Babalola, Abdurrauf; Olalowo, Elias Bayo

Article

Empirical analysis of the prospect for single currency in West African sub-region

Academic journal of economic studies

Provided in Cooperation with:
Dimitrie Cantemir Christian University, Bucharest

Reference: Babalola, Abdurrauf/Olalowo, Elias Bayo (2019). Empirical analysis of the prospect for single currency in West African sub-region. In: Academic journal of economic studies 6 (1), S. 12 - 21.
http://www.ajes.ro/wp-content/uploads/AJES_article_1_308.pdf.

This Version is available at:
http://hdl.handle.net/11159/4660

Academic Journal of Economic Studies
Vol. 6, No. 1, March 2020, pp. 12–21
ISSN 2393-4913, ISSN On-line 2457-5836

Empirical Analysis of the Prospect for Single Currency in West African Sub-Region

Abdurrauf Babalola[1], Elias Bayo Olalowo[2]

[1,2]Department of Economics, Al-Hikmah University, Ilorin, Nigeria, E-mail: abdclement@yahoo.com

Abstract

The study investigated empirically, the prospect for single currency in West African sub-region. Latest data from the fifteen members of ECOWAS was collected on basically six major criteria for monetary union. Simple bar chat was used to showcase the position of each member at present and the readiness for such monetary union. Descriptive statistics was employed to analyse the convergence tendency of member states using all six criteria which are economic indicators. The result divulged that, except for exchange rate that has convergence to a large extent, all the other criteria were very far from merging or uniting. In essence, the ECOWAS members are not fully prepared for such a monetary union, come January 2020. The study suggests that more time be given to all members to improve on their economic indicators and surplus members should assist the shortage states to realize this aim.

Keywords

ECOWAS, ECO Currency, Single Currency

JEL Codes: E52, E58, F15

Received: 12 December 2019 **Revised: 20 December 2019** **Accepted: 02 January 2020**

1. Introduction

All nations of the world are clamouring for ease of doing business, economic growth and development. To achieve these objectives, governments need to put in place policies that would facilitate the objectives. Part of the objectives may include economic integration and single monetary zone. This paper intends to examine the possibility and implication of Economic Community of West Africa States single monetary zone on the Nigeria economy. The operation of the monetary zone is to commence in the year 2020. Implementation of Eco was first planned to commence in 2003, but shifted several times to 2005, 2010, 2014, and now to 2020. With the present prevailing economic situations in several West African countries which include high rate of inflation as a result of importation of foreign goods including food items; for example, up to the year 2015 Nigeria was spending $6.5 billion on food imports.

The study becomes imperative as a result Nigeria's position within the community in terms of its population and economic size. The main objective of this study is to showcase the present state of affairs of ECOWAS based on the main criteria for monetary union and then analyse the possibility of forming the monetary union through the Eco currency in 2020. ECOWAS is a regional organization established on May 28, 1975. It was set up purposely to promote cooperation and integration leading to the establishment of an economic and monetary union in West Africa. The sub-region organization comprised of eight Francophone countries which are Benin, Burkina Faso, Cote Divoi're, Guinea, Mali, Niger, Senegal and Togo; five Anglophone nations comprising Gambia, Ghana, Liberia, Nigeria and Sierra Leone while Guinea Bissau and Cape Verde are Portuguese speaking countries (Cummunity Computer Centre, 2016).

Despite the language barrier, the fifteen member nations with the population of almost 350 million people and over $650 billion in GDP agreed to work together as a single regional economic block over 44 years ago. Although the aim of the economic block was total economic integration up to monetary union, which is still a mirage, the community has come up with 2020 as the year of common currency after intensive deliberation of twenty years. If the spirit of co-operation exhibited in 1975 and the level of achievement and failure of the union is anything to go by, it becomes imperative that this final step of the association of the fifteen countries be assessed.

It was the use of silver Spanish dollars which spread from the Spanish territories in the America to Asia and Europe between 17th and 18th century that may be described as the first worldwide single currency. This was as a result of Spain's political hegemony internationally. The importance of Spanish commercial routes across Atlantic and the Pacific as well as the quality of its coin gave the currency international recognition and acceptance as far as Caroline Islands, Micronesia, Guam, Philippine and China, and became legal tender in all above mentioned countries up to South East Asian nations till the mid-nineteenth century. Acceptance and usage of Spanish coins extended to European city states, Iberian Peninsula, Milan, Sicily, and Sardinia. Spanish dollars as it was known than was being spent in France, Spanish, Netherlands, Austrian Habsburg as well as South and Central America (Sumner, 1898).

As a result of this common currency during that period, business that period, business among the nations and territories was easily conducted in view of the fact that currency conversion had been eliminated. Bretton Woods System which was a fixed exchange arrangement between American dollar and other currencies came into being after World War II (WW II) in 1944 when exchange rate of the British pound was set at slightly over $4 to the pound. At that point, American dollar became a reference point for business transaction that other currencies were exchanged at a fixed rate and became the major internationally acceptable trade currency (Cordingly, 1998). This overriding influence of dollar as quoted currency for international trade remained so until March 1998 when European Commission ruled that eleven of the fifteen member states were eligible to proceed to Economic and Monetary Union (EMU), Euro came into being on January 1, 1999. In order for European countries to qualify as a member of the common currency they had to meet economic convergence criteria. This means they have to achieve similar levels of growth, inflation, budget deficits as a percentage of GDP, balance of payment.

