The Scope, Structure and Fiscal Policy Implication of West Africa Trade Zone

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Abstract

Regional economic integration has been an increasing priority among many African nations. Adequate information fosters better trade relations among nations. This paper investigated the scope, structure and fiscal policy implication of West Africa trade zone. Relevant data and information and materials for the study were obtained from Central Bank of Nigeria?s Statistical bulletin, 2018, textbooks and published journal articles. Econometric analysis of Ordinary least square was used in the analysis. The result showed that the absence of formal contact and adequate market information was smooth trade relations amongst the West African countries.

Index terms— regional economic integration, trade relations, market information, trade partners

1 Introduction

ountries in West Africa appear as natural partners in the hob of trade in agriculture, food and general merchandise, as different sub-regions have different comparative advantages, with diverse ecosystems yielding a wide range of produce. The natural complementary among countries due to the agro-climatic conditions, promote sizeable agricultural trade flows between coastal countries and the Sahel-Sudan and Sahel countries. The latter are typically exporters of coarse grains (millet, sorghum), cowpeas and livestock while the coastal countries and the lower Sahelo-Sudanian Zones export maize, rice, roots, tubers and tropical fruits to land-locked countries (FAO, 2015). Both regional economic communities, ECOWAS and Members of the West African Economic and Monetary Union (also known by its French acronym, UEMOA) which include Benin, Burkina Faso, Côte D'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo, have developed trade policy frameworks to increase trade integration between their member states. This process was further advanced in UEMOA, as the customs union, and the abolition of tariffs or quotas on intraregional trade in domestic products approved by ECOWAS. However, ECOWAS has been catching up through its Trade Liberalization Scheme (ETLS) and the Common External Tariff (CET).

Regional economic integration has been an increasing priority among many African nations in recent years. For instance, the Continental Free Trade Area Negotiating Forum (CFTA), which was convened for the first time in Addis Ababa aimed at incorporating all 53 African Countries. Besides the scope, the structure and financial implication of the West African Trade Zone, borders on the single currency and trading infrastructure. To this end, many developing countries, mainly the African countries are today faced with public expenditure funding issue essential to meeting the growing needs of their populations. The difficulties associated with this plan are further compounded by the sluggish international economic environment, which increases their vulnerability to the official development assistance (ODA) and foreign debt which they are essentially dependent. Given the volatility of external financing and the urgency to reduce external dependence, these African countries need to change development funding strategy, mobilizing domestic resources, which appear to consider the best way to finance public spending. In this context, it is appropriate to use the internal tax resources, whose mobilization

44 for development purposes can be performed without causing a debt process, allowing to prioritize the use of such
45 resources to preserve the sustainability of public finances.

46 Besides, there is a need to mobilizing domestic resources to give more relevance to fiscal policy. The
47 mobilization through the development of the private sector in the countries of the WAEMU zone is characterized
48 by an insufficient number of companies able to sustainably contribute to the creation of wealth. Moreover, the
49 existence of a limited number of companies is capable of making tax a fiscal tool to negative performance and
50 unsustainable in the long term, to financially support the zone, due to an unfavourable economic environment.
51 Various reforms have been carried out since 1990 which targeted a reduction in the weight of tax structures
52 which burdened economic growth. Taxes, therefore, sought to create a tax environment that encourages savings,
53 investment, entrepreneurship and work. **??**énassy-Quéré et al, (2009). affects: individual decisions concerning
54 savings, work and improvement in the level of education; ii) business decisions on production, job creation,
55 investment and innovation iii) the choice of savings instruments and assets by investors.

2   Taxes according to

57 OECD, **??**2009), stated that all these decisions are affected not only by the level of taxes but also by the way
58 tax instruments are designed and combined to generate public revenues.

59 It is important to note that formal and informal cross-border trade can also be explained by longstanding
60 relationships and indigenous patterns, which often pre-date colonial and post-colonial state boundaries. Cross-
61 border trade is often conducted among people of the same clan or ethnicity group. The West African communities
62 spread along the territorial boundaries, and they have a lot in common both culturally and socially. They speak
63 the same or similar languages, they inter-marry and own land on either side of the borders. This alone provides
64 an incentive to these communities to engage in trade to explore available opportunities on either side of the
65 border. In the absence of formal contracts, adequate market information, and other important obstacles to
66 formal trade, trust-based networks can play an important role in establishing trade relations, although informal
67 (OECD, 2009). ODI, 2012) quoting Aker et al. **??**2010), stated that ethnic differences can act as a significant
68 intra-national border between markets and suggest that ethnic similarities diminishing international border effects
69 could enhance international market integration.

