Anticipated Impact of a Monetary Union on Bilateral Trade Among ECOWAS Members

Article · March 2017

CITATIONS
0

READS
176

3 authors:

Akinyede Oyinlola
Redeemer's University
14 PUBLICATIONS **14** CITATIONS
SEE PROFILE

Temitope Mariam Worimegbe
Redeemer's University
14 PUBLICATIONS **8** CITATIONS
SEE PROFILE

Grace Iriobe
Redeemer's University
16 PUBLICATIONS **18** CITATIONS
SEE PROFILE

Journal of Global Economics, Management and Business Research
8(3): 155-161, 2017
ISSN: 2454-2504
International Knowledge Press
www.ikpress.org

ANTICIPATED IMPACT OF MONETARY UNION ON BILATERAL TRADE AMONG ECOWAS MEMBERS

O. M. AKINYEDE[1*], T. M. WORIMEGBE[1] AND G. O. IRIOBE[1]
[1]Department of Financial Studies, Redeemer University Ede, Nigeria.

AUTHORS' CONTRIBUTIONS
This work was carried out in collaboration between all authors. Author OMA designed the study, wrote the protocol, anchored the field study and gathered the initial data. Author GOI performed to interpret the data and preliminary data analysis. Author TMW managed the literature searches and produced the initial draft. All authors read and approved the final manuscript.

Received: 7th December 2016
Accepted: 12th February 2017
Published: 7th March 2017

Original Research Article

ABSTRACT

The pattern of growth of International Trade and Bilateral Trade among West African Countires has again brought to light the need for a common currency aimed at financial integration of the ECOWAS community. In this light, this study adopts the explanatory survey design and uses the questionnaire as a primary research instrument to solicit responses from experts in monetary policy, foreign exchange and international business with a view to examine and analyze the potential impact of the proposed ECO currency on Bilateral trade among the ECOWAS members. Data was analysed using the simple linear regression to determine the relationship between the dependent (bilateral trade) and the independent variable (monetary union). Findings from the study indicate there is a positive linear relationship between bilateral trade and monetary union; consistent with Akinyede (2014). The relationship is moderate and significant at 5% level of significance (p-value =.001 < alpha value =.05). Therefore, we conclude that the development of monetary union has significant impact on bilateral trade in ECOWAS.

Keywords: Bilateral trade; ECOWAS; ECO currency; monetary union.

1. INTRODUCTION

Economic Community of West African States (ECOWAS) founded on May 28, 1975 is a regional group of sixteen uneven sized West African countries which consist of nine Francophone, five Anglophone and two Lusophone countries. The community came into existence with the signing of the Treaty in Lagos, to achieve collective self-sufficiency for the member states by means of economic and monetary union creating a single large trading bloc. Its mission is to promote integration and economic development.

Economic States of West African Countries (ECOWAS) consists of 15 member developing countries that are presently divided into members of UEMOA and non-members. The likely growth in market is observed as one of the major advantage of a currency union. A country's advantage and disadvantage from joining a monetary union rely on how its economy is closely unified with other potential partners.

The West African Clearing House (WACH) mechanism, was distorted by the lack of assurance by

**Corresponding author: Email: akinyedeo@run.edu.ng;*

the major creditor Central Banks with discouraged or postponed transactions with repudiate debtor banks with the intention to decrease their exposure to risk among most ECOWAS countries debtor banks coupled with the fact that the banks with piled up settlement arrears or constant debtor situation also postponed additional employment of the system; and some member central banks almost shrunk the volume of dealings that were allowed to pass through the system due to balance of payments constraints. A set of macroeconomic convergence criteria targets that member countries of West African Monetary Agency (WAMA) are required to satisfy include both primary criteria and secondary criteria [1].

Efficient regional payments mechanism promote and buttress territorial flows by enlarging activity and opportunities, lowering cost, reducing risks of payment and ensuring a high degree of wholeness [2]. Using national currencies for intra-regional trade with the help of WAMA open market system was not successful [3].

In considering the pattern of growth of international trade and bilateral trade among West African countries, the purpose of financial integration in which ECOWAS was created has not been achieved over the years. Instead, ECOWAS countries trade more with the rest of world than among member states due to the influence of environmental factors on their foreign exchange market. To fill this gap, West African countries have developed a monetary unit called the "Eco" to start in 2020 so as to eliminate some of these environmental factors and improve intra-regional trade. The proposed "ECO" currency is expected to be the common currency for countries of West Africa. The study analysed the anticipated impact of the proposed monetary union on bilateral trade among ECOWAS members.

