Impact of Trade Balance on Current Account of ECOWAS Member Countries

Peter Adamu and Jamila Garba Audu

Abstract—**This study attempts to investigate the impact of trade balance on current account of ECOWAS Member State in a panel framework using a traditional panel. Data for 15 member countries were used for the period 2000-2016. The random effect model was used to draw a conclusion based on the outcome of the hausman test. The results revealed that trade balance significantly impact on current account balance. Specifically, merchandise export shows that more export improves current account balance while imports in merchandise reduce current account balance. Given the unchanged structure of the current accounts of the Balance of Payments of Member countries as a bloc, we conclude that an improvement of the trade balance is a precondition to the improvement of the current account balance. This can be done through long-term and sustainable substitution of imports with domestic production and also with effective export promotion. Increasing foreign direct investment and export promotion can be considered, in the longer term, the main way to improve the Trade Balance of member state.**

Index Terms—**Exports, imports, random effects, trade volume.**

I. INTRODUCTION

In recent times, most economies in the world are experiencing both trade and financial liberalization. This has resulted in a massive exchange of goods and services produced through the World Trade Organization (WTO) arrangement in international markets. More so, the financial interdependence which involves the movement of assets from one country to another has equally deepened. With this kind of arrangement across the globe, it is practically impossible for an economy to function in isolation from other countries. This dependence is effective for all countries of the world, regardless of their size and/or their economic development. The increasing interest in regional integration is often, attributed to the disappointing progress of multilateral trade negotiations in the WTO. But there also appears to be a widespread notion that regional trade in some way is "better" for developing countries than trade with the rest of the world.

Trade within the Economic Community of West Africa States is evolutionary. They are used to periods where old trading links were still being relied on to sustain business exchanges in the sub-region. However, what is obtainable in recent times is trade with development dimension. ECOWAS,

since its inception has had a trade policy designed to increase intra-regional commerce, raise trade volume and generally galvanise the economic activities within the region in such a way as to positively impact on the economic well being of ECOWAS citizens. The ECOWAS trade policy is also meant to foster the smooth integration of the region into the world economy with due regards for the political choices and development priorities of States in the desire to engender sustainable development and reduction of poverty.

Furthermore, ECOWAS trade has recently increased by an average of 18% per year between 2005 and 2014. The dominant sector is mining (oil resources, iron, bauxite, and manganese, gold) and agriculture (coffee, cocoa, cotton, rubber, fruits and vegetables) and other products rather marketed within the region (dry cereals, roots and tubers, livestock products). Increasing trade deficit is the biggest contributor to the deepening of current account deficit in the balance of payments in most ECOWAS member countries.

Consequently, the objective of this study is to investigate the effects of trade balance and its impact on the current account of the Balance of Payments of ECOWAS member countries.

Imports, Export Of Goods And Services And Current Account Balance Of Ecowas Member Countries
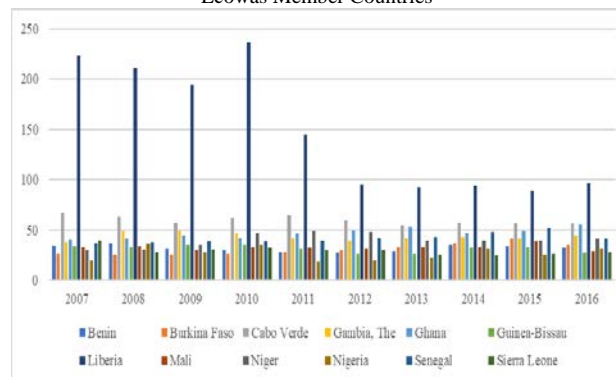

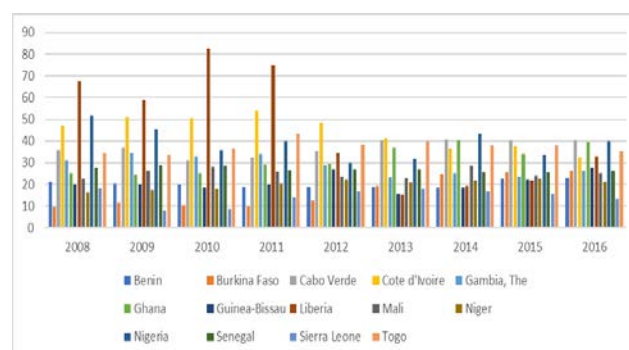Fig. 1. Imports of goods and services (% of GDP).

Fig. 2. Exports of goods and services (% of GDP).

Peter Adamu is with Kaduna State University, Nigeria (e-mail: peteradamu@gmail.com).

