TRADE POLICY AND TRADE FACILITATION FOR AFRICAN RENEWED ECONOMIC GROWTH: THE CASE OF ECOWAS

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Abstract

The focus of this study is the analysis of importance of trade facilitation measures in improving trade performance within the ECOWAS region with emphasis on Ghana and Nigerian trade relations. In achieving the basic objective, the study uses both descriptive and econometric methods of analysis. Descriptive analysis is used to capture documentation of trade facilitation measures, while determinants of trade volume are captured within the framework of the gravity model using Ordinary Least Square method. The study finds that real Gross Domestic Product (GDP) of Nigeria does not have significant impact on Nigeria's import value index from Ghana. Also, membership of ECOWAS has an insignificant negative relationship with Nigeria's import value index from Ghana but has a significant positive relationship with Nigeria's exports to Ghana. Moreover, government spending on infrastructure, the difference in the real per capita gross GDP between Ghana and Nigeria, the population of Ghana and the real GDP of the two countries are major significant determinants of trade potential in these countries. In view of these findings, there is the need for trade facilitation to enhance the inter- and intra-trade among ECOWAS countries.

1. Introduction

After independence, African countries found the need for both political and economic integration. This need stems from the belief that for their economies to develop, certain obstacles to trade had to be removed. Regional bodies were created to take advantage of economies of scale in production and consumption, which was a result of efficient regional integrations. This was done with a view to facilitating trade within these countries and unlocking the potentials of these countries to trade with one another. Economic Community of West African States (ECOWAS) was formed on the 28th May 1975 by 15 countries known as Member States (Osabuohien, 2007).

ECOWAS comprises of fifteen countries with mission is to promote economic integration in all fields of economic activity, particularly industry, transport, energy, telecommunications, agriculture, natural resources, and commerce. The basic aims are:

1. Elimination of custom duties and other charges of equivalent effect in respect of the importation and exportation of goods between member states;

2. Abolition of quantitative and administrative restrictions on trade among the member states;

3. Establishment of a common customs tariff and a common commercial policy towards third countries; and

4. Abolition (as between the member states) of the obstacles inhibiting free movement of persons, goods, services and capital.

These are laudable objectives, but the achievements have fallen far short from expectation especially in the area of trade liberalization. The Community has been trying to provide basic infrastructure such as good roads, reliable communication network, efficient transportation system and strong financial institutions. Measures to actively facilitate trade are increasingly seen as essential to assist member countries in expanding trade and benefiting from globalization to achieve sustainable economic growth. (Ogunkola, 1998). ECOWAS has witnessed a positive economic growth as the combined Gross Domestic Product (GDP) estimated at US$73.6 billion in 2001 increased to US$147.1 in 2007 (Osabuohien, 2007). The combined economic growth rate of the region was 3.6% in 2006. It is worthy to note that the region's economy is at varying stages of development. ECOWAS countries represent a mix of small and large countries. In 2007, Nigeria with population of 145million has largest economy with a GDP of $79.2 billion which is larger than the combined GDP of the other ECOWAS countries. Guinea with the GDP of US$283 million has the smallest economy. Countries like Cote d'Ivoire with population of less than 15 million also had GDP per capita of US$1072 in 2007. Guinea Bissau with GDP per capita of US$211 in 2007 is the poorest in the region, while the richest is Cape Verde with GDP per capita of US$2689 (United Nations Statistics Division, 2008).

As liberalization continues to reduce artificial trade barriers, transaction costs are becoming higher than the cost of tariffs. In many instances, the cost of compliance with custom formalities reportedly exceeds the cost of the custom tariffs. SME's, which are the dominant actors in developing countries, are the most affected by these high transaction costs. According to the World Bank "it is increasingly being realized that tariffs, quotas and other trade policies are only a few elements of the overall cost of trade and that efforts to improve customs procedures minimize the trade distorting impact of standards and reduce transport costs may have higher pay-off than reciprocal reductions in most trade policy barriers, because logistical, institutional and regulatory barriers are often more costly and generate no offsetting revenue".(World Bank 2005).

On the average, 8 documents are required to process export and import goods in the ECOWAS region. Nigeria, Senegal, Liberia and Burkina Faso are the worst in terms of documentation of trade, as it requires between 10 and 11 documents to carry out these transactions. The best in this regards is Cape Verde with only 5 documents. Also between 30 and 36 days are needed to process containers in various ports of the region. In Nigeria, it will take 46 days to process a container carrying imported goods, and 26 days for export goods. The situation is bad with Niger, as 68 days are required to clear a container carrying imported goods and 59 days for the exported goods. In terms of cost per container, it costs, on the average, US$1226.87 to clear a container of exported goods and US$1498.47 to clear a container of imported goods. Niger with cost of US$2945 has the highest cost of clearing container, compared to Cote d'Ivoire with least cost of US$660. (Olayiwola and Osabuohien, 2009).

Besides the structural problems, lack of defense mechanism against dumping practices and customs services which are insufficiently equipped to detect dumped goods as efforts are directed to the fight against smuggling. In the case of rules of origin, similar problems arise. Many ECOWAS countries belong to WAEMU and ECOWAS, and also have privileged ties to the EU through the Lome Convention. The community origin of products entering the country is not always easy to determine. This requires appropriate training for members of the custom services. The same is true of the compliance with procedures relating to the origin of non-agricultural goods from the country entering the EU market.