2. REVIEW OF LITERATURE

2.1 Monetary Union

Monetary union is defined as "agreement between countries in an economic union to have a common currency, fixed exchange rates and free movement of capital between countries" [4]. In economics, a monetary union, also known as a unitary or common currency, is a setting where two or more nations have an agreement to use a common currency.

The main disadvantage of a common currency is the loss of independence over exchange rate and monetary policy. The national central banks of member countries either shut down or remain redundant in a total monetary union. Nations that forgoes their currencies and joins a monetary union would not use the exchange rate as a means of guiding against economic shocks by revaluations and devaluations [5].

Monetary union has many economic advantages, which range from trade advantages to exchange rate. Some advantages of a monetary union are: Opportunity to trade in a larger market; increased trade among member countries; decrease in transaction costs; removal of exchange rate losses when doing business in the zone; increase in economies of scale, which will reflects in cheaper prices for regional goods production; eradication of exchange rate risks and exchange controls within member countries; low interest rates that reduce the cost of borrowing and lower inflation; and higher value for money (review the underlined expression); more sustainable economic growth, which will increase job security, Price stability and Price convergence within the zone Facilitation; Decrease in costs of cross-border business and reduction in prices for goods bought from member countries. Guillaume and Stasavage [6] argue that the formation of a monetary union can also improve policy credibility. Some believe that EMU and CFA membership will have the following disadvantages [7]. Fear of recession is a major disadvantage.

All the countries in a monetary union have various economic cycles, or are at diverse stages in the cycle between boom and recession. Such countries are also in different economic stages. Critics of monetary union say that the formation of a monetary will destroy the policy option of setting interest rates differently at the appropriate country level [7].

2.2 International Trade

International business is used to wholly describe all commercial transactions (private and governmental, sales, investments, logistics, and transportation) that take place between two or more regions, countries and nations beyond their political boundary. For this research, international business will be viewed from the angle of international trade [8]. International trade is the exchange of goods and services between countries. This method of trade results in a global economy, where demand, supply and prices are influenced by global developments [9].

International trade is the exchange of tangible and non tangible items across national borders. In most nations, it represents an extensive share of Gross Domestic Product. While international trade has been present throughout history, its economic, social, and political benefits has been on the rise in recent centuries, mainly because of industrialization,

advanced transportation, globalisation, multinational corporations, and outsourcing. In fact, it is probably the increasing prevalence of international trade that is usually meant by the term "globalisation" [10].

2.3 Countries Influence on ECOWAS Countries in Achieving Common Currency

Nigeria's funding to the 15-member body (ECOWAS) stood at three to six times what other nations contributed as at 2013. That ratio rose recently to over 60 per cent of ECOWAS' total revenues, with the introduction of community levies, according to data showing annual state-wide contributions. According to the Performance Group [11], Nigeria is the pillar of ECOWAS. It host more than 50% of the ECOWAS population and its GDP is greater than the total Gross Domestic Product of other ECOWAS countries. Nigeria accounts for the greatest share of the yearly ECOWAS budget, as well as of the ECOWAS Aribisala [12].

Only two percent of ECOWAS total exports and three percent of combined imports are intra region. The insignificant trade itself is broadly regional, because trade is commom between same language speaking countries [12]. Moreover, a sizeable degree of this low-degree sub-regional trade is in reality no extra than the trans-cargo of non-ECOWAS items. And the situation becomes even extra miserable when it is acknowledged that over 60% of intra-West African exports is represented via Nigerian oil on my own. However, Nigeria's export to the ECOWAS vicinity, which averaged about 7 percent of its general exports within 2001 and 2006, plummeted to 2.3% in 2010. The proportion of other ECOWAS nations in Nigeria's imports additionally dropped from 4.4% in 2001 to much less than 0.5% in 2010 [13].

The percentage of manufacturing in Nigeria's total exports to ECOWAS area moved from 1% in 2001 to 5.4% in 2010. ECOWAS promotes extra performance in Nigerian industries through the development of an amplified trade. Corporations generating for a big and regional various markets have a tendency to establish in regions desirable to most excellent production efficiency. Within ECOWAS, this gives Nigeria a decided advantage given the nations tremendously degree of infrastructural development, and skilled manpower vis-à-vis its francophone neighbours [12].

Nigeria offers other ECOWAS countries more than it receives from them. ECOWAS politicians are clamoring for the monetary union because they, like most economists, argue that the single currency for UEMOA has been successful. UEMOA countries are more fiscally grooved than other West African countries [14].