3   a) Statement of the problem

71 There are numerous unresolved issues bedevilling trade relations among the West African States, which points to
72 the widespread nature of bribery in the region, especially, the prevalence of corrupt customs procedures and road
73 harassments. Border bribes and roadblocks lead to long and costly delays in trade (World Bank, 2015). There are
74 cases of import restrictions, export restrictions, and tariffs. Free and intra-regional trade is further hampered by
75 complex, non-transparent or lengthy customs procedures, high costs of moving goods by road or rail within West
76 Africa sub-region, as a result of poor infrastructure and governance of the transport sector, which affects prices
77 of goods produced in rural areas. Transport prices per kilometre from farm gate to primary collection markets
78 tend to be three to five times higher than those from secondary (often rural wholesale) markets to wholesale
79 markets located in the country's capitals (FAO, 2015).The high cost of transportation negatively affects access
80 to markets, because of the geographical distance between producers and consumers. The availability and quality
81 of connecting infrastructure also hamper free trade in the West African suburb. Considering these numerous
82 hindrances, it becomes pertinent to provide answers to questions such as: what is the cost implication of trading
83 among West Africa countries and how free is the zone. To this end, we are poised at addressing the scope,
84 structure and fiscal policy implication of West Africa Trade zone.

4   b) Study Hypothesis

86 The study is guided by the following formulated hypotheses: The meaning of the above-used abbreviations are as
87 follows: FDI is the total foreign direct investment, ExR is the exchange rate, TOP represents the trade openness,
88 NT is net tax, NIP is the net import while NExP is the net export.H 01 :

5   c) Significance of the study

90 The importance of this study will go a long way in educating researchers and the public in light of the following
91 benefits: i.

92 Researchers will find this work rewarding at all times as a reference when seeking literature on West African
93 Trade-related issues. ii.

94 The study will help researchers to realize the actual state of bilateral trade among Members of Economic
95 Communities of West Africa (ECOWAS). iii. The study will help the West African economies by revealing the
96 stand of the economy in the face of challenges facing West Africa trade relations. iv. The study stands to
97 enlighten Policy Maker son the ways of finding the best policy to use when it comes to the issue of West African
98 trade zone.

99 II. Literature Review trade transaction costs at the interface between business and government and is an
100 agenda item within many custom related activities (Baxa, (2010).

6 ii. Trade Structure

According to Martinez-Lopez (2005), trade structure is independent of the level of the trade itself, which has an important effect on the rate of economic growth. It is the trade constituents, what it is made up of.

7 iii. Fiscal Policy

Fiscal Policy is how a government adjusts its spending levels and tax rates to monitor and influence a nation's economy usually through the controlled spending, taxation and transfer payment to influence aggregate demand and therefore real income **??**Blankenau & Simpson (2004).

Fiscal policy, therefore, is undoubtedly one of the most important tools used by the government to achieve macroeconomic stability of the economy of most developing countries (Siyan and Adebayo, 2005).

Fiscal policy according to Abomaye-Nimenibo (2017) is the use of government spending and taxation policies to influence the level of economic activity, inflation and economic growth. Fiscal means having to do with taxation, public revenue or public debt. He went to say that, to stabilize prices of goods and services in the country, the government may use a fiscal tool of contractionary fiscal policy to combat price induced inflation.

8 b) Theoretical Framework

The theoretical framework is based on several empirical studies which have produced mixed results on the effect of fiscal policy on economic growth. To understand the main channels through which fiscal variables affect the rate of economic growth, the neoclassical model of Solow **??**1956) Economists of supply conclude from their analysis that reducing the tax burden should lead initially to accelerating economic growth and secondly to enable the State to increase the amount of revenue.

The pioneering work on endogenous growth **??**Romer, 1986; **??**ucas, 1988) helped to capture the effects of taxation on growth. The work allows verifying that when taxes are used to finance public investment in infrastructure, education and health, they may be favourable to growth **??**Lucas, 1988; **??**arro, 1990).

Considering a growth model with productive public spending, **??**arro (1990) emphasizes the existence of a Laffer curve between tax rates and economic growth rates. This curve shows that up to a certain tax threshold, tax policy encourages growth, but beyond that threshold, it generates negative externalities that retard growth.

Kocherlakota and Yi (1997) find that the effects of taxes on economic growth are permanent as provided by the endogenous growth model. However, when taxes exceed a certain level, they generate negative externalities on the economy. From a general equilibrium model calibrated on the multiregional WAEMU countries, Cadot et al. **??**2013) show that following the enlargement of the tax base of value-added tax (VAT) associated with a significant decrease in rates for the same level of VAT revenue, GDP increases by 1 to 2 percent according to the country.

Easterly and Rebelo **??**1993), in a study to show the relationship between the various fiscal policy measures, the level of development and the rate of economic growth, among others conclude that the impact of taxes on growth depends on its structure, and only the marginal tax rate on income significantly explains the growing disparities.