In November 28, 2007, Nigerian traders in Ghana found themselves at crossroads over a business policy targeted only at Nigerian businesses in Ghana. On that date, the Ghana Investment Promotion Council (GIPC] came up with a policy that every Nigerian business outfit in Ghana must pay a record $300,000.00 before being allowed to do business. To the traders, the policy looked ridiculous and sounded like a joke but the government meant it. The Republic of Ghana, a staunch member of the Economic Community of West African States (ECOWAS) to suddenly come up with such a policy without minding the treaty and protocols of ECOWAS was a surprise. More surprising is the fact that this was targeted only at Nigerians, considering that millions of other nationals, including Asians, Arabs, Europeans and other African countries were doing business in Ghana. These other nationals are not subjected to the harsh treatment being meted to their Nigerian counterparts. The matter was taken up with the ECOWAS Parliament after its attempt to seek legal redress in Ghanaian courts was turned down by the judiciary.

The broad objective of this study is to analyze the importance of trade facilitation measures in improving trade performance within the ECOWAS region with emphasis on Ghana and Nigerian trade relations. The basic hypothesis of the study is that improved trade facilitation measures can have significant effects on international trade between Ghana and Nigeria. The trade data of these countries is sourced from ECOWAS Handbook of International Trade and Statistics for the period of 1970 to 2007. Nigeria trade with Ghana is chosen as case study because both countries are prominent members of the ECOWAS. Nigeria is the most populous country and the biggest economy of ECOWAS while Ghana is its closest and major trading partner. The rest of the paper is arranged as follows. Section 2 discusses various literature of trade policy and trade facilitation cum economic growth. Section 3 addresses the methodology, while section 4 presents empirical results and discussion. Section 5 is for conclusion and recommendations.

Section 2: Literature Review

Many African economies believed that economic and trade integration served as an effective means of asserting their economic independence. Reasons such as economies of scale, poor resource endowment and under- development, just to mention a few, have been adduced as economic arguments for the establishment of regional bodies Two very prominent members of ECOWAS are Ghana and Nigeria. It is believed that regional integration would obviate difficulties, which are characteristic of isolated and poor economies and pave the way for sustainable growth and development. West African countries thus found need to develop the necessary capabilities, particularly human and infrastructure capacities, to exploit the potential of intra-regional trade (Ogunkola, 2005).

Trade facilitation is not an end in itself. For instance, the International Chamber of Commerce in 2003, defined trade facilitation as "the adoption of a comprehensive and integrated approach to simplifying and reducing the cost of international trade transactions, and ensuring that the relevant activities take place in an efficient, transparent and predictable manner based on internationally accepted norms and standards and best practices. Accordingly, the problem of trade facilitation in ECOWAS has to be perceived in a broader context of the weak capacities existing in all aspects of African economies, ranging from weak transportation networks, dilapidated communications systems, poor port facilities, lack of automation systems, lack of transparent regulatory frameworks, cumbersome customs procedures and low-level of human capacity. UNCTAD estimates that the cost of trade related obstacles are equivalent to around 10% of the value of trade. It is assumed that up to 5%, that is about half of today's estimated cost of trade obstacles could be reduced through efficient trade facilitation measures (UNECA 2003).

Trade facilitation has become an essential element in achieving global competitiveness. To date no consensus has been reached on a standard definition. In a narrow sense, trade facilitation efforts address the logistics of moving goods through ports and the documentation associated with cross-border trade. Globalization has placed enormous demands on firms to become internationally competitive. To participate meaningfully in international and regional trade, governments and firms must reduce the complexity and costs of transactions, including eliminating unnecessary administration and using modern technology to encourage cost-effective processing.

Initiation of trade facilitation and customs reforms has fairly extensive coverage over countries, especially medium-size and larger developing countries. The sustainability and effectiveness of these reforms seems to vary significantly across countries. A number of factors appear to account for this, in particular variations in the precision in which objectives were specified, variations in the degree of commitment to reform, variations in the resourcing of programmes, variations in the effectiveness of staffing reforms (release of existing staff, hiring of new staff, salary restructuring, training of staff), and variations in the effectiveness of measures to eradicate corruption (Adenikinju, 1999).

Intra-ECOWAS export and import shows dismal performance between 1996 and 2001. On the average intra-ECOWAS trade is only about 11% of trade with non-ECOWAS countries (WTO, 2005). For instance, in 2000, only about 6% of Nigeria's exports (mainly oil) were traded with ECOWAS members (mainly to Ghana and Cote d'Ivoire). On the import side, less than 2% of Nigeria's imports originated from ECOWAS states (mainly Benin, Ghana and Cote d'Ivoire). However, ECOWAS possesses large enough a market for member-countries to dominate, and from there launch out as a strong competitive force to other regions of the world.

Commitment to regional integration enhances both intra-regional and extra-regional flow of trade, while trade facilitation is equally as important to advancing strong regional integration arrangement. While there has been very little study on the empirical evaluation of trade potential in ECOWAS, this study highlights some of the findings from the empirical literature on related studies. From the existing literature on ECOWAS, there has been studies that base performance evaluation of the Community on its effect on intra-regional trade flows, carried out by a number of scholars including Inotai (1991), Ariyo and Raheem (1991), and Alokan (1992). The bases of these studies are statistics of trade flows, which are mainly indicators of effectiveness of integration efforts. They usually compare changes in relative shares of trade within and outside the Community.

Statistics show that intra-ECOWAS exports accounted for about 9.6% of total value of exports of the Community, which was about $1,503 million in 1989. It can be deduced that the share of intra-ECOWAS trade as percentage of the total exports of the Community has been growing– from about 1.2% in 1960 to about 3.9% in 1980 and to about 9.6 % in 1989. Although intra-regional trade flows are statistically shown to be very low, this type of analysis does not necessarily or adequately measure the effect of integration efforts (Robson, 1987).