Since Euro came into being, it has become a competitive currency to dollar in terms of international trade. Presently, it is controlling 40% of international trade while the remaining 60% is dollar denominated business. A very high percentage of European intra-trade is euro denominated. Non-Europeans may wonder why Europeans adopted euro as a common currency. They did so for several reasons which include both political and economics. Common currency reduces border controls and it also prevents trade war that may lead to political conflicts among common currency nations. There is no cost of currency conversion in order to engage in business. Price of goods and services can be easily compared within all eurozone.

According to IMF, in 2017, the EU had a combined GDP of $21 trillion, 17% share of global gross domestic product by purchasing power parity (PPP). As a political entity it is represented in the World Trade Organisation (WTO) and its member states own the estimated second largest after the United States US $98.2 trillion net wealth in the world. This is equivalent to 25% of the global wealth. This global economic wealth of the European Union may be attributable to their economic integration and common currency. Nineteen member states belong to a monetary union known as eurozone which uses the Euro as a single currency. The currency union represents 342 million EU citizens. The euro is the second largest reserve currency and it is the second most traded currency in the world after the US dollar. This outstanding achievement within twenty years, that is, 1999 to 2019 is a good measure to benchmark ECOWAS common currency success when it becomes a reality and well managed. At present, member nations are warming up for the Eco currency comes January, 2020. What is the present status of ECOWAS? Are members ready in real terms? What are their convergences in terms of the economic indicators?

1.1. Justification of the study

Most of the previous studies on single currency in ECOWAS have been theoretical. Such studies of Ferdinand and Daniel (2016), Yomi (2019), Aloysius (2019); Asongu, (2019) and many others have not been able to assess present state of affairs of the member states to diagnose convergence based on the laid down criteria for monetary union. This study is out for analysis and unique since it analyses the possibility of single currency using many criteria which have not been used together be previous researchers. Apart from the individual countries that would identify their position compared with other members, the prospective central bank of ECOWAS or its monetary authority would employ the work to identify the surplus and shortage members in the region. Researchers could use the study for further analyses.

2. Lierature review

2.1. Conceptual framework

Monetary union, which is synonymously used as currency union, is a regime in which countries make use of identical currency. In some instances, multiple currencies are applicable but the currencies would have a pegged exchange rate with one another. Common currency is the coming together of several sovereign countries in order to have a common means of settling business transaction within participating countries and internationally. Whatever being the local currency of the member countries would be abandoned and replaced with the common currency. Frequent questions usually asked about common currency include why common currency, its benefits to the participating nations who would lose their monetary and fiscal control? Membership of common currency automatically turns all countries involved to economic family in which economic activities must converge (Neuby and Barret, 2017).

Firstly, exchange barrier is to be totally removed, and international business transactions become seamless. Furthermore, investment between member countries and financial intermediation that would enable resources to flow within the monetary zone from the surplus unit to that of deficit unit would become unhindered and availability of credit becomes easily and this would economic growth of member nations. Secondly, since members of the monetary union will subject their monetary policy to one central bank that would prevent arbitrary printing of money to pay national debt, national inflation would be curtailed. As a result of this, debt repayment within the monetary union will be predictable as a result of the fairly uniform interest and inflation rates within the monetary zone. When the union becomes a reality, the abysmal low rate of trade among West African nations will flourish and foreign direct investment (FDI) among them will blossom.

2.2. Theoretical review and framework

The main theory of monetary union or zone is the theory of optimum currency area of Mundell (1961). This was the same foundation theory employed by the monetary union of Europe. The theory specifies the necessary features for optimality of the currency, sustainability of the plan and economically viable and efficient in a far time. According to the theory, members should satisfy some four conditions. Firstly, there should be large and integrated labour market that makes labour mobility very high – no barrier to labour movement from one member country to another. Secondly, free movement of price and wage in order to eschew trade inequality within the region. Thirdly, a central mechanism that allows fiscal transfer to deficient countries – transfer from surplus member to shortage state. Fourthly, business cycle of these members should be similar (Asongu, 2019). Other criteria were postulated by Kenen (1969), Vaubel (1978) and Taylor (1994). Their ideas have been captured in the models of Mundell (1961) and WAMI (2013)

At the wake of ECOWAS forum, convergence criteria came on board, which are six in number. The West Africa Monetary Institute (WAMI, 2013), in line with this, formulated ten convergence criteria: four as primary criteria; and six as secondary criteria. Ten convergence criteria set out by the West African Monetary Institute (WAMI) must be met for Eco to become a reality. However, it could be extremely difficult if not impossible to meet the criteria by most of ECOWAS members as stated by WAMI.

WAMI Criteria for ECOWAS Group to join monetary Union

Primary criteria

- A single –digit inflation rate at the end of each year.
- A fiscal deficit of no more than 4% of the GDP.
- A central band deficit financing of no more than 10% of the previous year's tax revenues.
- Gross external reserve that can give import cover for a minimum of three months.

Secondary criteria

- Prohibition of new domestic default payments and liquidation of existing ones.
- Tax revenue should be equal to or greater than 20% of the GDP.
- Wage bill to tax revenue should be equal to or less than 35%.
- Public investment to tax revenue should be equal to or greater than 20%.
- A stable real exchange rate.

In essence, this study adapts the theoretical foundation of Mundell (1961) which is also adapted by WAMI (2013).