Jamila Garba Audu is with Glasgow Caledonian University, the United Kingdom (e-mail: meezee515@yahoo.com).

The import of goods and services for member countries of ECOWAS is as presented in Fig. 1. It is clear that imports from most countries have been reduced from 2007 to date. Although, countries like Gambia, Ghana and Senegal have their imports of goods and services stagnated from 2007 to 2016. This result shows that most of the countries are making efforts to reduce dependence on imports.

Exports measure the stability and sustainability of the economy as well as the ability to compete in international markets. The multiple charts show that for each of the years, exports of goods and services (% GDP) has been declining for most of the ECOWAS member countries. This situation is worrisome and implies that receipts from international markets have been falling over the years. This can translate into deficit in the balance of payments of these countries, especially imports dependent countries.

TABLE I: CURRENT ACCOUNT BALANCE OF WEST AFRICAN COUNTRIES: 1978-2012 (AVERAGE)

Country	CAB/GDP	EXP/GDP	IMP/GDP	TRS/GDP	INC/GDP
Benin	-7.41	20.22	31.70	6.33	-1.16
Burkina Faso	-5.69	10.65	26.35	9.50	-0.35
Cote d'Ivoire	-3.43	40.03	34.38	-3.11	-7.50
Cape Verde	-9.38	25.98	66.95	30.26	-1.64
Ghana	-4.93	23.75	34.28	7.84	-1.61
Guinea	-6.86	27.44	30.66	2.28	-5.98
Gambia, The	-5.82	34.44	46.25	9.54	-1.61
Guinea Bissau	-7.24	17.80	41.96	7.63	-3.30
Liberia	-8.79	41.33	68.20	31.81	-13.32
Mali	-4.99	21.22	35.76	7.42	-2.37
Mauritania	-3.23	43.23	62.27	4.30	-1.64
Niger	-7.81	18.94	26.02	3.68	-1.45
Nigeria	3.17	34.61	29.52	3.29	-6.95
Senegal	-7.84	26.70	38.55	5.99	-2.51
Sierra Leone	-8.40	18.83	27.19	5.17	-4.06
Togo	-7.32	39.21	51.04	8.43	-2.59
Average	-5.99	26.74	39.25	9.07	-3.76

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The current account balance (% of GDP) for all member countries in ECOWAS is as presented in Fig. 3. The figure reveals that from 2009 to 2016, virtually all the member countries are operating a negative current account balance except for Nigeria that started with a positive current account balance in 2009 and lost its gain for few years and after that obtaining a positive value for 2014-2017. This figure confirms the fact that, a large percentage of member countries are import-dependent countries.

A summary of current account balance of west aAfrican countries is shown in Table I.

Table I shows that a large percentage of countries in West African experienced deficit for the period 1978-2011. The data shows that about 70% of the countries that make up ECOWAS have their average current account deficit over five percent (5%0 which is the acceptable threshold for a sustainable current account deficit. It is clear from Table I that majority of the countries in the region are less competitive because imports exceeded exports. This situation have persistent and still in place in most of the countries to date.
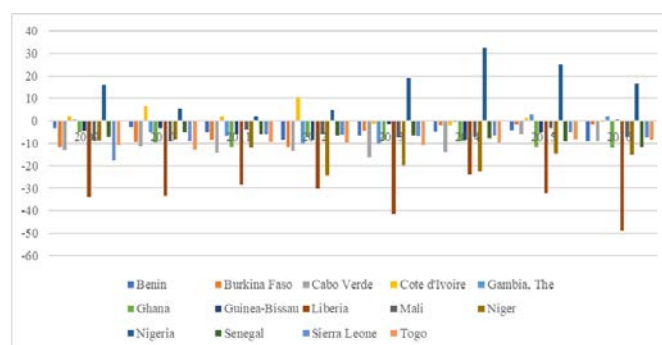

Fig. 3. Current account balance (% of GDP).

II. LITERATURE REVIEW

The Economic Community of West African States (ECOWAS) is a regional organisation of 15 West African countries established on 28 May 1975. Its main goal is the promotion of the economic integration among its members. Indeed, ECOWAS is one the five regional pillars of the African Economic Community (AEC). ECOWAS has three official languages: English, French, and Portuguese.

The two main institutions of ECOWAS are the Secretariat and the Fund for Cooperation, Compensation and Development which have the mandate to implement ECOWAS policies. The ECOWAS Fund was transformed into the ECOWAS Bank for Investment and Development in 2001.