Agu (1992), in trying to explain low intra-regional trade in ECOWAS, is of the opinion that countries in West Africa produce a set of homogeneous goods and hence they do not have goods to exchange. In other words, he postulates that there is no difference in the member states' factor endowment; and, thus believes that members of the Community are not natural trade partners. However, two countries could have identical factor endowments and still trade with each other at Intra-industrial level if there is possibility of product differentiation. Some analysts have the opinion that the low level of intra-ECOWAS trade flows derives from the fact that the West African sub region does not produce the right type of manufactured goods to meet its requirements.

For Nigeria, Ghana and most African states, the 1970s and early 1980s represented a period of socio-economic crisis. The causes have been attributed to domestic policy mismanagement and

natural calamities, aided by a severe deterioration in international trade relations. Many African economies have undergone structural adjustment reforms aimed at correcting their anomalies. The policy reforms have had two premises: free markets and sound money. The route to free markets took the form of trade liberalization and the elimination of government controls on relative prices within the economy (Briggs and Srivastava, 1992). The assumptions underlying the reforms were based on the neoclassical notion of high relative supply elasticities that would elicit speedy and sizeable responses in investment and output under improved price incentives and free markets. Unfortunately, it has been observed that the growth impact of the policies has been much lower than expected. The supply response has been uniformly inelastic in almost all African nations that implemented adjustment programmes.

Studies have also been carried out on finding explanations for why ECOWAS countries tend to unite in words and thereafter divide in their actions. Explanations are provided as to why the agreed programmes of action on regional integration were either delayed or often even canceled. Some of the explanations in this area are: lack of the political will to embark on tariff reduction or removal of such tariffs and the removal of other trade barriers by member states (Ariyo and Raheem, 1991; Ariyo, 1992; Ogun and Adenikinju, 1991). Indeed, taxes from foreign trade transactions form a significant proportion of total current revenue of various member states.

In a particular study carried out by Foroutan and Pritchett (1993), despite focus on SSA and non-African countries, its approach was a direct one that used dummy variables in the gravity model to explain trade difficulties and attractions. Four dummy variables were used for African countries, while the preferential trade arrangements that were recognized were ASEAN, LAFTA, CACM and the Lome convention. It was reported that among the CEAO, ECOWAS, UDEAC and other preferential trade arrangements in the SSA countries, only CEAO appeared to have positively and significantly affected intra-regional trade among its members. The results of the study suggest that though trade potentials are limited in SSA, it is not impossible for effective regional integration efforts to stimulate higher intra-SSA countries trade. This follows from estimates of the dummy variable for intra- SSA trade, which are positive but statistically insignificant. Various methods have been developed for empirically investigating the effect of regional integration efforts on trade flows of member states. These methods could be used to assess possible gains from potential regional integration efforts even before such integration comes into effect.

First, the survey approach investigates the impact of regional integration efforts on trade flows by assessing the views of major actors and experts on international trade in the region, the expected benefits of the regional integration, and how they expect regional integration to affect costs of production and prices of inputs and outputs. Second, the analytical approach focuses on the effects of economic integration explicitly, including tariff changes as one of the endogenous variables. Hence, the effect of changes in tariff is measured differently. Generally, the effect of tariff changes on domestic prices of imported goods is estimated. The estimated elasticities are then used to measure the ex post and ex ante effects on the particular member country or the group as a whole. The problems of measuring international trade elasticities are enormous, and various methods have been devised such as the use of a priori elasticities (Prewo, 1974). Another approach is the residual method. The bulk of the literature on the effects of economic integration applied this method, which compares the reconstructed pre integration (post-integration) trade

with post-integration (pre-integration) matrixes to measure the effect of integration. Prominent among the residual approaches to reconstruction of trade flows is the construction of a normal trade matrix by gravitational model (Aitken, 1973), Linnemann (1966), Prewo (1974) and recently Erzan et al., (1992), Wang and Winters (1991), and Havrylyshyn and Pritchett (1991).

There are three commonly used tools to evaluate the impacts of integration and in particular the effects of border barriers. These are econometric models, computable general equilibrium models, and gravity model or gravity equation. Econometric models should be suitable for both forecasting and policy simulations. It is able to run simulations of policy and other scenarios under a variety of assumptions about how households, firms and financial markets form expectations, including the extent of available information. Estimation of equations in the model should be based on modern time series techniques. Equations should have satisfactory statistical properties, including goodness of historical fit. Computable General Equilibrium models are also known as the CGE models. The main reason to use a CGE model is to provide a quantitative evaluation of the effects of government policies. A CGE model is basically a large set of demand and supply functions that cover every market, both for commodities and factors of production in the economy. The distinguishing features of general equilibrium modeling derive from the Walrasian general economic equilibrium theory that considers the economy as a set of agents, interacting in several markets for an equal number of commodities under a given set of initial endowments and income distribution.

The gravity model usually proceeds on the premise that potential foreign goods supply and potential foreign goods demand, as well as trade resistance/promoting factors, are the major determinants of bilateral trade flow patterns. The supply potential in the origin, the demand potential in the destination, and both natural and artificial barriers are usually quantified as explanatory variables for trade flows between two countries. This approach is of particular interest in this study for several reasons. First, it is handy for handling the specific nature of regional integration in the West African region where some countries belong to more than one regional group. Second, the element of proximity that provides a natural impetus to trading among the countries can also be handled within this framework. Third, as there has been no reduction in tariffs by member countries, this method, which does not include tariff changes in its analysis, is the most appropriate. This approach, which has been applied in the measurement of the effects of economic integration on trade flows, is generally an econometric approach where regression equations based on cross-sectional data are investigated for periods prior to and after the integration.