ECOWAS countries are poor in infrastructural development [15]. According to [12], exchange transactions and transfers within ECOWAS were done through Paris and London. Such alternate constrains amount for the good sized bilateral trade and bills preparations with the sub-region, which go to a large extent to bog down trade promoting. Bilateralism necessarily involves favoritism in opposition to the ones parties no longer directly involved, thereby developing sheltered regions wherein prices are better than that derived elsewhere. In a community of such bilateral arrangements, individual nation has a tendency to discriminate in opposition to its creditors in favour of its debtors and, thereby, inspire the allocation assets by means of the necessities of bilateral stability, as opposed to issues of aggressive efficiency [16].

ECOWAS citizens have been very beneficial to the Nigerian financial system. They are heavily represented in the service area of the financial system. Many Nigerians themselves bring them into the country for such lowly-paid jobs as labourers and workers. Others are invited in as business-partners, industrialists, consultants among others [17].

2.4 Research Design

This study utilised both quantitative and qualitative research design with the use of descriptive explanatory survey design which involves the administration of questionnaire to obtain information directly from respondents. This was used to provide leads in identifying needed changes, explain how the independent variables explain the dependent variable and to describe the variables of the research as a measure for reducing raw data to easy-to-understand dimension.

2.5 Study Population

The study population's focus of interest is respondents who are experts in the field of monetary policy, foreign exchange and international business. The population include 270 staff that have spent not less than five (5) years in the foreign exchange department and / or the treasury department of twenty (20) banks in Nigeria out of the twenty one commercial banks as at October 2013 and the Central Bank of Nigeria. These staff are chosen for this study because they are directly involved with foreign currency transactions overtime and they have expert knowledge of currency movement. Heritage Banking

Company Ltd was exempted from the study because it reopened in 2012 after collapsing for years. The population was used as the sample. For the secondary data the population of the study are all ECOWAS Countries who are members of the West African Monetary Agency.

2.6 Sample Size and Sampling Technique

The census sampling technique was used for data collection. This sampling technique was used because the entire population is small, and the researcher included the entire population in the study. Hence, a total of 270 respondents were administered questionnaires to gather data for the study.

2.7 Model Specification

This study employed the descriptive survey research method to establish a relationship between monetary union and bilateral trade among ECOWAS members. The major instrument used for this study was questionnaire. For the purpose of analysis, the structure format has been employed in data collection. The questionnaires were presented in 6-point Likert scale. The code 6 represented strongly agree (SA), 5 was coded as agree (A), 4 represented fairly agree (FA), 3 was coded as fairly disagree (FD)", 2 represented "disagree (D)" and code 1 was "strongly disagree (SD)".

The data generated from the sample was presented and analyzed using simple descriptive method with of tables and percentages. Simple linear regression was used to determine the relationship between the dependent and the independent variable. The independent variable (monetary union) was measured using bilateral trade and monetary union. Hence, we accessed the relationships that exists between the identified variables in the following equations

The Models are as follow:

$Y = f(X)$

Y = dependent variable

X = independent variable

$Y = f(y_1)$

$X = f(x_1)$

$y_1 = b_0 + b_1x_1 + \varepsilon$ (1)

x_1= monetary union (MU)

y_1 = Bilateral Trade (BT)

3. DATA ANALYSIS AND RESULTS

3.1 Correlation Result

The correlation result reveals the nature of relationship that exists between the two variables bilateral trade and monetary union.

Table 1. Correlations showing relationship between bilateral trade and monetary union

		BT	MU
BT	Pearson correlation	1	.221**
	Sig. (2-tailed)		.001
	N	224	224
MU	Pearson correlation	.221**	1
	Sig. (2-tailed)	.001	
	N	224	224

**. *Correlation is significant at the 0.01 level (2-tailed).*

Source: Field Survey, February, 2014

Table 1 reveals there is a positive linear relationship between bilateral trade and monetary union. The relationship is moderate and significant at 5% level of significance. The extent to which the explanatory variable monetary union influences the dependent variable bilateral trade is to the degree .221 that is approximately 22.1%.

3.2 Regression Results

The regression results explaining the magnitude of relationship between bilateral trade and the monetary union.