2.3. Empirical review

Previous studies on single currency in ECOWAS have been theoretical. Such studies of Ferdinand and Daniel (2016), Yomi (2019), Aloysius (2019); Asongu, (2019) to mention a few, are not analytical. This study is analytical and unique since studies to analyse single currency are scanty. One of the analytical studies is that of Olawale (2005), who did analysis on the single currency using descriptive statistics for data between 1970 and 1997, and exchange rate between two countries each in ECOWAS. His finding revealed that ECOWAS is not ripe for the union of single currency. However, the data used were quite old and also, only exchange rate as a criterion, was employed. Most recent is the work of Mati, Civcir and Ozdeser (2019) with same aim to evaluate the viability of monetary union in West Africa. The used inflation and output models to represent two major criteria for the currency union. They analysed their data using correlation, impulse response and variance decomposition. Their findings revealed that member states are not well prepared for the monetary union. Also, they have only been able to employ two variables for the convergence.

2.3.1. West African Monetary Zone

West African Monetary Zone (WAMZ) is a group of six countries within ECOWAS that came together in the year 2000 that planned to introduce a common currency to be known as *Eco.* These countries comprise of Gambia, Ghana, Guinea, Nigeria and Sierra Leone which are the initial five and joined in February 2010 by Liberia. Guinea is the only francophone country among the group. Establishment of WAMZ was an attempt to create a strong stable currency to rival the CFA franc whose exchange rate is tied to that of the *euro* and it is guaranteed by the French Treasury. The vision and mission of ECOWAS is for the CFA franc and Eco to merge so that all of West and Central Africa countries may be operating a single stable currency. The launch of the new currency is the responsibility of West African Monetary Institute based in Accra, Ghana.

ECOWAS with over 350 million citizens presently has a good population to have large volume of trade whenever the common currency (Eco) becomes operational. Presently, there are seven currencies within the sub-region namely – CFA franc, cedi, escudo, dalasi, dollar, naira and leone. This is one of the problems economic integration/single currency is to get rid of (Central African Republic, 2017). Since the citizens of the sub-region would no longer face the problem of currency conversion, foreign direct investment (FDI) and free movement of investment capital would be easily achievable. As a result of this, capital would move from surplus region to deficit region of the monetary zone. Migration of citizens would become easier. With the above impressive population figure that can be considered as an essential factor that should sustain single currency, there are obstacles that must be areas of concern to the proponent of Eco.

2.3.2. Obstacles facing single Currency Zone

Several ECOWAS members will have some hurdles to scale. Criteria such as single inflation rate of 5% or less, as well as national budget deficit financing are part of them. Nigeria rate of inflation by the end of August, 2019 was over 11%; those of Ghana and Sierra Leone were over 12%, while Liberia rate of inflation was 26.4% and the highest among them presently. All francophone nations within ECOWAS have very low inflation rate which ranges from as low as 0.4% to 8.7%. This impressive inflation rate may be due to the fact that their common currency CFA franc is pegged to Euro because French Treasury guarantees it convertibility to euro at a fixed parity (Solans, 2003). Despite this fact, economic growth within the nations has not significantly out-performed other sub-Saharan African countries and surprisingly intra-trade among them has been abysmally low. Vigorous and sustainable intra-trade among single currency zone is one of the cardinal objectives of common currency, and unless and until this is achieved, establishment of single currency would not have met its desired objective (Liedong, 2017).

Macroeconomic convergence is another factor that the proponents of ECOWAS common currency should be worried about. As at 2018 budget period, public debt to gross domestic product (GDP) among the fifteen members ranged between 18.2% to as high as 124.64%. If eligibility to become a member of the currency zone by the year 2020 will be based on low public debt to GDP, many of the countries may not qualify. As a result of the present condition of public debt to GDP, the date set for the commencement of single monetary union will not materialize and it may have to be postponed for several more years (NAPTOR, 2017).

Table 1. ECOWAS member's budget and public debt record 2017-2018

Country	Budget deficit as % of GDP 2017-2018	Percentage of Public Debt to GDP
Benin	4.7	22.10
Burkina Faso	7.2	38.42
Cape Verde	2.6	122.80
Cote D'ivoire	3.8	24.50
The Gambia	3.9	83.15
Ghana	7.2	59.56
Guinea	4.4	42.90
Guinea Bissau	5.1	28.10
Liberia	4.4	28.80
Mali	4.8	35.90
Niger	5.9	33.00
Nigeria	2.2	28.42
Senegal	3.5	64.45
Sierra Leone	5.8	26.20
Togo	8.1	74.10

Source: Compiled by the authors

Implementation of Eco was first planned to commence in 2003, but shifted several times to 2005, 2010, 2014, and now to 2020. With the present prevailing economic situations in several West African countries which include high rate of inflation as a result of importation of foreign goods including food items; for example, up to the year 2015 Nigeria was spending $6.5 billion on food imports (Haque, 2019).

2.3.3. Implication of ECOWAS Single Currency on Nigeria Economy

Economic situation of many ECOWAS members today does not give observers of common currency in the sub-region cause for optimism; however, its establishment would give great impetus to Nigerian economy whenever it becomes operational. The country's economy represents two thirds of the member nations' GDP and has seventy percent of the group's population. As a result of globalization and trade openness, ECOWAS members are benefitting from international business. Exports from the sub-region are dominated by Nigeria and Ivory Coast that share 87% of the trade volume. Nigeria provides a lion share of 77% of the group's exports while Ivory Coast accounts for the remaining 10%. Ghana ranks thirds on export list with 4% while Senegal ranks fourth with 2%. Mali is the fifth ECOWAS exporter with 1.7%. Benin, Burkina Faso, Guinea, Niger and Togo are responsible for 1% each of ECOWAS exports. By 2015, the government turned serious attention to agriculture to end food importation, become food sufficient and food secured.