Section 3.The Methodology Framework

The focus of the study is in the documentation of trade facilitation measures as well as the analysis of the determinants of trade volume between Nigeria and Ghana. The study makes use of both descriptive and econometric methods of analysis. Descriptive analysis is used to capture documentation of trade facilitation measures, while determinants of trade volume are captured within the framework of the gravity model. The gravity model establishes a baseline for trade-flow volumes as determined by Gross Domestic Product (GDP), population, and distance. Being introduced by Tinbergen (1962), the gravity model was considered to be a useful physical analogy with fortunate empirical validity. The effect of policies on trade flows can then be

assessed by adding the policy variables to the equation and estimating deviations from the baseline flows. In many instances, gravity models have significant explanatory power, leading Deardorff (1998) to refer to them as a "fact of life."

According to Tinbegen (1962), gravity models begin with Newton's Law for the gravitational force (GF_{ij}) between two objects *i* and *j*. He explains the gravitational force as directly proportional to the masses of the objects (E_i and E_j) and indirectly proportional to the distance between them (D_{ij}). Gravity models are estimated in terms of natural logarithms, denoted "ln". Newton's Law of Gravity translated into:

$$\ln GF_{ij} = \ln E_i + \ln E_j - \ln D_{ij} \quad i \neq j \tag{1}$$

Following the leadership of Reinert (2006), gravity models of trade however interpret the above equation in four alternative distinct ways when measuring trade flows between two countries i and j. They are highlighted as;

- Mass being associated with the gross domestic products (GDP) of the two countries. The equation thus becomes

$$\ln E_{ij} = \alpha + \beta_1 \ln GDP_i + \beta_2 \ln GDP_j + \beta_3 \ln D_{ij} \tag{2}$$

- Mass being associated by both GDP and Population (POP). Thus, the equation becomes

$$\ln E_{ij} = \varphi + \gamma_1 \ln GDP_i + \gamma_2 \ln POP_i + \gamma_3 \ln GDP_j + \gamma_4 POP_j + \gamma_5 \ln D_{ij} \tag{3}$$

- The third alternative is mass associated with GDP per capita and is represented as:

$$\ln E_{ij} = \tau + \delta_1 \ln\left(GDP_i / POP_i\right) + \delta_2 \ln\left(GDP_j / POP_j\right) + \delta_3 \ln D_{ij} \tag{4}$$

- The fourth and last associates mass with both GDP and GDP per capita.

$$\ln E_{ij} = \mu + \nu_1 \ln GDP_i + \nu_2 \ln\left(GDP_i / POP_i\right) + \nu_3 \ln GDP_j + \nu_4\left(GDP_j / POP_j\right) + \nu_5 \ln D_{ij} \tag{5}$$

In its simplest form, the gravity model of bilateral trade used by Tinbergen (1962) and Linneman (1966) relates trade between country i and country j to the proportion of the product of both countries GDP (GDPi and GDPj) and to the distance between them (Dij) as a proxy for

transaction costs. In line with equation 5, the volume of trade is measured in terms of exports and imports in the empirical equations.

Equation 6 is specified in a functional form and it shows that export of Nigeria to Ghana is determined by;

$$\log(EXPO) = \beta 0 + \beta 1 \ln(RGDPNIG) + \beta 2 \ln(RGDPGHA) + \beta 3 \ln(POPNIG) + \beta 4 \ln(POPGHA) + \beta 5 \ln(ELEGHA) + \beta 6 \ln(ELENIG) + \beta 7 \ln(DRPGDP + \beta 8(RTA) + \varepsilon \quad (6)$$

Equation 7 is specified in a functional form and it shows that import of Nigeria from Ghana is influenced by the independent variables specified below:

$$\log(IMPIND) = \beta 0 + \beta 1 \ln(EXCH) + \beta 2 \ln(POPNIG) + \beta 3 \ln(GDPNID) + \beta 4 \ln(RTA) + \varepsilon \quad (7)$$

The OLS technique is also used for the estimation and the technique is chosen because of its simplicity. Documentation of trade facilitation measures is captured with the use of descriptive analysis. Table 1 provides information on variables used for the estimation.

Table 1.01: Variables Definition, Sources and Measurement

VARIABLE	VARIABLES	TYPE OF VARIABLE	VARIABLES DEFINITION
Export of Nigeria to Ghana	EXPO	Dependent variable	The value of Nigeria's exports to Ghana measured in millions of U S dollars
Import Value Index Of Nigeria from Ghana	IMPIND	Dependent Variable	The value of Nigeria's import from Ghana measured in millions of U S dollars
Real Gross Domestic Product in Nigeria	RGDPNIG	Independent Variable	Annual national income of Nigeria measured in U s dollars
Real Gross Domestic Product in Ghana	RGDPGHA	Independent Variable	Annual national income of Ghana measured in U S dollars
Population in Nigeria	POPNIG	Independent Variable	Total population of Nigeria measured in millions
Population in Ghana	POPGHA	Independent Variable	Total population of Nigeria measured in millions
Difference in Real Per Capita Gross Domestic Product	DRPCGDP	Independent Variable	Difference in the per caita income of Nigeria and Ghana
Electricity Production in Nigeria	ELENIG	Independent Variable	Electricity production in Nigeria measured in Kilowatts per hour and used as a proxy for government expenditure on infrastructure.
Electricity Production in Ghana	ELEGHA	Independent Variable	Electricity production in Nigeria measured in Kilowatts per hour and used as a proxy for government expenditure on infrastructure.
Regional Trade Agreement (ECOWAS)	RTA	Independent Variable	Dummy variable for ECOWAS membership
Exchange Rate in Nigeria	EXCH	Independent Variable	Exchange rate in Dollars per Naira