In 2000, five ECOWAS members formed the West African Monetary Zone (WAMZ) aiming to establish a strong stable currency, "eco", to rival the CFA franc, whose exchange rate is tied to that of the euro and is guaranteed by the French Treasury. The eventual goal is for the CFA franc and Eco to merge, giving all of West and Central Africa a single stable currency. The launch of the new currency is being prepared by the West African Monetary Institute based in Accra, Ghana. This is intended to be the forerunner of a common central bank. However, several of the WAMZ's countries suffer from weak currencies and chronic budget deficits which are currently plugged by their central banks printing more and more notes of decreasing real value.

Majorly, ECOWAS was founded to achieve collective self-sufficiency for the member states by means of economic and monetary union creating a single large trading bloc. It was designated one of the five regional pillars of the African Economic Community (AEC). Together with COMESA, ECCAS, IGAD, and SADC, ECOWAS signed the Protocol on Relations between the AEC and Regional Economic Communities (RECs) in February 1998. However, the very slow progress towards economic and monetary integration meant that the Treaty of Lagos was revised in Cotonou on 24 July 1993, towards a looser collaboration and this yet to be achieved to date.

Policy-making across the globe and within the ECOWAS sub-region have continued to devote considerable attention to the factors and conditions that shape the longer-run trade balance trends and whether these trade positions are sustainable. There exists no comprehensive conceptual model incorporating all possible transmission mechanisms

explaining the trends in current account balances. Researchers have offered divergent opinions on factors that lead to long-run periods of current account surpluses or deficits and how sustainable they can be [1]. Panel data studies by [2]-[5], and [6] have confirmed that current account trade balances over the mid to long run, are influenced by fundamental factors associated with a country's propensity to save and invest in both the public and private sectors. These studies include structural variables that explain saving and investment levels but exclude near-term fluctuations in the prices and quantities of tradable goods and services and altered external portfolio positions and asset prices.

[7] examined the determinants of current account deficits in developing countries. They found that a rise in domestic output growth generates a larger current account deficit. However, transitional increases in either public or private saving has a positive effect on the current account, but their permanent changes have insignificant effects. Shocks that are temporary increase the terms of trade or appreciate the real exchange rate and that is connected to higher current account deficits, but their permanent changes do not have significant effects. Similarly, the study by [8] shows that increasing the opportunities of foreign investments will make the relative capital account openness to have a positive impact on medium run current account balances in industrialized countries but the relative capital account openness has negative impact on medium run current account balances of emerging countries. They concluded that the evolutions of domestic and foreign capital account openness have allowed increasing medium run current account balances in absolute value for the period under study. The sustainability of the current account deficit was investigated by [1].They found that total exports and total imports for Mauritius are does not have a cointegrating relationship; however, the addition of income plus transfers, on a net basis, resulted to a Cointegrating vector. This is not compatible with a sustainable current account and the absence of sustainability might be caused by a growing imbalance between exports and Imports of goods.

Further more, [3] used a dynamic panal analsysis to examine the determinants of current account imbalances across the gobe and found that current account balance has positive relationship with trade openness, net foreign assets and exchange rate stability. On the contrary, current account has a negative correlation with commodity price, real GDP growth and real effective exchange rate for the developed countries. But, the results for emerging countries shows that commodity price, real GDP growth, trade openness and De;jure capital openness has positive correlation while net foreign asset, exchange rate stability index has a negative nexus with current account balance.

The properties of current account variations was studied by [9] for selected MENA countries. The study found that government spending, investment and foreign interest rates have a negative impact on current account.

III. Data and Method

For this study, data were pooled for 15 ECOWAS member countries covering the period 2000-2016. The selected countries used for this study are chosen based on their membership status in ECOWAS. The selected independent variables follow closely those used in previous panel data studies by [1], [7], [6], and [10]. The data used for this study were retrieved from the [11].

Model Specification

The model for this study follows the general formulation adopted previously for understanding midterm adjustments in the current account balances across multiple countries and years. These previously mentioned studies emphasise that current account balances are a relative concept that responds to conditions at home as well as abroad. Home country variables are not sufficient to determine current account balances. In line with previous panel studies on this issue, we have converted all variables from country levels to their deviations from global averages for each year, resulting in the following specification:

$$Y_{it} = \sum \beta_i + \lambda(X_{it} - X_t^*) + \mu_{it} \tag{1}$$

where: Y= current account balance as a percent of GDP (both in nominal terms), X is a vector of independent variables defined below, Xt* denotes the average for all countries in a particular year, μ is the disturbance term, and the subscripts i and t represent country and year, respectively. To capture both the country and time invariance in the analysis, the following model is specified:

$$Y_{it} = \sum \beta_i + \sum \beta_t + \lambda(X_{it} - X_t^*) + \mu_{it} \tag{2}$$

The model for this study canot be estimating using the Pooled least square approach because the Pooled OLS approach neglects the cross-sectional and time series nature of the data and assume that the characteristics are captured by the error term. Hwoever, the Fixed and Random Effects models tries to capture the time invariance and cross-sectional nature of the data using separate parameters. This is summarized in equation 3.

$$CAB_{it} = \beta_0 + \beta_1 EXP_{it} + \beta_2 IMP_{it} + \varepsilon_i + v_t + \mu_{it} \tag{3}$$

where: CAB is Current Account Balance, EXP is merchandise export, IMP is merchandise import, ε_i is unobserved effects, v_i is time invariance or time effect and μ_{it} is the stochastics random error term.