As Nigeria presently embarked on economic diversification into agriculture/agro-allied venture, manufacturing, solid mineral exploitation, tourism and entertainment its economy would experience higher growth whenever West African common currency becomes a reality. Its Anchor Borrowers Programme through which farmers can acquire single interest loan agriculture loan through Central Bank of Nigeria has resulted in self-sufficiency in rice production after several decades of massive importation. With the present rate of rice production, milling companies are getting ready for exportation of their products by the year 2020.

The inward looking programme of the country has started yielding result in view of the fact that both the private manufacturer in Ogun State of the country as well as the Nigeria Military Manufacturing Company Limited in Kaduna State are now manufacturing armored personnel carriers which are before now were on the shopping list of the nation. In addition to the above accomplishment in the area of manufacturing, another indigenous private agricultural equipment manufacturer has commenced operation in Plateau State. This is not the only achievement of the country in the past four years, economic diversification especially in the area of agriculture. The problem of insufficient availability of fertilizer which has retarded local agricultural production for many years has been solved. The bilateral agreement on phosphate (a fertilizer blending raw material) supply between Morocco and Nigeria has turned the nation to become self-sufficient in the production of fertilizer to the extent that the year 2020 has been designated as the year when export of excess production of Urea and NPK blend fertilizer export to West African nations will commence.

As the largest economy of the ECOWAS sub-region, if the proposed single currency takes off in 2020 and the African Continental Free Trade commences in the same year, Nigeria will become one of the leading beneficiary as demand for its products will blossom. To commence a single currency, it is imperative for the regional body to create and empower regional institutions such as West African Central Bank to manage and supervise the regional monetary policy. The regional commission has committed itself to do whatever is necessary to achieve its set objective, but what remains to be tested is whether the commitment is real or rhetorical. Surrendering national sovereignty by the political leaders in the regional countries in terms of political power and wealth control should be the concern of single currency observers. If and when West African Single Currency is established, Nigeria will be the arrow-head and catalyst of the regional association.

3. Methodology of research

3.1. Source of data

The main source of data for this study was from the World Bank Group 2018/2019, in which the study employed the latest data reported mostly in 2019. However, some countries have latest data on the World Bank group dating back to 2015. In essence, the study did not use time series data for analysis.

3.2. Technique for analysis

Since time series data are used and presentation of the present state of affairs for all indicators for monetary union as stated by WAMI, thus the study employed simple bar chart to showcase the indicators of member countries and then used descriptive statistics to analyse the data most especially standard deviation which is of germane in the study. These techniques were used to analyse data for six major, out of ten indicators of WAMI for monetary union- ECO currency. These indicators are inflation rate; fiscal deficit; external reserve; tax revenue; public debt; and exchange rate stability.

Vol. 6 (1), pp. 12–21, © 2020 AJES

4. Results

Results of analysis are presented and interpreted based on the six major indicators of WAMI for monetary union- ECO currency.

4.1. Results of Inflation Rate

The West African Monetary Institute (WAMI) set out that ECOWAS members must have a single-digit inflation rate as the first primary criterion. It is evident in figure 1 that the francophone countries have quite similar rates which range between -3.6% and 1.7%, which are very low. The members are Benin (1.7%); Burkina Faso (1.1%); Cote D'ivoire (-0.3%); Guinea Bissau (-.3%); Mali (-2.2%); Niger (-3.6%); Senegal (0.7%); and Togo (-0.3%). These countries recorded the lowest single-digit inflation rate so far. These non-francophone countries of Cape Verde (0.7%); the Gambia (7.65%); Ghana (7.6%); and Guinea (9.4%) also recorded a single-digit inflation rate. However, countries like Liberia (29.9%); Sierra Leone (15.4%) and Nigeria (11.24%) have run-away inflation rate and hence constitute a large volume of bottle- neck to monetary union in the region. It is also evident from figure 2 that the mean value of inflation distribution is 5.25, meaning that about six countries are far above the average inflation rate. The standard deviation which is of high interest, depicts 8.75 signifies a high deviation from the standard. It is recommended that the standard deviation is very close to zero if not zero.

