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# Economic Integration in West Africa: A Reconsideration of the Evidence

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## Abstract

There is no doubt that economic integration in the sub-region would be beneficial to member countries. However, the conditions precedent suggest the need to consider other factors outside the convergence criteria for the West African Monetary Zone (WAMZ) region and the link between the Franco-phone countries with France. Using stylized facts and preliminary panel results, there are still unsettled important issues as the region moves towards economic integration. These issues include but not limited to political will, huge infrastructure deficit and fiscal imperatives.<sup>1</sup>

**Keywords:** economic integration, ECOWAS, unsettled issues

**JEL classification:** F02, 01

## 1. Introduction

The Economic Community of West Africa States (ECOWAS) was established in 1975 with the aim of achieving a monetary union for the sub-region. ECOWAS consists of 15 countries that were colonized by the British, French and Portugal. The process towards economic integration has not been smooth. After 43 years of existence, with some marginal gains, enormous challenges face the bloc.

There is no doubt that there are benefits associated with a monetary union, for example, large market as well as a regional bloc for negotiating with other groups globally. The Institution has set several deadlines for eventual integration, but each deadline has not been met. Recently, the Heads of state and Governments have insisted on the year 2020 for eventual monetary union. The technocrats and policymakers seem to be working hard to meet the new deadline of 2020.

It must be noted that the Franco-phone economies are integrated (West African Economic and Monetary Union) with one Currency (CFA), one central bank and several approved protocols.

In 2000, in order to fast-track integration, another monetary zone known as the West African Monetary Zone (WAMZ) was established to work towards the

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convergence of the currencies of the economies of WAMZ with the aim of aligning with the CFA to have a single currency for the region.

The WAMZ consists of The Gambia, Ghana, Liberia, Nigeria and Sierra Leone. An agency called the West African Monetary Institute (WAMI) was created to drive the process. WAMI was to ensure the convergence of the currencies of the six countries—the goal post for achieving a common currency has been shifted several times. The last deadline was the year 2020. The attempt to shift the 2020 deadline was resisted by the Heads of States and Governments.

Presently, the ECOWAS Commission has provided a single-track approach to a monetary union. The requirements for the fast-track approach are not too different from the convergence criteria set by the WAMZ. However, whether the proposed year of 2020 for the establishment of the monetary union is feasible is a matter of debate.

While the Heads of State and Governments appear to be optimistic at one hand, the technocrats on the other hand are pessimistic insisting that the primary criteria must be met by all the countries for integration to take place. Can the political consideration be ignored? After over 40 years of the creation of ECOWAS, the road towards a monetary union remains bumpy.

The objective of this paper is to re-examine the issues and possible challenges facing the West African sub-region as it ‘progresses’ towards economic integration.

The paper is organized as follows: following the introduction, Section 2 briefly examines the performance of the ECOWAS economy, while Section 3 provides the review of literature. Section 4 analyses the evidence using both stylized facts and regression approach. Section 5 provides the conclusion and recommendation. It is expected that the inherent discussion would provide further insights into the economic integration conundrum confronting the sub-region.

## **2. Performance of the ECOWAS economy**

The tables below briefly explain the performance of the West African economies for the period of 2011–2017. The growth in real GDP which stood at 6.2 percent in 2011 declined sharply to 2.8 percent in 2015. By 2016, all the economies in the West African Monetary Zone (WAMZ) were in a recession partly due to the collapse of commodity prices. The economic analysis of the fundamentals in the sub-region is the story of export in primary commodities whether agriculture and/or minerals. The fluctuations and volatility of commodity and mineral prices affect all other macroeconomic fundamentals either directly or indirectly (**Tables 1–3**).

The rate of inflation which was 11.2 percent in 2011 averaged single digit during the period, while the growth of money supply contracted at 19.5 percent in 2016 from a positive growth of almost 12 percent in 2011. Tax revenue as a percent of GDP remained very low during the period when compared to the African average. To meet the deficit/GDP criteria in spite of huge infrastructural deficit, this ratio remained within the benchmark with or without grants. It is necessary to note that if the deficit/GDP ratio is slightly violated in favor of capital projects (hard and soft infrastructures), there would be multiplier effects on the economies of the sub-region.

Throughout the period under review, growth of GDP in WAMZ was below that of the entire ECOWAS. However, in 2016 most of the economies in WAMZ were in recession; growth in GDP was very marginal for the entire ECOWAS. The sharp drop in export commodities as well as structural problems contributed to the recession in 2016. The recession in a large economy like Nigeria has impact on other countries in the region.