IV. Result and Discussion

From Table II, the random-effect panel model appears statistically preferable to the fixed-effect approach in this application. The Breusch–Pagan Lagrangian multiplier test indicates that the variance of the random effect can be distinguished from zero with a χ2 statistic of 143.42 (significant at the 1% level). More importantly, the Hausman

test comparing the generalized least squares (random effect) with the fixed effects model results in a χ2 statistic of -1.86 (significant at the 1% level), resulting in the decision to remain with the random-effect specification. With these results, the interpretation of the results was based on the random effect approach. From the results, the trade volume is statistically insignificant. This suggests that there is no significant relationship between trade volume and current account balance of the selected countries. More importantly, the results of merchandise imports revealed a significant negative nexus with current account balance. From the results, a 1% increase in merchandise imports will lead to a 3.227 decrease in current account balance while a 1% increase in merchandise exports will lead to a 3.963 increase in current account balance. The results show that countries will further pile up their current account balance when they increase their share of exports to the global market.

TABLE II: PANEL REGRESSION RESULTS: DEPENDENT VARIABLE: CURRENT ACCOUNT BALANCE (% OF GDP)

Variable	Pooled OLS	Random Effect	Fixed Effect
Trade Volume	-0.133***	-0.019	0.009
Merchandise Exports	3.963***	6.022***	5.069***
Merchandise Imports	-3.227**	-9.525***	-10.603**
Constant	-11.969	71.387***	112.080
Breush Pagan Test		(143.42)***	
Hausman Test		-1.86***	

V. CONCLUSION AND RECOMMENDATIONS

The trade deficit and specifically the current account deficit are the major challenges bedeviling the economy of most countries in the ECOWAS sub-region. The Balance of Payments (BOPs) statistics of most member states is the largest component, expressed in absolute and relative terms and consequently, it determines the behaviour of the current account balance. Trade deficit to GDP ratio is very high. Regarding this, financing the constant deficit of the current account is becoming a real problem, because in the long run, it is impossible for a country to spend more than its income without becoming a debtor to the rest of the world. This study attempts to investigate the impact of trade balance on current account of member state in a panel framework using a traditional panel. Data for 15 member countries were used for the period 2000-2016. The random effect model was used to draw conclusions based on the outcome of the hausman test. The results revealed that trade balance significantly impacts on the current account balance. Specifically, the merchandise export shows that more export improves current account balance while imports in merchandise reduce current account balance. Given the unchanged structure of the current account of the Balance of Payments, we conclude that an improvement of the trade balance is a precondition to the improvement of the current account balance. This can be done through long-term and sustainable substitution of imports with domestic production and also with effective export promotion. Increasing foreign direct investment and export promotion can be considered, in the longer term, the main way to improve the Trade Balance of member state.

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Peter Adamu was born in Zaria on the 29th June, 1982 and started his elementary education in the same city. He studied B. Sc Economics at Ahmadu Bello University, Zaia, Kaduna, Nigeria in 2008. He proceeded with a Master degree in the same field from Universiti Putra Malaysia in 2013. He was also awarded a Doctor of Philosophy in Economics from Universiti Putra Malaysia in 2017 with specialization in International Economics. He has worked as an academic staff in Kaduna State University, Nigeria from 2011 to date, and is currently a LECTURER with the University. Dr. Adamu is engaged with community development services which involves community participation in Government Budget preparation and implementation.
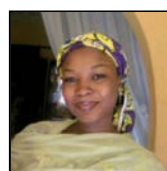
Jamila Garba Audu was born in Zaria on the 29th March, 1982. She earned her B.Sc degree in Accounting at Ahmadu Bello University, Zaria, Kaduna, Nigeria in 2002 and also obtained her Masters degree in Accounting and Finance from the same University in 2011. She is currently working towards completing her PhD program in Finance from Glasgow Caledonian University, United Kingdom, where she also helps with teaching and coordinating seminars for undergraduate students. Mrs Jamila is currently running a college connect tutor program for college students transiting into the university as 2nd and 3rd year students and is also a mentor volunteer for MCR pathways and Children 1st.