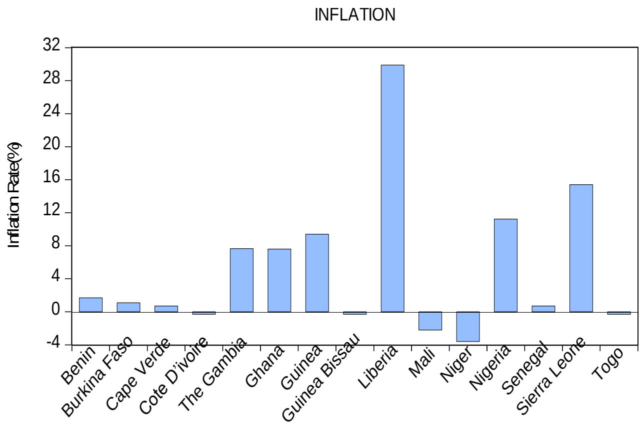

Figure 1. Inflation Rate of Member States

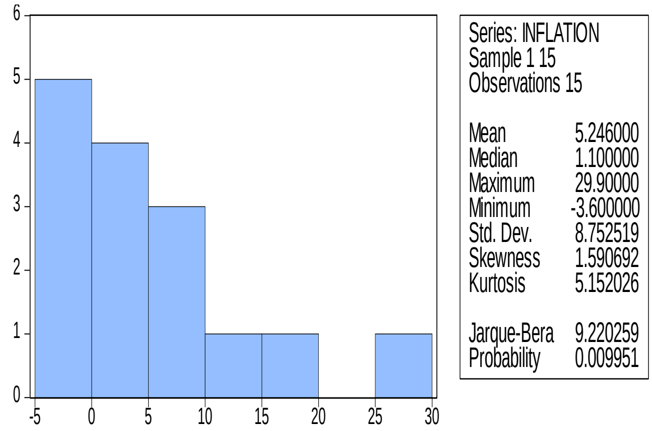

Figure 2. Descriptive Statistics of Inflation Rate

4.2. Fiscal Deficit

A second primary criterion is that fiscal deficit should not be more than 4% of GDP. Evidence from figure 2.1 that, of all fifteen member states, five members of Cape Verde (2.6%); Cote D'ivoire (3.8%); the Gambia (3.9%); Nigeria (2.2%); and Senegal (3.5%), with Nigeria being the lowest, met this condition implying that only about 33% of members met this fiscal deficit condition. Even the francophone countries could not meet this condition of no more that 4% xcept Senegal (3.5%). Togo has the highest fiscal deficit of 8.1%.

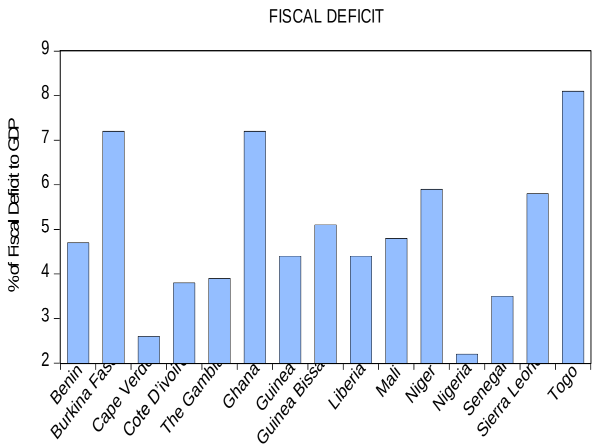

Figure 3. Fiscal Deficit of ECOWAS

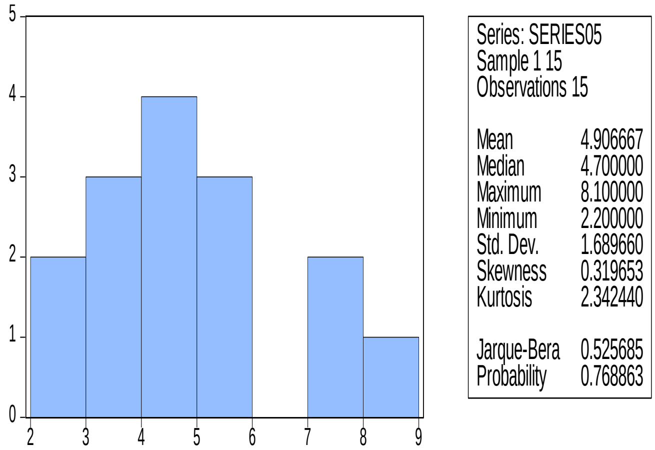

Figure 4. Descriptive Statistics of fiscal Deficit of ECOWAS

Counting on only standard deviation of fiscal deficit in Figure 4, the value of 1.71 indicates a high variation which tends to be far from the mean (5.01). This implies that ECOWAS does not have close or similar experience as far as fiscal deficit is concern.

4.3. Tax Revenue

One of the secondary criteria of WAMI for monetary union is that, tax revenue should be equal to or greater than 20% of GDP. Figure 5 showcases the result of tax revenue as percentage of GDP of the member states.