	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017*</b>
<b>ECOWAS</b>	<b>5.8</b>	<b>6.0</b>	<b>3.2</b>	<b>0.2</b>	<b>2.2</b>
<b>UEMOA</b>	<b>6.0</b>	<b>6.5</b>	<b>6.6</b>	<b>6.8</b>	<b>7.3</b>
Benin	7.2	6.4	2.1	3.9	5.4
Burkina Faso	5.7	4.2	4.0	5.9	7.4
Cote D'Ivoire	9.3	8.8	9.2	8.8	8.5
Guinea Bissau	3.6	1.0	5.1	5.1	5.4
Mali	2.3	7.0	6.0	5.8	5.3
Niger	5.3	7.5	4.0	5.0	5.2
Senegal	3.5	4.1	6.3	6.5	6.8
Togo	6.1	5.9	5.5	5.1	5.3
<b>WAMZ</b>	<b>5.7</b>	<b>6.0</b>	<b>2.6</b>	<b>-0.9</b>	<b>1.4</b>
The Gambia	4.8	0.9	4.3	2.2	3.0
Ghana	7.3	4.0	3.8	3.7	6.3
Guinea	3.9	3.7	3.5	6.6	6.7
Liberia	8.7	0.7	0.0	-1.6	2.5
Nigeria	5.5	6.2	2.7	-1.5	0.8
Sierra Leone	20.7	4.6	-20.5	6.3	5.6
Cabo-Verde	0.8	0.6	1.0	3.8	5.7

Source: WAMA /ECOWAS; \*\*Projections

Source: Annual Report and Statements of Accounts, West African Monetary Agency (WAMA), Freetown, Sierra Leone.

**Table 1.**  
Trends in real GDP growth rates in ECOWAS member countries (2013–2017).

It should be noted that the growth rate of 2.2 percent in 2017 is less than the growth rate of population which is about 3 percent. The growth rate must average about 10 percent and sustainable for 10–15 years to have a dent on poverty reduction.

	2015	2016	2017
<b>ECOWAS</b>	<b>8.9</b>	<b>15.5</b>	<b>13.6</b>
<b>UEMOA</b>	<b>1.3</b>	<b>0.3</b>	<b>0.9</b>
<b>WAMZ</b>	<b>10.2</b>	<b>16.5</b>	<b>15.7</b>
The Gambia	6.7	7.1	8.4
Ghana	17.7	15.4	12.1
Guinea	7.3	8.7	8.7
Liberia	8.0	12.5	10.8
Nigeria	9.6	18.6	16.1
Sierra Leone	8.9	9.5	19.1
Cape-Verde	-0.2	-1.8	1.7

Source: WAMZ: 2017 Report

**Table 2.**  
*Inflation in ECOWAS and WAMZ (2015–2017) (%).*

	2014	2015	2016	2017
<b>ECOWAS</b>	–2.2	–2.8	–3.5	–3.6
<b>UEMOA</b>	–5.9	–6.5	–6.4	–7.3
<b>WAMZ</b>	–1.6	–1.2	–3.0	–3.0
Cape Verde	–9.1	–6.4	–4.8	–4.8
Nigeria	–0.9	–1.7	–2.2	–2.7
Ghana	–7.1	–6.6	–11.0	–5.3
Cote d’Ivoire	–4.0	–4.3	–5.0	–5.7
Senegal	–8.5	–7.7	–7.0	–6.3

Source: Annual Report and Statement of Accounts, West African Monetary Institute (WAMI), Accra (various issues).

**Table 3.**  
*Budget deficit (excluding grants) as % of GDP in ECOWAS.And selected countries.*

Year	West Africa	SSA	Africa	Oil-importing countries
2009–2019	–2.9 (1.6)	–2.8 (–1.9)	–3.4 (–1.2)	–4.3 (–5.9)
2014	–2.8 (–1.6)	–3.6 (–4.4)	–5.7 (–4.9)	–4.5 (–7.5)
2015	–3.7 (–4.2)	–4.3 (–6.2)	–7.1 (–6.8)	–4.8 (–6.7)
2016	–5.0 (–1.8)	–4.6 (–4.6)	–7.0 (–5.9)	–4.7 (–6.3)
2017	–4.8 (–1.0)	–4.5 (–3.4)	–5.7 (–4.2)	–4.5 (–5.5)
2018*	–4.4 (–1.4)	–4.1 (–3.6)	–4.7 (–3.5)	–4.3 (–5.7)
2019**	1–4.0 (–1.1)	–3.8 (–3.5)	–4.3 (–3.2)	–3.9 (–5.7)

Source: see Table 3.