9 c) Empirical Review

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Eaton **??**1981) showed that taxes may reduce growth in the endogenous growth model. Work by Chambas (1994) concluded the adverse effects of tax rates on productive activity in African countries. For him, the tax rate generally applied in Africa is the source of incentives to reduce consumption.

Lee and Gordon (2005) and Martinez Lopez (2005), using the endogenous growth model, lead to the conclusion that the increase in the tax rate on income leads to lower growth rates.

Milesi-Ferretti and Roubini (1995) also showed that direct taxes hurt growth. Using the framework of the neoclassical growth model, Milesi-Ferretti and Roubini (1998) show that changes in tax rates can not affect the

160 long-term growth rate. Some authors believe that the impact of fiscal policy on growth is negligible (Harberger,
161 1964), Mendoza, Milesi-Ferretti and Asea, 1995), and conclude that growth requires substantial changes in the
162 tax system (Mendoza, Milesi-Ferretti & Asea, 1995).
163   Rivas **?**2003) shows that if the government uses taxes to finance certain public services such as infrastructure,
164 education, health, the legal system, respect for property rights, the relationship between taxation and growth
165 becomes ambiguous. By using the endogenous growth model, Tomljanovich **?**2004) showed that the relationship
166 between fiscal policy and growth becomes more uncertain.

10   III. Method of Study

168 The econometric analysis was implored in the data analysis in which step by step analysis followed the adoption of
169 Augmented Dickey-Fuller, bound cointegration test, vector error correction model and Engle-Granger Causality
170 test.
171   In analysing the scope, structure and fiscal policy implication of West Africa trade zone, an econometric model
172 was built on the functional form: FDI = f(ExR, TOP, NT, IMP, ExP). 1
173   Where FDI is the total foreign direct investment, ExR is the exchange rate, TOP represents the trade openness,
174 NT is net tax, NIP is the net import while NExP is the net export. ? 0 = regression constant ? 1, ? 2, ? 3, ? 4
175 =

11   regression coefficients of the explanatory variables u t = Error term a) A priori theoretical expectation

178 A Priori Theoretical Expectations, the coefficients of the parameter estimates are: From the results above, the
179 variables are stationary at 1 (0) level. Therefore, the test for cointegration is not necessary, meaning that, at
180 short-run analysis, the system will quickly adjust to the long-run equilibrium. Therefore, we proceed to the
181 ordinary least squares (OLS) estimation. The result shows that TOP has a negative relationship with net tax
182 (NT). This indicates that a unit change in TOP will cause a change in BA by 53806285 in the opposite direction.
183 Also, given the probability value of the estimate, the result shows that TOP is a significant determinant of NT
184 statistically given the probability value as less than 0.05 and t-value greater than 2.(? 1 > 0, ? 2 > 0, ? 3 > 0,
185 ? 4 > 0, ? 5 > 0).

12   IV. Analysis and Discussion of Results

13   a) Data Presentation

14   c) Regression Results

15   Foreign Direct Investment (FDI):

190 The FDI has a negative relationship with NT. This means that a unit increase in FDI will cause NT to fall by
191 159.6749. Given the t-value greater than 2, the estimate of FDI is significant. This also holds for the probability
192 value, less than 0.05.
193   Exchange Rate (ExR): This has a negative relationship with NT. This shows that a unit increase in ExR
194 will cause NT to fall by 100099.4. Given the probability value less than 0.05, it shows that ExR is a significant
195 determinant of NT likewise t-value greater than 2. R^2 = 0.924337(92%): This shows that 92% variation in
196 the variable NT is explained by variables in the model, while the remaining 8% is explained by other variables
197 not included in the model. F-Statistic: This shows that the overall model is statistically significant given the
198 probability f-statistic at 5% level of significantly less than 0.05. D-W-Statistics: Giving the value of D-W stat as
199 2.393544 greater than the R 2 , there is the absence of autocorrelation. This implies the model can be used for
200 forecasting.

16   e) Granger Causality Test

202 The existence of a relationship between the variables does not prove causality or the direction of influence. As a
203 result, the Granger causality test is to test for the causality between NT, TOP, FDI and ExR. Since The Scope,
204 Structure and Fiscal Policy Implication of west Africa Trade Zone we are interested in the causality between NT
205 and other explanatory variables in the model, other results of the causality test will not be interpreted. Therefore,
206 the changes in any variable in the pairs can be used to predict the changes in the other.

17   f) Decision Rule

208 Reject H 0 if the probability of Granger causality < 5% level of significance, accept if otherwise. The results of the
209 Granger causality test are presented below: From the results above, the following conclusions are drawn. TOP
210 Granger-causes NT but NT does not Granger-cause TOP. FDI does not Grangercause NT and NT Granger-causes
211 FDI. ExR Grangercauses NT and NT Granger-causes ExR.