Source; Researcher's Computation

Section 4: Discussion of Empirical Results

4.1: Descriptive Analysis of Trade Facilitation Measures in ECOWAS

Trade performance of ECOWAS countries clearly shows a dismal performance. Using trade balance as a percentage of GDP, all ECOWAS countries except Nigeria and Cote d'Ivoire had trade deficit in the period of 2000 to 2007. In 2006, the magnitude of intra-ECOWAS trade of 32.40% compared to COMESA (48.70%), SADC (75.20%), and UMA (62.90%) is a clear attestation to the fact that regional integration process is still far from ideal in West Africa. While more than 70% of the EU total trade happens within the community, intra-community trade in ECOWAS region remains far less than 10%. Despite all efforts put into free trade and regional integration in the region, the trend of intra-regional trade remains very low. On the average, intra ECOWAS trade is about 11% of trade with non-ECOWAS countries (WTO, 2005). For instance, in 2007, only about 7% of Nigeria's exports (mainly oil) were traded with ECOWAS members which are mainly Ghana and Cote d'Ivoire. On the import side, less than 3% of Nigeria's imports originated from ECOWAS states mainly Benin, Ghana and Cote d'Ivoire

ECOWAS regional market is becoming important as export destination for many ECOWAS countries. In the region, Cote d'Ivoire is the second most important exports destination after Nigeria with its share rising from 19% in 1996 to 23% in 2007.

Table 2.0 Some Trade Performance Indicators of ECOWAS Members

	Trade (goods and services) balance (as a % of GDP)				Total trade share of world market (%)			
Members	2000	2005	2006	2007	2000	2005	2006	2007
Benin	-7.954	-8.693	-11.138	-12.134	0.008	0.008	0.007	0.008
Burkina Faso	-16.109	-12.982	-13.681	-12.683	0.006	0.006	0.006	0.006
Cape Verde	-33.876	-28.040	-25.295	-26.174	0.003	0.004	0.005	0.005
Côte d'Ivoire	7.120	7.068	9.989	11.056	0.050	0.063	0.056	0.061
Gambia	-23.902	-17.409	-22.548	-19.701	0.004	0.002	0.002	0.002
Ghana	-18.278	-25.295	-24.493	-24.983	0.037	0.041	0.046	0.045
Guinea	-4.423	-6.192	-12.197	-13.041	0.010	0.007	0.006	0.007
Guinea Bissau	-12.397	-19.203	-17.603	-17.603	0.001	0.001	0.001	0.001
Liberia	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Mali	-11.672	-8.639	-9.098	-7.416	0.010	0.013	0.012	0.013
Niger	-7.503	-14.092	-13.555	-14.226	0.005	0.006	0.006	0.006

Nigeria	19.458	28.026	26.999	21.045	0.208	0.302	0.295	0.277
Senegal	-9.268	-13.797	-16.050	-16.050	0.019	0.022	0.020	0.019
Sierra Leone	-30.723	-15.719	-8.389	-8.128	0.002	0.003	0.003	0.003
Togo	-13.431	-29.107	-33.958	-27.028	0.006	0.009	0.009	0.009
ECOWAS Average	-11.640	-11.720	-12.216	-11.933	0.026	0.035	0.034	0.033
SSA Average	-7.948	-9.932	-9.129	-25.188	0.030	0.039	0.040	0.039
World Average	-3.746	-5.036	-4.059	-7.954	0.583	0.572	0.583	0.632

Source: World Trade Indicators (2008)

Also, Nigeria non-oil exports to ECOWAS region increased from about 13% in 1995 to 20% in 2007. However, the average, intra-trade as percentage of total exports in ECOWAS region was less than 10% in the period of 2000 to 2006.

Trade regimes for goods and services in ECOWAS countries have undergone substantial liberalization since the early 1980s. In particular, the simple average MFN applied tariff rate for ECOWAS countries fell by 66% from an average of 38% in 1980-1984 to 13% in 2000-2007. From Table 8.0, we can observe that average weighted applied tariff of 10.39 in 2007 is lower compared to SSA average 11.60%. In Cote d'Ivoire, the policy reforms of the 1980s and 1990s led to reduction in the level of applied tariffs, the elimination of most non-tariff barriers and their replacement with moderate tariffs.

Table 3.0 Some Trade Policy Indicators in ECOWAS Members

	Applied Tariff – Weighted Average (WA)- All Products (%)			Applied Tariff - WA- Agric (%)			Applied Tariff - WA- Non-Agric (%)	
Members	2001	2006	2007	2001	2006	2007	2000/2001	2006
Benin	12.62	16.53	16.53	16.52	14.25	14.30	11.67	..
Burkina Faso	14.11	4.30	4.75	54.30	15.18	15.11	12.26	3.85
Cape Verde	n.a	13.22	12.90	n.a	16.59	16.65	n.a	11.81
Côte d'Ivoire	7.22	10.08	10.23	10.72	11.07	11.08	6.58	9.78
Ghana	16.20	11.32	11.32	20.58	16.70	16.70	15.69	10.21
Guinea Bissau	13.87	10.98	10.94	18.69	12.21	12.23	12.45	10.36
Mali	10.64	8.40	8.45	14.37	9.19	9.21	10.02	8.25
Niger	13.66	11.21	11.15	15.63	12.98	13.06	12.01	10.89
Nigeria	21.47	11.02	..	30.20	20.97		18.64	9.68

Senegal	9.40	9.53	9.63	11.58	10.69	10.81	8.24	9.17
Togo	10.91	13.62	13.60	12.60	15.49	15.51	10.51	13.38
ECOWAS Average	10.84	10.02	10.39	17.10	12.94	12.25	9.84	8.11
SSA Average	11.19	11.19	11.60	15.26	47.67	14.10	17.00	15.43
World Average	10.26	6.44	7.01	15.64	19.03	12.28	9.35	10.40

Source: World Trade Indicators (2008)

The policy reforms in Ghana and Nigeria make the tariff structure to move from a range of OB 300% in 1990 to the range of 0-150% in the period of 1995 to 2007. In addition, the list of prohibited imports was reduced substantially and import ban are partially phased out. Despite these tariff reforms, there is still poor trade cooperation among these countries. It is generally agreed that tariffs comprise only a small share of impediments to trade in ECOWAS region. The bulk of problems that constrains intra-regional trade have to do with non-tariff barriers that stifle the movement of goods and services across borders.