**Table 4.**  
*Fiscal balance and external current account (including grants) in Africa 2009–2019 (% of GDP).*

Another disturbing trend in the region is the presence of twin deficits. The economies of West Africa experienced twin deficits throughout the period 2009–2017. Instability in the external sector is not healthy for the economy of the sub-region. In order to restore fiscal balance especially in the external sector, the countries might resort to borrowing with implications for the wider economy of the region (see **Table 4**). When the performance of the macroeconomic indices is juxtaposed with the rising misery index, it becomes certain that performance has not been satisfactory.

### 3. Review of Literature and Theoretical Underpinnings

The literature on regional economic development efforts in Africa is vast, and we make no attempt to review them in this paper. There are about five stages towards a complete regional economic integration, that is, a monetary union. These stages include free trade area, customs union, common market, economic union and monetary union. Each stage has several requirements theoretically and in practice. In the West African sub-region, some successes have been achieved at various stages, but there exist overlaps between the stages (WAMI, 2018).

A monetary union is the highest form of economic integration which is often characterized by the establishment of fixed exchange rates between the currencies of Member States and the harmonization of monetary and fiscal policies. Furthermore, there must be an authority such as the central bank to administer the accepted common currency [1].

An optimum currency area (OCA) which is a currency area that affords the most efficient adjustment process in response to both internal and external disturbances is not only crucial but ideal. However, factors that influence the size of an OCA include the degree of the mobility of the factors of production and the degree of capital mobility especially financial capital. Other features are price and wage flexibility, economic openness, diversification in production and consumption, similarity in inflation rates, fiscal integration and political integration.

Another set of theoretical considerations centre around issues of convergence and vulnerability. Consequently, countries eager to be part of a monetary union are required to meet the following primary criteria to ensure currency convergence: (1) fiscal deficit plus grants of not more than 3.0 percent of GDP; (2) yearly inflation rate of less than 10 percent; (3) a central bank deficit financing of not more than 10 percent of the previous year's tax revenues; and (4) gross external reserves not less than 3 months of import cover.

In some regional efforts, there may be secondary requirements such as in the WAMZ region—members are required to meet additional two secondary criteria, namely, exchange rate stability with nominal exchange rate depreciation/depreciation of not exceeding 10 percent and a public debt-to-GDP ratio not exceeding 70 percent to complement the primary criteria.

As would be shown later, the economies of the sub-region have challenges in meeting both the primary and secondary criteria for convergence due to the vulnerability of their economies to various economic shocks particularly those related to commodity prices. Most the shocks are outside the control of the economies in the WAMZ [2].

A recent study [3] confirmed the vulnerability of the economies of the WAMZ to external shocks. The components of the economic vulnerability indices (EVI), having trade openness, export concentration and dependence on strategic imports as its elements, clearly showed that the reliance of the economies of the sub-region on commodity exports, reliance on one or two commodities as well as the reliance



on strategic imports such as capital cement its inability to meet the various convergence criteria [4].

It is, therefore, crucial that while not dismissing the importance of currency convergence, it is paramount to think outside the box and optimize other benefits of economic integration by being practical and functional. Even with the economic space for progressing towards a monetary union, there remain several unsettled issues.

Several studies conducted by African scholars have highlighted the benefits and challenges of regional economic integration. These studies also suggested the way forward if the objectives of integration are to be achieved [5–7].

We next utilize stylized facts and regression approach to reconsider the issues and challenges facing economic integration in the West African sub-region after examining the convergence matter.

Notwithstanding the paucity of data, we will attempt to estimate the following relationship:

$$Y_g = f(M2, gcf; X) \tag{1}$$

where  $Y_g$  = growth in GDP;  $M2$  = broad money supply;  $gcf$  = gross capital formation; and  $X$  = control variables.

3.1 Convergence dilemma?

**Tables 5–7** and **Tables A1–A5** in the Appendix provide a summary of the status of the convergence criteria required for progress towards currency convergence necessary for economic integration during the period of 2001–2016. The data for earlier period is in the Appendix.

From 2001 to 2015, The Gambia only met the inflation and import cover requirements, while Ghana met only one requirement, that is, import cover. Liberia satisfies four requirements, while Nigeria satisfied three criteria. Sierra Leone and Guinea both met three requirements. As a zone, all the countries struggled to meet the requirements during the period of 2001–2015. The number of primary criteria met by each country is summarized in **Table 5**.