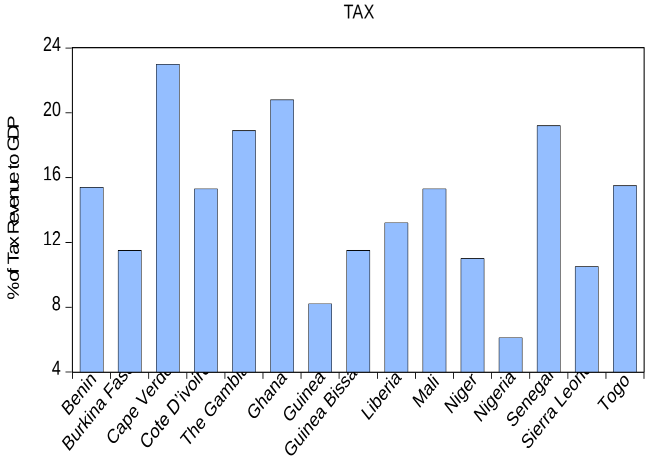

Figure 5. Tax Revenue to GDP of ECOWAS

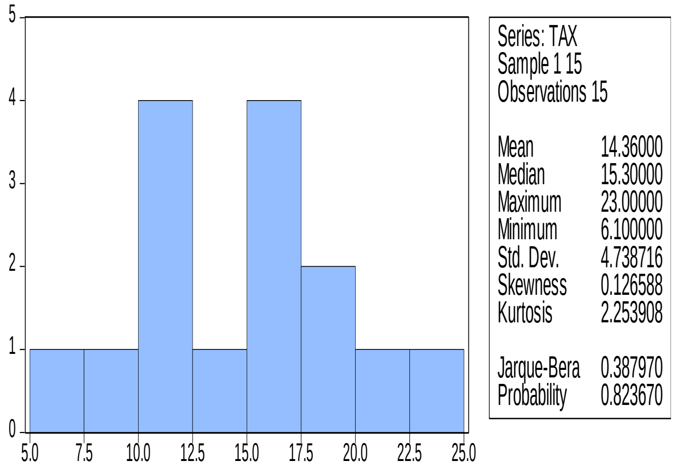

Figure 6. Descriptive Statistics of Tax Revenue of ECOWAS

Of all the members, only Cape Verde with 23% and Ghana, 20.8%, are able to scale the 20% bench mark. Very close to this bench mark are countries like Senegal (19.2%) and the Gambia (18.9%). Other members that are close are Togo (15.5%); Benin (15.4%); Cote D'ivoire (15.3%); and Mali (15.3%). Seven members are quite far from the bench mark. On Figure 6, the mean value of tax revenue of all members is 14.36%, implying that, even at average, member states could not realize the bench mark of 20%. Also, the standard deviation (4.74) is high, indicating that the members, through tax revenue, are not converging to a good term.

4.4. Public debt

Public debt to GDP is anticipated not to be more than 70% in the six-convergence criteria. Following the result in Figure 7, only three members exceed this bench mark, namely: Cape Verde (122.8%) being the highest so far; the Gambia (83.15%); and Togo (74.1%). All other members meet this condition with Benin (22.1%) as the lowest indebted member when compared with GDP. The standard deviation (28.34) result in Figure 8 shows that there is large amount of disparity among member states.

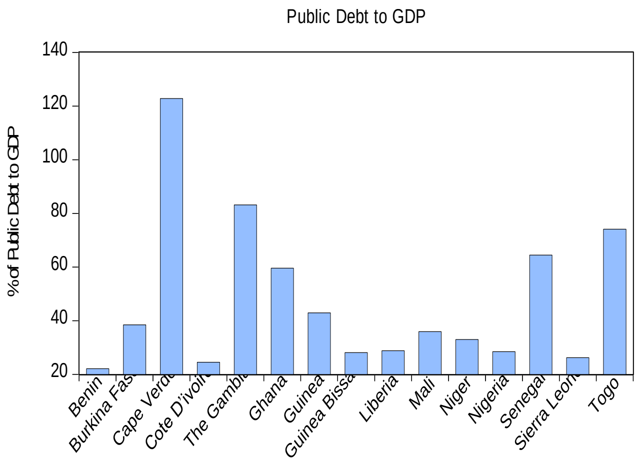

Figure 7. Public Debt to GDP of ECOWAS

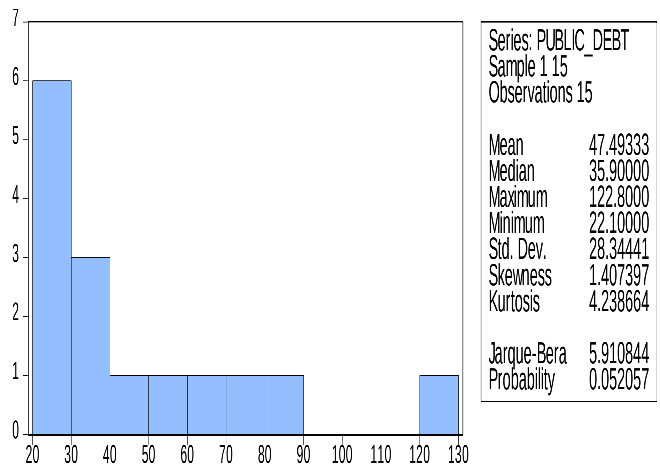

Figure 8. Descriptive Statistics of Public Debt

Vol. 6 (1), pp. 12–21, © 2020 AJES

4.5. Exchange Rate

Another criterion for monetary union given in ECO's six criteria and placed as a secondary by WAMI is a stable exchange rate. Figure 9 shows the exchange rate position of member state as against the US dollar. Ghana (0.18 to US$) has the highest and most powerful currency in ECOWAS, followed by the Gambia (0.02 to US$) and Cape Verde (0.0099 to US$). Figure 10 showcases the convergence of exchange rate within members. The standard deviation (0.046) shows a close-to-zero value, implying that, the exchange rates of members are significantly equal.