18   g) Discussion of Findings

The study investigated the scope, structure and fiscal policy implications of Nigeria in the West African Trade Zone. The study models net tax as a measure of restrictive and protectionist policy instrument, as a dependent variable on foreign direct investment (FDI), the exchange rate (ExR) and trade openness (TOP). The variables are stationary at a level indicating a long-run relationship among the variables as shown by the Augment Dickey-Fuller test. The regression results show a positive relationship between NT and the variables in the model are significant at 5%. The Pair wise Granger Causality Tests reveals a two-directional causal relationship between ExR and NT, while FDI and NT, and TOP and NT have a unidirectional relationship. The overall model equally shows that the estimates are statistically significant and have a negative relationship with NT. This implies that protectionist policies on trade partners in West Africa's Trade Zone have significant effects on the external performance of the Nigerian economy either positively or negatively.

V. Summary of Findings, Conclusion and Recommendations a) Summary of Results

1) TOP has a negative and significant effect and relationship with NT. 2) FDI has a negative and significant long-run effect and relationship with NT. 3) ExR has a negative and significant effect and relationship with NT in the long run. 4) There is no short-run interaction between variables in the model. This implies that tax being a contractionary fiscal instrument can be used to regulate the external sector of the Nigerian economy in the West African Trade Zone.

19   b) Conclusion and Recommendations

The study concludes that trade relationship among West African Countries fosters unity among member states. We also find that policies on trade partners in West Africa's Trade Zone have significant effects on the external performance of the Nigerian economy positively and/or negatively. It was further revealed that tax a contractionary fiscal instrument can be used to regulate the external sector of the Nigerian economy in West Africa's Trade Zone. Accordingly, we recommend that: i.

Tax as a contractionary fiscal instrument is used to regulate the external sector of the Nigerian economy as it relates to West Africa's Trade Zone. ii.

We further suggest that all barriers against the free flow of trade among West African countries be removed forthwith. iii. There should be bilateral trade between members of ECOWAS with no trade tariffs, customs duties, etc. iv. Labour mobility be encouraged among the Member States of ECOWAS, etc.   [1] [2] [3]

Figure 1:

Transforming the equation into linear form;

$LnFDI = Ln?\ 0 + ?\ 1\ ExR\ t + Ln?\ 2\ TOP\ t + Ln?\ 3\ NT\ t + Ln?\ 4\ IMP\ t + Ln?\ 5\ ExP\ t + e\ t$ . . . .

. . . .

4

Where:

FDI	= dependent variable
ExR, TOP, NT, IMP, ExP	= independent or explanatory variables

Figure 2:

239

1

Year	Foreign Direct Investment, FDI (N' Billion)	Exchange Rate, ExR (NPer USD)	Trade Openness (TOP)	Net Tax, NT (N' Billion)	Net Import, NIP (N' Billion)	Net Export, NExP (N' Billion)
1981	4475.062	0.6	0.00156	1.85696	12.8396	11.0233
1982	1100.485	0.7	0.001268	1.65584	10.7705	8.2064

Figure 3: Table 1 :

2

Variables	ADF State	5% Critical Value	Order of Integration	Assessment
NT	-6.467138	-2.948404	1(0)	Stationary
TOP	-4.710965	-2.945842	1(0)	Stationary
FDI	-3.825469	-2.945842	1(0)	Stationary
ExR	-4.210022	-2.945842	1(0)	Stationary

Sou rce: Authors' Computation

Figure 4: Table 2 :

3

	Method: Least Squares			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
TOP	-53806285	20313669	2.648772	0.0122
FDI	-159.6749	14.91015	18.101955	0.0282
EXR	-100099.4	22751.33	4.399716	0.0001
C	13739398	1349025.	10.18469	0.0000
R-squared	0.924337	Mean dependent var		33725375
Adjusted R-squared	0.917661	S.D. dependent var		19578386
S.E. of regression	5617969.	Akaike info criterion		34.02014
Sum squared resid	1.07E+15	Schwarz criterion		34.19252
Log-likelihood	-642.3826	Hannan-Quinn criteria.		34.08147
F-statistic	138.4542	Durbin-Watson stat		2.393544
Prob(F-statistic)	0.000000			

Source: Eviews 9 Output

d) Interpretation of Results (Using 5% Level of Significance)

Trade Openness (TOP):

Figure 5: Table 3 :

4

Null Hypothesis:	Obs	F-Statistic	Prob.
TOP does not Granger Cause NT	37	28.8324	6.E-06
NT does not Granger Cause TOP		2.27476	0.1407
FDI does not Granger Cause NT	37	18.8955	0.0001
NT does not Granger Cause FDI		2.01564	0.1648
EXR does not Granger Cause NT	37	2.65433	0.1125
NT does not Granger Cause EXR		2.71193	0.1088
		Source: Eviews 9 Output	

Figure 6: Table 4 :

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