Performance score is calculated as the sum of numbers of countries satisfying each criterion expressed as a percentage of total expected score on all four criteria. Six countries were assessed, giving a total expected score of 24.

Indicator	Inflation ( <10%)	Fiscal deficit ( <4%)	Central bank deficit financing ( <10%)	Gross external reserve (≥3 months of imports)
The Gambia	6.8	4.4	20.5	5.3
Ghana	14.5	4.9	10.0	3.6
Guinea	15.6	3.3	10.3	2.3
Liberia	9.0	−0.6	0.0	2.8
Nigeria	11.9	3.2	2.4	10.2
Sierra Leone	10.4	7.5	11.8	3.8
WAMZ	11.4	3.8	11.0	4.7

Source: WAMI Annual Report (various issues).

**Table 5.**  
Average primary convergence criteria (2001–2015).

	2011	2012	2013	2014	2015	2016
	Dec	Dec	Dec	Dec	Dec	Dec
Gambia	3	3	2	2	1	1
Ghana	3	3	2	1	2	1
Guinea	2	2	2	2	1	3
Liberia	3	3	3	3	3	3
Nigeria	3	3	4	4	4	3
Sierra Leone	1	2	4	3	3	1

Source: WAMI Annual Report (various issues).

**Table 6.**  
Number of primary criteria satisfied by Member States.

Year	2011	2012	2013	2014	2015	2016
Inflation	2	3	4	5	5	2
Fiscal Deficit	4	2	2	2	2	3
Central Bank Financing	6	6	4	4	4	4
External Reserves	5	5	5	5	3	4
Performance Score (%)	70.83	66.67	62.50	66.67	58.33	54.17

Source: WAMI, Accra, Ghana.

Performance score is calculated as the sum of numbers.

**Table 7.**  
Primary criteria—performance score.

Examining the performance scores, meeting the primary criteria declined from almost 71 percent in 2011 to 54.2 percent in 2016. Though there are always reasons for poor performance, the underlying question is whether the convergence criteria should be both the necessary and sufficient conditions for economic integration. It is surprising why and how the economies in the zone try to meet the deficit/GDP when there is huge infrastructural deficit.

It seems desirable to invest in capital projects to foster integration. If that is the case, then there is nothing absolutely wrong in borrowing to fill the gap provided the amount borrowed is utilized in capital projects that would pay its way. While fiscal discipline is crucial, infrastructure is necessary for increased trade which is important for economic integration.

Another element affecting convergence is the matter of vulnerability of the zone to external shocks. WAMI [3] identified the following implications of vulnerability of Member States on the convergence process:

- Persistence of economic and social divergence. Different growth paths of member countries may create migration from countries with high growth to those of low growth, and this may result in social disequilibrium.
- Incomplete union. This a case of budgetary control in practice. This involves budgetary unification in order to smoothen consumption among member countries. However, it is a tall order as the fiscal operations of countries in the zone are far from being harmonized.



- Risk of exchange rate crisis. How stable would the accepted and unified currency be? There are issues of convertibility to global currencies such as the US dollar and the British pound, among others.
- Likelihood of banking crisis. 'In the event of adverse shock from the external environment, which affect output and hence the tax base of the issuing country, the incentives to default could be high. Under this scenario, investors would want to pull out from the domestic bond market, a development that would elicit increase in interest rate on government bonds. Since domestic banks are the main investors in the domestic sovereign bond market, the banks could be caught up in a funding problem' ([3], p. 35).
- Loss of potency of instrument of automatic stabilizer. With the high vulnerability of Member States to shocks, it becomes doubtful whether the budget could serve as an instrument of automatic stabilizer especially in a recessionary phase of the economies in the zone.
- Risk of debt overhang and sovereign debt crisis. A sharp decline in commodity exports as a result of a shock may result in sharp decline in revenue resulting in current account imbalances and potential domestic fiscal deficits. The resultant twin deficits would be unhealthy for the zone.

The inconsistency in meeting the primary and secondary criteria for convergence overtime suggests the need to stress other economic variables. It would be extremely difficult if not impossible for all the member countries to meet the criteria at the same time. The evidence from 2001 to 2016 confirms this position. Consequently, it may desirable to consider point convergence and/or convergence by two big economies in the zone in addition to other factors in order to push ahead the integration process.

