree of openness coefficient is negative but insignificant. This shows that globalization impact negatively on the food processing industry but the impact is not too strong. The error correction model indicates that world income and importation of modern technology coefficient is likely to cause expansion in food processing industry's export performance. This is because, when there is increase in the world income and the importance of high technology capital inputs for the processing of food, this might brought about a reasonable positive change in the demand for the Nigerian food processing export in the near future.

References

- Ahmed J. & Kwan A.C.C. (1991) “Causality between exports and economic growth: Empirical evidence from Africa. *Economic Letters* B37: 243 – 248.
- Akano, S.O. (2005) “Issues in Money, Finance, and Management in Nigeria”. Essay in honour of Professor Olakanpo O. *Published by University of Lagos Press*. Edited by Fakiyesi O.O. and Akano S.O.
- Baker, H. (2003) “Determinant of Food Industry Performance”. Published by American Agricultural Economic Association.
- Bangkok Bank (2001) “Food Industry: Major Force in Thai Economic Recovery” (in Thai).
- Connor, J.M. (1988) “Food processing”, Lexington, mass, Lexington books, DC, Heath and company, 1988.
- Ekpo & Egwakhide (1994) “Export and Economic growth: A reconsideration of the evidence”. *Journal of Economic Management* 2(1):57 – 73.
- Fred Weston & Susan Chiu (2014) “Growth Strategies in the Food Industry” *Business economics* vol. 31, No.1, pp. 21 – 27. Published by *Palgrave Macmillan Journals*.
- Gray, S.T. & McDermott, M.C. (1989) “Mega-merger Mayhem”, London: Paul Chapman Publishing Ltd.
- Kabir, H.D. (2012) “Globalization and the challenge for Nigeria’s development” Published by *Economics Journal* pp. 12 – 19.
- Marwa, M.B. (1999) “The transforming power of globalization”. Published by NES 1999.
- Nzeku, G. (1999) “Contemporary Experiences in Globalization”. Published by Nigerian Economic Society.
- Obadan, M.I. (1999) “Features and Implications of globalization proceedings of the seminar held at the NIIA, Lagos.
- Okoh, R.N. (2002) “Expanding Nigerian Export trade through globalization: Is it Feasible?” *Nigerian Journal of Economic and Social Studies* vol.44(3) 2002.
- Olomola, P.A. (1998) “Openness and long-run economic growth in Nigerian (1960 – 98). *Journal of economic management* 5(1): 39 – 62.
- Radha, G. (2016) “Sustainable food production and consumption: Agenda for Action”. Published by *Economic and Political weekly* vol. 36. No. 14 pp. 1207 – 1225.
- Sunetra Lekuthac (2007) “The importance of food industry to the Thai Economy: An Input-Output Perspective”. Published by *Institute of Southeast Asian Studies* 2007, pp. 238 – 253.
- Thaiprasert, N. (2006) “Rethinking the Role of Agriculture and Agro-industry in the Economic Development of Thailand, Input-output and CEE Analysis”. Unpublished doctoral dissertation, Japan.
- Thirlwall, A.P. (2000) “Trade agreement, trade liberalization and economic growth: A selective study”, *African Development Review* 12(2): 12- - 160.
- Todaro, M.P. & Smith S.C. (2008) “Economic Development”. Published by Pearson Education, India.
- Williams, H.F. & Johanes S. (2008) “Determinant of food industry performance - Empirical Evidence based on a survey” published by American Agricultural Economic Association.