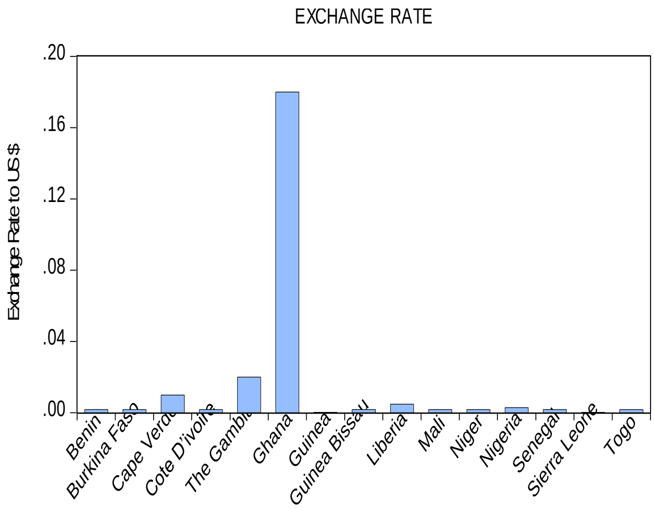

Figure 9. Exchange Rate of ECOWAS

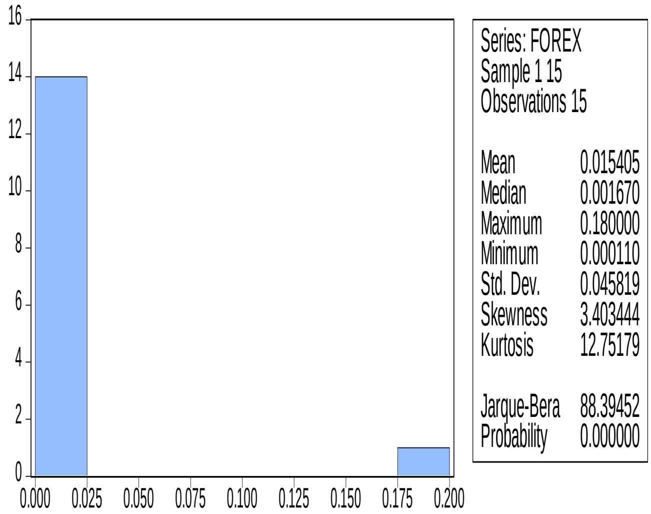

Figure 10. Descriptive Statistics of Exchange Rate

4.6. External reserve

The criterion is that, member countries should have a gross external reserve that can give import cover for a minimum of three months. Figure 11 depicts the result of ECOWAS external reserve with Cape Verde (US$63,496.6) taking the lead, followed by Nigeria (US$40,464.2), Ghana (US$8,226.1) and Guinea (US$1,224.99). Since one of the essences of reserve is to serve as buffer to correct any exchange rate or international transaction shock, it is important for members to improve their reserves.

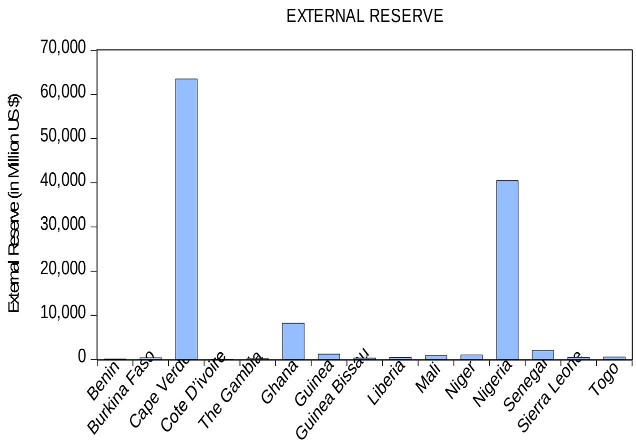

Figure 11. External Reserve of ECOWAS

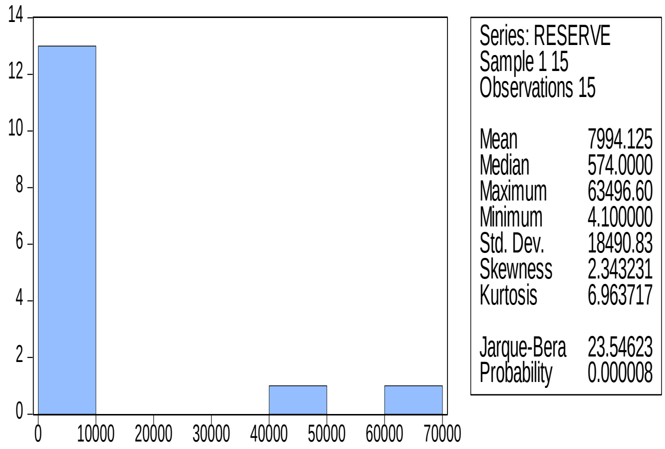

Figure 12. Descriptive Statistics of External Reserve

Figure 12 shows the degree of convergence member states have and this explains how efforts will be put in forestalling normalcy. The mean value of this reserve is 7994.13, which means, when compared with the members with low reserves, more than half the members are below this average. Also, the standard deviation (18490.83) is quite high, implying that the dispassion is too high. There is more to do in terms of making the convergence, knowing fully well that, external reserve is used to augment imbalances in foreign exchange market.

5. Implication of the findings

From the six criteria showcased, the indicator of Inflation rate used implied that, even at average, the rate is exorbitant as it will make the purchasing power of currency to be low and weak, and it will affect the worth of that currency on public debt to GDP. The gap is quite wide and the degree of dispersion is much. The implication of high public debt profile is that implication it will have on budget through debt servicing. The exchange rate result showed that, there is convergence within the members. However, this is the only indicator that gave a near total convergence and symmetry according to the standard deviation. It shows readiness for monetary union if at all this is the only condition. The external reserve of ECOWAS members is quite poor. The gap between highest and lowest is outrageous and calls for recovery. This implies that members are not exporting their goods enough to other parts of the world to earn more foreign reserve.

Tax revenue also showed some disparity, which means there is asymmetry in the rate of tax collection to GDP. This will lead to nothing but fiscal deficit which could be the main reason for fiscal imbalance that is very common in the region. It could also be as a result of leakages from the national treasury as it is quite common in developing nations. Generally, the implication of the study is that the member states are not fully prepared due to the asymmetric nature of their economic indicators as the result divulged. This is in line with the empirical studies of Olawale (2005) and Mati *et al.* (2019).