#### **4. A reconsideration of the evidence: unsettled issues**

We have argued elsewhere that there still exist unsettled matters concerning progress towards economic integration in the sub-region via WAMZ [7]. These include the following:

- Increased intra-WAMZ trade. Trade among member countries increased very marginally between 2015 and 2016. Intra-WAMZ trade improved to US\$2.8 billion (0.71 percent of GDP), from US\$1.6 billion (0.30 percent of GDP), reflecting increases in The Gambia, Nigeria and Sierra Leone. The degree of intra-WAMZ trade relative to the rest of the world rose to 2.6 percent, from 1.2 percent in the previous year. While The Gambia, Nigeria and Sierra Leone recorded improvements in intra-WAMZ trade, Ghana, Guinea and Liberia posted declines. WAMZ Member States trade with the rest of ECOWAS declined to US\$3.09 billion (0.80 percent of GDP) in the review period, from US\$5.95 billion (1.10 percent of GDP) in 2015.
- There are still challenges when it comes to free movement of goods and services. This is more pronounced during road transport. Traders and non-traders go through 'hell' when traveling by road in the sub-region. It seems the customs and immigration officers do not know of existing protocols. Several unnecessary road blocks hinder free flow of goods and services.

- There is a huge infrastructural deficit in the zone. The absence of good roads, railways and good air connection coupled with poor electricity supply cannot foster economic integration.
- Economic diversification. The high vulnerability of the economies of the sub-region compels the need for economic diversification implying that economies in the region must earn revenue from other sources other than the export of primary commodities whether agricultural or minerals. We have shown elsewhere through panel regression analysis that private sector investment, GDP per capita growth, infrastructures, trade openness and public investment enhance economic diversification. The economies in the sub-region export similar goods; hence it is difficult to trade among themselves. Consequently, diversification implies the urgency of industrializing the zone.
- Fiscal consolidation and coordination. It is important to begin to address the fiscal imperatives of integration. This goes beyond meeting the deficit-to-GDP ratio. Are the economies ready to have a unified budget? Has each economy passed and implemented its fiscal responsibility? Arising from the European Union experience, the fiscal aspect of regional integration is key to the process of consolidating a monetary union. In addition, it is necessary to harmonize the indirect taxes in the zone. For example, VAT in Nigeria is 5 percent, while it is 15 percent in Sierra Leone and Ghana.
- The citizens in the zone have integrated as evidenced by their ability to move between the countries notwithstanding the challenges. In fact, they trade to some extent with the currencies of the member countries. The Ghanaian cedi is accepted in the Balogun Market in Nigeria, while the Nigerian currency, the naira, is accepted in most markets in member countries. The informal sector is waiting for the policymakers and bureaucrats to formalize the process of currency convertibility within the zone. In this regard, the East African experience is a case in point. The Kenyan shilling is quoted in Tanzanian banks and vice versa.
- Political commitment. Without this variable, there would be no economic integration. The economics though crucial cannot be 100 percent. Once the politicians take the decision after considering the economics to some extent, other economic variables would adjust. The road to economic integration no matter the theorizing cannot and is never linear. It has bumps, but once there is political commitment, the challenges would be addressed as the process continues.
- Growth trajectory versus misery index. The growth of GDP in the sub-region averaged about 3 percent which is almost the same growth rate of population. However, a bigger question would be to investigate the misery index in the various countries. For example, in Nigeria which is the largest economy, the misery index has shown an upward trend during the period under review.
- The 'conflict' between the Anglophone and Franco-phone countries. The issue to address is whether the Franco-countries would delink with France given the strong historical ties. The CFA has a fixed parity with the Euro, and the reserves of the Franco-phone countries are domiciled in Paris with certain conditions. If the Franco-phone countries delink with France, then certain macroeconomic fundamentals such as inflation rate would definitely exceed the benchmark set by the ECOWAS Commission.

Variables	Coefficient	Standard error	t
$\frac{m_2}{Y}$	−0.0929	0.0439	2.11*
Gcf	0.1551	0.0565	2.75*
Inf	−0.0552	0.0152	3.63*
Infant mortality	−0.0585	0.0488	1.20**
Openness	2.8981	0.9353	3.10*
Cag	0.1325	0.0463	2.86*
Constant	−14.3780	6.0257	2.39*
*Significant at 5%.			
**Significant at 10%.			

**Table 8.**  
Regression results. Dependable variables:  $Y_g$  Number of observations: 304 Method: Least squares (panel) Period: 1980–2017 Fixed effects

- The financial system in the sub-region is yet to be integrated. A recent study [8] clearly discusses the implications of non-integration of the financial system.
- Ratification of protocols. Several protocols agreed upon by member countries are yet to be ratified by their respective parliaments.