Table 2. Model summary showing relationship between bilateral trade and monetary union

Beta – contant	32.404
- MU	0.189
R	0.221[a]
R square	0.049
Adjusted R square	0.045
Std. error of the estimate	6.60195
Sig.	.001[b]
F	11.412
T	3.378
Durbin-Watson	1.912

Source: Field Survey, December, 2016 (see appendix)

$y_1 = 32.40 + 0.19MU + \varepsilon$

3.3 Interpretation of Results

Table 2 above showed that a positive significant relationship exist between BT and MU as reflected in model, using the unstandardized beta factors. This implies that a common currency will lead significant growth in bilateral trade amongst ECOWAS

members. The R squared of .049 which implies that about 4.9% variations in dependent variable (bilateral trade) is explained by independent variable (monetary union). Though very low, this provides empirical evidence that bilateral trade growth is explained by common currency and other macroeconomic variables not considered in this study. However, the Durbin-Watson test showed that our model is free of auto-correlation with the value 1.912.

The p-value of .001<0.05 shows that the variables are statistically significant. Hence, we accept the alternative hypothesis and reject the null hypothesis, and conclude that the development of monetary union has significant impact on bilateral trade in ECOWAS.

From the coefficient table the simple linear regression equation can be written using the standardized beta factors as:

$$BT = b_0 + b_1 MU$$

$$BT = 32.404 + 0.189\text{MU}$$

The above equation implies that a unit change in monetary union will propel an increase of 0.189 in bilateral trade while if monetary union is held constant it will propel an increase of 32.404 in bilateral trade.

Considering the pattern of growth of international trade and bilateral trade among West African countries, the purpose of financial integration in which ECOWAS was created has not been achieved over the years. Instead, ECOWAS countries trade more with non regional members than regional member states due to the influence of environmental factors on their foreign exchange market coupled with the major problem to international business all over the world which has been identified to be currencies and the risk associated to currencies. To fill this gap, West African countries have developed a monetary unit called the "Eco" to flag up in 2020 so as to eliminate some of these environmental factors and improve intra-regional trade. The proposed "ECO" currency is expected to be the common currency for countries of West Africa.

The capacity growth in trade is seemed as one of the most vital benefit of a monetary union. a nations disadvantage and advantages from participating in a currency union depend upon how carefully incorporated its economy is with those of its members.Research shows that the more two countries trade with each other and the more similar their business cycles are, the better candidates they are for a currency union. Recent studies focus on increase in trade as a major effect of joining a currency union with the assumption that increase in trade will boost the growth and development of member countries. Not much has been said about the effect of a currency union on other economic statistics, organisations and the entire population. Studies generally find that the cost of adopting a single currency is eminent for most regions and most research focus on either existing currency union or on developed countries.

The theory of the optimal currency area was pioneered by economist Robert Mundell describes the optimal characteristics for the merger of currencies or the creation of a new currency and is often used to argue whether or not a certain region is ready to become a currency union, one of the final stages in economic integration and the theory is used as a foundation of a common currency.

4. DISCUSSION OF FINDINGS

Most theoretical and empirical literature supports the hypothesis that countries sharing common currency would have an increased bilateral trade. Lama and Rabanal [18] evaluated that though membership of a currency union could decrease the costs of transaction of trade with other countries, administering efficacy profits to the new member country and the monetary union as a whole. Adopting a common currency is also costly for a nation since it loses independent monetary and exchange rate policies as tools for macroeconomic stabilization.

Current empirical researches show that the alternate many of the individuals of the EMU has grown on average via 10–15 % due to using a single currency and there has been additionally an growth in exchange with the non-member states. The exchange benefit of the access of recent nations into the EMU will consequently now not be the same as the advantages of the initial formation of the EMU in the 1990s [19].

The impact of 'ECO' the proposed ECOWAS currency on trade using the gravity model for five countries that are to start the currency for a period of forty years and concluded that the currency will impact trade of members countries between 100to 200 percent [1].

Tsangarides and Qureshi [20] applied a hard and soft clustering algorithms to a set of variables suggested by the convergence criteria and the theory of OCA, to examines the suitability of countries in the West African region to partake in the proposed monetary unions, the WAMZ and the ECOWAS. They examine the status of the candidate countries for the proposed ECOWAS currency union in terms of the convergence and OCA criteria. It affords insights into the similarities of nations' monetary structures and

identifies the present homogeneous subgroups in the community. Similarly, by using West and central African areas collectively, the analysis helped in comparing the feasibility of new monetary preparations and the desirability of changing the prevailing ones to opportunity configurations in West and central Africa.

5. CONCLUSION

In conclusion, ECOWAS has proposed to start a common currency between five member states in 2020. One of the main reasons for the instigation of this currency is to reduce the problem of low intra-trade. Since 1995, West Africa Monetary Agency (WAMA) has been preparing member states for this proposed currency.