7. Conclusions and recommendations

The study investigated empirically, the prospect for single currency in West African sub-region. Latest data from the fifteen members of ECOWAS was collected on basically six major criteria for monetary union. Simple bar chat was used to showcase the position of each member at present and the readiness for such monetary union. Descriptive statistics was employed to analyse the convergence tendency of member states using all six criteria which are economic indicators. The result divulged that, except for exchange rate that has convergence to a large extent, all the other criteria were very far from merging or uniting. In essence, the ECOWAS members are not prepared for such a monetary union, come January 2020. Based on the result of findings, the study proffers the following recommendations:

- The ECOWAS should strive to reduce the non-convergence level to almost zero by encouraging the surplus members to allow goods and service flow to the shortage members in the region.
- Member nations should try reduce their debt profile to GDP most especially, those countries that have above 70% or better still, allow the public debt to remain while increasing their gross domestic product
- Members should maintain the level of exchange rate to make it stable for long and the external reserve be used efficiently to stabilize the rate of exchange
- There is need to improve the net export of member states to boost foreign reserve.
- Tax base of members should be broadened
- Leakages in fiscal policy should be blocked through fiscal discipline

References

Aloysius, U. O. (2019). An Evaluation of the Single Currency Agenda in the ECOWAS Region. Africa in Focus. brookings.edu./blog/Africa-in-focus.

Asongu, S. A. (2019). Can A West African Currency Union Work? https://www.project- syndicate.org/commentary/conditions-for-a-west-african-currency-union-by-simplice-asongu-2019-10

Community Computer Centre (2016). Treaty. A Newsletter published by CCC and Directorate of Communication. ECOWAS: Togo

Cordingly, D. (1996). Under the Black Flag: The Romance and the Reality of Life among the Pirates. Random House, p. 36

Ferdinand, B. & Daniel, N. (2016). Why and When to Introduce a Single Currency in ECOWAS. *African Economic Brief.* Vol. 7 Issue 1.

Haque, N. (2019). West Africa economy: Leaders push for single currency – Eco." www.aljazeera.com

Kenen, P.B. (1969). The Theory of Optimum Currency Areas. An Eclectic View in

Mundell R. A. and Swoboda, A. eds., Monetary Problems and International Economy. Chicago: University of Chicago Press.

Liedong, T. A. (2017). Why the Quest for a Single Currency for West Africa won't materialize soon. United Kingdom. theconversation.com why-the-quest-for-a-single-currency-for-west-africa.

Mati, S., Civcir, I. & Ozdeser, H. (2019). ECOWAS Common Currency: How Prepared are its Members? *Investigación económica / Escuela Nacional de Economía, Universidad Nacional Autónoma de México. Vol. 78 Pg. 89-119.*

Neuby, B. L. & Barret, S. M. (2017). The Case for a Single Currency. *Journal of Advances in Economics and Finance*, Vol. 2 No. 2.

Solans, E, D. (2003). An Analysis of the International Role of the Euro: Its impact on economic relations between Asia and Europe. *European Central Bank,* www.ecb.europa.eu

World Bank Development Indicators (2019). https://databank.worldbank.org/data/

World Bank, (2015). Enhancing the Climate Resilience in African Infrastructure. www.worldbank.org>content>dam>worldbank>Africa

Vol. 6 (1), pp. 12–21, © 2020 AJES

Central African Republic(2017) - Country engagement note for the period FY2016-2017 *(English)*.Washington, D. C. World Bank Group.http://documents.worldbank.org/curated/en/726401467991967379/Central-African-Republic-Country-engagement-note-for-the-period-FY2016-2017

Nigerian Annual Trade Policy Report (NATPOR) (2017). Trade for modernization, growth and job creation. *Nigerian Office for Trade Negotiations.*

Mundell, R.A. (1961). A Theory of Optimum Currency Areas. *American Economic Review*, November 1961.

Vaubel, R. (1978). Real Exchange Rate Changes in the European Community: A New Approach to the Determination of Optimum Currency Areas. Journal of International Economics, Vol. 8, Pg. 319-39.

Olawale, O. (2005). An Evaluation of the Viability of a Single Monetary Zone in ECOWAS. *African Economic Research Consortium,* Nairobi.

Taylor, A. B. (1994). Problems of Monetary and Financial Integration in ECOWAS. *West African Economic Journal*, Vol. 7, Pg. 143-158.

Yomi, K. (2019). West Africa's "Eco" Single Currency Ambition has a Slim Chance of Success. https://qz.com/africa/1657000

Sagiru, Irfan & Husseyin (2019). Sumner, W. G. (1898). "The Spanish Dollar and the Colonial Shilling". *The American Historical Review*. 3(4): 607–619.

West African Monetary Institute (2013) ''Reassessment of the WAMZ Convergence Criteria: Revisited'' Document WAMIIMAO/CC.A/2013/03, Accra, June.

West Africa Monetary Zone (2014) ''Report of the 30th meeting of the Committee of Governors of Central Banks of the West African Monetary Zone'', Banjul, The Gambia -January 16.

Lawrence, S. et al. (2001). Persistence of Web References in Scientific Research. *Computer*, *34*, 26-31. http://dx.doi.org/10.1109/2.901164

Smith, Joe. (1999). One of Volvo's core values. [Online] Available: http://www.volvo.com/environment/index.htm (July 7, 2007)

Strunk, W., Jr., & White, E. B. (1979). *The elements of style* (3rd ed.). New York: Macmillan, (Chapter 4).

Van der Geer, J., Hanraads, J. A. J., & Lupton R. A. (2000). The art of writing a scientific article. *Journal of Scientific Communications*, *163*, 51-59.