ECOWAS has for many years struggled to motivate process leading to uniform tariff policy in the region. The body has attempted to establish a common tariff (CET of 0%, 5%, 10% and 20%) similar to those already in place by UEMOA bloc of West Africa. ECOWAS trade liberalisation has not been fully implemented in all these countries. While all countries except Liberia have eliminated tariffs on unprocessed products, only Benin has done so for industrial goods. Efforts to revitalise trade liberalisation have begun with fast track initiative between Ghana and Nigeria. Only the UEMOA members have operated within the MFN applied and final bound tariff rates agreed to by ECOWAS members. Simple average tariff on all products ranges from 6.5% in Guinea to 29.1% in Nigeria.

TABLE 4.0 Some Technological Advancement Indicators in ECOWAS Region

	Personal computers per 100 inhabitants			Internet users per 100 persons		
Members	2000	2005	2007	2000	2005	2007
Benin	0.14	0.38	0.57	0.21	5.01	7.99
Burkina Faso	0.13	0.23	0.63	0.08	0.46	0.56
Cape Verde	5.55	10.85	n.a	1.78	5.72	6.36
Côte d'Ivoire	0.53	1.74	n.a	0.23	1.08	1.59
Gambia	1.08	1.55	1.89	0.87	3.59	4.95
Ghana	0.30	0.57	n.a	0.15	1.78	2.65
Guinea	0.50	0.50	n.a	0.10	0.56	0.54

Guinea Bissau	0.19	n.a	n.a	0.22	1.94	2.25
Mali	0.13	0.39		0.15	0.52	0.58
Niger	0.04	0.08		0.04	0.22	0.29
Nigeria	0.60	0.85		0.06	3.54	5.53
Senegal	1.55	2.12		0.39	4.59	5.38
Sierra Leone	n.a	n.a		0.11	0.19	
Togo	1.85	2.97		1.85	4.81	4.99
ECOWAS Average	0.84	1.85	1.03	0.45	2.43	3.36
World Average	10.22	15.80	21.74	7.67	19.41	22.75

Source: World Trade Indicators (2008)

ECOWAS region's trade facilitation challenge bestrides a whole range of poor capacities, such as deficient transportation networks, moribund communications and energy infrastructure, poor port facilities, a lack of automation systems, a lack of transparent regulatory frameworks, burdensome customs systems, and inadequate human resources. On the average, ECOWAS countries have the longest customs delays in the world. The cost of clearing a 20-foot container through the ports of Abidjan or Dakar is the same with the cost of shipping the same container to a North European port. Shipping a car from Japan to Abidjan costs US$1500, but shipping the same car from Abidjan to Addis Ababa costs US$5000. (Soko, 2005).

Table 5.0: Some Trade Facilitation Indicators n ECOWAS Region (2007)

Members	No. of documents		No of Days		Cost (US$ per container)	
Countries	Export	Import	Export	Import	Export	Import
Benin	7	7	34	41	1167	1202
Burkina Faso	11	11	45	54	2096	3522
Cape Verde	5	5	21	21	1024	1024
Côte d'Ivoire	7	8	18	25	660	660
Gambia	7	8	23	23	809	869
Ghana	6	7	19	29	895	895
Guinea	7	9	33	32	570	995
Guinea Bissau	6	6	27	26	1445	1749
Liberia	10	9	20	10	1032	1032
Mali	9	11	44	65	1752	2680
Niger	8	10	59	68	2945	2946
Nigeria	10	9	26	46	1026	1047

Senegal	11	11	20	26	828	1720
Sierra Leone	8	7	31	34	1282	1242
Togo	6	8	24	29	872	894
ECOWAS Average	7.87	8.40	29.60	35.27	1226.87	1498.47
World Average	6.99	7.81	26.12	29.69	1230.26	1412.48

Source; Olayiwola and Osabuohien (2009)

Trade facilitation in ECOWAS is primarily aimed at the process of reducing obstacles to trade at borders, including red tape, corruption, onerous customs procedures, restrictive visa systems, and complex data requirements for imports and exports. According to the United Nations Conference on Trade and Development (UNCTAD), 2005, the average customs transaction involves 20–30 different parties, 40 documents, 200 data elements (30 of which are repeated at least 30 times) and the re-keying of 60 - 70% of all data at least once.

In this region, infrastructure costs are among the highest in the world. Electricity averages 4.5 times and international telephone calls cost four times the charges in OECD countries. In Niger, it takes 11 steps and costs four times the average income to register a business. Much of the sparse road network is in poor condition, and frequent checkpoints-one every 14 kilometers on the road between Lagos and Abidjan-shrink markets (Kaplan, 2006).

Table 6.0 Check points Along Intra-ECOWAS Major Highways

Major Way	Distance (Km)	No. of Checkpoints	Checkpoint to Security Posts per 100km
Abidjan to Lagos	992	69	7
Abidjan to Ouagadougou	1122	37	3
Accra to Ouagadougou	972	15	2
Cotonou to Niamey	1036	34	3
Lome to Ouagadougou	989	34	4
Niamey to Ougadougou	529	20	4

Source; Olayiwola and Osabuohien (2009)

Trade facilitation in ECOWAS region would benefit not only importers and consumers who have to contend with higher prices induced by red tape in import administration, but exporters too. It would enable firms to increase their continental share of trade in goods and services as a consequence of lower transactions costs. It would reduce compliance costs, service charges, business opportunity costs, and costs associated with uncertainty and corruption. Provided it is implemented correctly, trade facilitation can benefit governments too. It can bring about: more efficient control methods, better resource allocation, higher revenues, improved trade compliance, faster economic development, and a climate conducive to foreign investment.