A Single currency can enhance bilateral trade due to the fact trades within the currency area ought not to fear approximately change in FOREX fluctuations. As such it will likely be simpler to transport monies within countries in the zone without being afraid of FOREX fluctuations. Common currency also increases intra regional transactions because the currency is implicit to be more stable than individual country currency.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Akinyede OM. Impact of a monetary union on trade in the West Africa monetary zone. Redeemer's University Journal of Management and Social Sciences. 2014;2:2. ISSN: 23544007
2. BC Ross – Larson. Assessing Regional Integration in Africa, Economic Commission for Africa, Payment Systems and Intra- African Trade; 2010.
3. Freetown. Review of ECOWAS Exchange Rate Mechanism; 2008. Available:http://www.amao-wama.org/fr/Publications/Mecanisme%20de%20change%20en.pdf
4. Clark J. Dictionary of banking and financial terms; 1999.
5. De Grauwe P. The euro at stake? The monetary union in an enlarged Europe. CESifo Economic Studies. 2003;49(1):103.
6. Guillaume DM, Stasavage D. Improving policy credibility: Is there a case for African monetary unions? World Development. 2000;28(8): 1391-1407.
7. BBC News. Special Report Emu: The Disadvantages; 1998. Available:http://news.bbc.co.uk/2/hi/special_report/single_currency/66501.stm on Thursday, March 19, 1998 by 16:02 GMT
8. Daniels JD, Radebaugh LH, Sullivan DP. International Business: Environment and Operations; 2007.
9. Heakal R. What is an Emerging Market Economy; 2003. (Retrieved June, 9, 2007)
10. Krugman PR. International economics: Theory and policy, 8/E. Pearson Education India; 2009.
11. Performance Group. Performances Veille Secteur Public Et Institutions Numéro 297 - Semaine 42 du 14 au 20 Octobre 2013. Available:http://www.perfcons.com/page/doc/PVeille_n297/secteur_public297.pdf
12. Aribisala F. ECOWAS imperative for Nigeria. In Nigeria Development & Finance Forum, Policy Dialogue, no Date, Retrieved. 2014;24.
13. Udoh EO. Integration and politics among West African states: The Nigerian experience. Humanities. 2015;1(1):30-41.
14. Couharde C, Coulibaly I, Guerreiro D, Mignon V. Revisiting the theory of optimum currency areas: Is the CFA franc zone sustainable? Journal of Macroeconomics. 2013;38:428-441.
15. Park YH, Kim Y, Jang JM, Jeon H. The role of international development finance institutions in financing infrastructure in Africa and Its implications for Korea. KIEP Research Paper No. World Economic Update. 2014;14-35.
16. Dupraz CL, Postolle A. Food sovereignty and agricultural trade policy commitments: How much leeway do West African nations have? Food Policy. 2013;38:115-125.
17. Chete LN, Adeoti JO, Adeyinka FM, Ogundele O. Industrial development and growth in Nigeria: Lessons and challenges (No. UNU-WIDER Research Paper WP2014/019); 2014.
18. Lama R, Rabanal P. Deciding to Enter a Monetary Union: The role of trade and financial linkages. IMF Working Papers 12/240, International Monetary Fund; 2012.
19. Cieślik A, Michałek JJ, Mycielski J. Measuring the trade effects of the euro in Central and Eastern Europe. The Journal of International Trade & Economic Development. 2012;21(1): 25-49.
20. Tsangarides CG, Qureshi MS. Monetary union membership in West Africa: A cluster analysis. World Development. 2008;36(7):1261-1279.

APPENDIX

Table 1. Model summary showing relationship between bilateral trade and monetary union

Model	R	R square	Adjusted R square	Std. error of the estimate	Durbin-Watson
1	.221[a]	.049	.045	6.60195	1.912

a. Predictors: (Constant), MU
Source: Field Survey, December, 2016

Table 2. ANOVA of the relationship between bilateral trade and monetary union

Model		Sum of squares	Df	Mean square	F	Sig.
1	Regression	497.403	1	497.403	11.412	.001[b]
	Residual	9676.026	222	43.586		
	Total	10173.429	223			

a. Dependent Variable: BT
b. Predictors: (Constant), MU
Source: Field Survey, December, 2016

Table 3. Coefficients of the relationship between bilateral trade and monetary union

Model		Unstandardised coefficients		Standardised coefficients	T	Sig.
		B	Std. error	Beta		
1	(Constant)	32.404	2.333		13.891	.000
	MU	.189	.056	.221	3.378	.001

a. Dependent Variable: BT
Source: Field Survey, December, 2016