(Olayiwola and Osabuohien, 2009). In this study, together with other factors that encourage trade facilitation between Ghana and Ghana, there is much emphasis on the presence of a regional trade agreement as a means of facilitating trade.

4.2: Discussion of Empirical Results

The first part of the analysis deals with the determinants of exports of Nigeria to Ghana. The basic explanatory variables included are as shown in Table 7.

Table 7.0 Determinants of Nigeria's Exports to Ghana

VARIABLES	COEFFICIENT	T-STATISTICS
C	41.32517	-2.454891
ELEGHA	3.67E-11	0.551510
ELENIG	-1.76E-11	-0.635427
POPGHA	-23.96947*	-2.581766
POPNIG	35.70485*	3.165515
RGDPGHA	14.27920*	2.432338
RGDPNIG	-23.30055*	-2.688944
DRPCGDP	10.6496*	3.374981
RTA	0.697178*	2.220168
R-squared (R^2)	0.927769	
Adjusted R-squared ($\bar{R}^2$)	0.907132	
Durbin-Watson stat	2.136205	
F-statistic	44.95574	

Source; E- Views 5.0
*, ** and *** Indicate significance at 1%, 5% and 10% level of significance.

As shown in Table 7, membership of ECOWAS is a very significant determinant of Nigeria's export to Ghana. The positive coefficient clearly shows that the variable positively influences the volume of export. The basic economic interpretation of the finding is that membership of Regional Trade Agreement (RTA) is a good trade facilitation measure that can be used to promote export. Another significant determinant of volume of export is real GDP of Ghana. This is expected as the level of income of the destination country of exports clearly influences the amount of foreign goods needed.

The positive and significant relationship between Nigeria's population and volume of exports to Ghana is in line with a priori expectation but results show that there is a negative significant relationship between population of Ghana and export volume from Nigeria. This suggests that with recent efforts in boosting Ghana's economy, the more population increases, the less they import from Nigeria. This could be as a result of measures to promote self sufficiency. The difference in the real per capita income of Nigeria and Ghana is in favour of Nigeria as Nigeria has greater real per capita income. Results show that an increase in this difference has a significant and positive on exports from Nigeria. This is expected as more production is encouraged in Nigeria, inducing more exports. The real GDP of Nigeria shows a negative and significant relationship with export volume to Ghana while the electricity production in Nigeria has a negative and insignificant impact on export volume. Both relationships are not in line with a priori expectation but results show that in the case of Nigeria, increase in income and electricity production does not increase exports to Ghana.

For the Export model, the Heteroskedasticity test was carried out. This set of tests allows you to test for a range of specifications of heteroskedasticity in the residuals of your equation. Ordinary least squares estimates are consistent in the presence of heteroskedasticity, but the conventional computed standard errors are no longer valid. White's (1980) test is a test of the null hypothesis of No heteroskedasticity against heteroskedasticity of unknown, general form. Due to the number of variables present, the no cross white heterskedasticity test is carried out. EViews reports three test statistics from the test regression. The *F*-statistic is a redundant variable test for the joint significance of all cross products, excluding the constant. It is presented for comparison purposes. The R-squared statistic is White's test statistic, computed as the number of observations times the centered from the test regression. The third statistic, an LM statistic, this, too, is distributed as chi-squared distribution with degrees of freedom equal to the number of slope coefficients (minus the constant) in the auxiliary. The test regression always includes a constant term as a regressor. The first part of the output displays the joint significance of the regressors excluding the constant term for each test regression. Under the null of no heteroskedasticity or (no misspecification), the non-constant regressors should not be jointly significant. Our export model does not show joint insignificance of the regressors , therefore it rejects the hypothesis of no heteroskedasticity.

The histogram and normality test was also carried out for the export model. It used the Jarque-Bera statistic to test the null of whether the standardized residuals are normally distributed. If the standardized residuals are normally distributed, the Jarque-Bera statistic should not be significant. Jarque-Bera statistic strongly rejects the hypothesis of normal distribution. This view displays a histogram and descriptive statistics of the residuals, including the Jarque-Bera statistic for testing normality. If the residuals are normally distributed, the histogram should be bell-shaped and the Jarque-Bera statistic should not be significant; Thus, our exports model accepts the hypothesis of noarmality and is insignificant.

Ordinary Least Square Estimation (OLS) for Import Model

The first part of the analysis deals with the determinants of exports of Nigeria to Ghana. The basic explanatory variables included are as shown in Table 8.

Table 8.0 Determinants of Nigeria's Imports from Ghana

VARIABLES	COEFFICIENT	T-STATISTICS
C	12161.33*	3.25
EXCH	4.70**	1.928
POPNIG	4.78*	2.11
RGDPNIG	1.53	1.19
RTA	-1.68*	-2.35
AR(1)	0.71	5.59
R-squared (R^2)	0.836862	
Adjusted R-squared ($\bar{R}^2$)	0.810550	
Durbin-Watson stat	1.612696	
F-statistic	31.80470	

Source E-views 5.0
*, ** and *** Indicate significance at 1%, 5% and 10% level of significance.

From results of our import model, it is shown that population of Nigeria and real GDP of Nigeria conform to a priori expectations and their estimated coefficients show that each of them has a positive relationship with import value index. This shows that as Nigeria's population and national income increase, her import from Ghana tend to increase as well and this is very evident in Nigeria's general trade pattern. However, population of Nigeria is significant at 1% level of significance showing great impact on import value index, while real GDP of Nigeria is significant at 5% level of significance showing lesser impact. Regional Trade Agreement has a significant negative relationship with import value index. This is majorly as a result of the low Nigerian import from Ghana due to Nigeria's stronger trade ties with European countries and other non African countries. This finding also supports Agu (1992) submission that West African countries produce a set of homogeneous goods and hence they do not have goods to exchange. In other words, he postulates that there is no difference in the member states' factor endowment; and, thus believes that members of the Community are not natural trade partners. Also Nigeria's exchange rate has a significant positive relationship with import value index.

The Heteroskedasticity test was carried out for this model as well. This set of tests allows you to test for a range of specifications of heteroskedasticity in the residuals of your equation. Ordinary least squares estimates are consistent in the presence of heteroskedasticity, but the conventional computed standard errors are no longer valid. White's (1980) test is a test of the null hypothesis of no heteroskedasticity against heteroskedasticity of unknown, general form. Due to the number of variables present, the no cross white heterskedasticity test is carried out. The test regression always includes a constant term as a regressor. The first part of the output displays the joint significance of the regressors excluding the constant term for each test regression. Under the null of no heteroskedasticity or (no misspecification), the non-constant regressors should not be jointly significant. Our import model shows joint insignificance of the regressors excluding the constant regressor, therefore it accepts the hypothesis of no heteroskedasticity.

The histogram and normality test was also carried out for the import model. It used the Jarque-Bera statistic to test the null of whether the standardized residuals are normally distributed. If the standardized residuals are normally distributed, the Jarque-Bera statistic should not be significant. Jarque-Bera statistic strongly rejects the hypothesis of normal distribution. This view displays a histogram and descriptive statistics of the residuals, including the Jarque-Bera statistic for testing normality. If the residuals are normally distributed, the histogram should be bell-shaped and the Jarque-Bera statistic should not be significant; Thus, our import model does not accept the hypothesis of normality and is highly significant.

Section 5: Conclusion and Recommendation

This paper focuses primarily on trade facilitation and regional trade potential in ECOWAS among selected African countries; Nigeria and Ghana. The study examined how trade facilitation can affect trade in ECOWAS specifically in trade flows between Nigeria and Ghana.

The summary of findings of this study is as follows;

1. The Real Gross Domestic Product of Nigeria does not have significant impact on Nigeria's import value index from Ghana. This shows that economic growth in Nigeria may not lead to trade expansion in Ghana.
2. The presence of a regional trade body such as ECOWAS has an insignificant negative relationship with Nigeria's import value index from Ghana but has a significant positive relationship with Nigeria's exports to Ghana.
3. Government spending on infrastructure proxied by electricity production in Ghana, the difference in the real per capita GDP between Ghana and Nigeria, the population of Ghana and the real GDP of the two countries are major significant determinants of trade in these two countries.

In view of the above findings, this study has shown that there is significant need for trade facilitation to enhance the inter- and intra-trade among between ECOWAS countries. The study recommends these trade facilitation measures in the quest for renewed growth in ECOWAS member states.

First and foremost, the need for trade and institutional reform is an essential prerequisite for achievement of deepening integration, trade facilitation and development in West Africa. Administrative and procedural process associated with customs operations must evolve efficient region-wide regulatory framework to reduce the number of customs documents and eliminate human barriers created in this process.

Trade facilitation measures have a high potential for win-win situations. With continued liberalization, transaction cost become higher than the cost of tariffs and assume prime importance for competitiveness. Trade facilitation needs to move to the forefront in importance for policy makers. The transport and infrastructure improvements have to go hand in hand to improve overall competitiveness as the whole cycle from the exporters to the importers premises needs to be taken into account. While many trade facilitation measures can be unilaterally

achieved, other issues such as transit, visa, road permits and road infrastructure have a regional component which must be addressed.

It is important that the issue of trade facilitation be positioned within a broader framework needed to reduce transactions costs for both domestic and international trade of West African economies and within a broader framework of engineering economic growth and social change. As indicated in the past, a narrow view of trade facilitation runs the risk of focusing more on rationalization of trade procedures and less on dealing with the fundamental constraints, which inhibit West African countries from effectively participating in international trade.

There is the need to strengthen customs reform in the region. This should form a core part of any trade facilitation measures. As earlier discussed, customs delays, coupled with corruption and bribery at the border, have stifled the region's competitiveness. Enhancing customs efficiency can have a positive impact on trade and investment. There is ample empirical evidence that trade facilitation reduces customs delays and costs considerably, while also raising revenue. In this region, customs revenue can provide close to a quarter of government revenue. However, due to inefficiencies in tax and duty collection, the revenue collected falls far short of its potential.

Furthermore, the reforms should address the supply-side problems that have hobbled trade integration in most West African countries. This requires a greater focus on strengthening the negotiating capacity of African countries, promoting economic diversification, increasing the participation of SMEs in regional and global supply chains and dealing with infrastructure backlogs. Any efforts to promote trade must take account of informal cross border trade, which constitutes a significant proportion of trade among countries.

Trade–related infrastructure is also needed. This would serve twin purposes of addressing export response capacity as well as trade facilitation. According to Oyejide et al (2004), the major impediment to the slow performance of the West African manufacturing and trade is not only foreign market access alone, but the major obstacle is a weak domestic supply response. Therefore, the primary concern should be on addressing export supply response capacity constraints inherent in the region.

Also, effort at addressing trade facilitation should encourage process that would harmonize multiple currencies and exchange rate arrangements. It should be realized that monetary unions can generate potential large benefits through trade flows and economic growth. ECOWAS countries need education and enlightenment on the process of monetary integration. This is because, monetary integration implies a medium to long term move towards fixed exchange rate, and eventual adoption of common currency. Regional development bank should be mobilized to provide finance to facilitate trade, to undertake projects at the national and regional levels, and to assist poorer members in the region.

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