Furthermore, we examined the relationship between economic growth and relevant economic variables for the period of 1980–2017. After almost 43 years at economic integration effort, what has been the precise link between capital expenditures, openness, broad money supply, private investment and inflation to growth? The results are presented in **Table 8**.

$$R^2.0.14; F(7, 290) = 3.25; \tag{2}$$

$Y_g$  = growth of GDP;  $\frac{m_2}{Y}$  = broad money supply; gcf = gross capital formation (private investment); Infant mort = infant mortality rate; Inf = inflation; Openness = openness; Cag = capital expenditure (public investment).  
The regression results indicate that broad money supply, inflation and infant mortality (a proxy for capturing development) are negatively related to growth and are statistically significant at 5 percent and 10 percent, respectively. Openness, gross capital formation and capital expenditures are positively related and statistically significant. The properly signed openness variable indicates the importance of trade in the sub-region. The explanatory power is weak; hence the results need to be interpreted with caution.

It should be noted that some of the variables, for example, delinking with France, discussed above cannot be captured in the regression due to lack of data.

5. Conclusion and recommendation

We examined the integration efforts of ECOWAS which was established in 1975 and argued that the stylized facts suggest that there are still fundamental challenges if the union has to be a reality. The convergence criteria set by the WAMZ component of ECOWAS as well as the link between the Franco-phone countries and

France pose significant matters to be addressed. The political dimension vis-à-vis the work of the technocrats needs to be reconciled as the sub-region moves towards economic integration.

The preliminary panel regression provides mixed results regarding the relationship between economic growth, inflation and private investment, among others, from 1980 to 2017. Both the economics and politics of economic integration must be considered as the movement towards a monetary union progresses.

Based on the issues examined above, economic integration is not a smooth journey. The experience of Europe is worth emulating. The Heads of State and Government must strive to address the unsettled issues discussed above. Within that context, point convergence as well as two or three big economies in the region may jump start the integration process for other economies to join later.

A. Appendix

Countries	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
The Gambia	2	1	1	3	3	4	4	4	4	4	3	3	2	2	1
Ghana	1	0	2	1	3	2	2	0	2	3	3	3	2	1	2
Guinea	3	2	0	0	2	1	2	1	1	0	2	2	2	2	1
Liberia	NA	NA	NA	NA	NA	NA	1	2	4	3	3	3	3	3	3
Nigeria	3	3	2	3	3	4	4	3	3	2	3	3	4	4	4
Sierra Leone	2	2	0	2	2	2	2	2	1	1	1	2	4	3	3

Source: WAMI, Annual Report and Statement of Accounts (various issues).

Table A1.  
Number of primary convergence criteria met by Member States (2001–2015).

Year	2011	2012	2013	2014	2015	2016
Country						
The Gambia	-5.5	-5	-4.3	-3	-3.2	-2.0
Ghana	-1.3	-1.1	3.6	7.1	7.8	5.5
Guinea	9.1	2.9	0.6	-0.9	-2.6	-1.2
Liberia	1.6	-2.2	-1.4	-2.2	-1.9	2.6
Nigeria	0.4	2.1	-1.9	-1.9	-0.3	8.7
Sierra Leone	7	1.5	-1.7	-2	-1.0	7.5
Mean Deviation	1.9	-0.3	-0.9	-0.5	-0.2	3.5

Source: WAMI, Annual Report and Statement of Accounts.  
The inflation threshold used for computing the deviation is 9.9 percent. A negative value means a country is within the threshold, while a positive value implies a country is above the threshold.

Table A2.  
Member States' deviation from inflation threshold.

Year	2011	2012	2013	2014	2015	2016
Country						
The Gambia	1.2	1.6	5.7	6.1	3.6	6.5
Ghana	-2.1	2.7	4.6	3.4	1.5	7.4
Guinea	-1.8	-1.8	-0.1	0.9	5.9	-2.8
Liberia	-2.5	-7.3	-5.1	-3.2	-4.6	-5.2
Nigeria	-1.9	-4.4	-4.4	-3.9	-1.4	-0.8
Sierra Leone	1.3	2.1	-1.5	0.4	1.1	4.7
Mean Deviation	-1.0	-1.2	-0.1	0.6	1.0	1.6

Source: WAMI, Annual Report and Statement of Accounts (various issues).  
The fiscal deficit/GDP threshold used is 3.0 percent. A negative value indicates a country is within the threshold, while a positive value implies a country is above the threshold.

**Table A3.**  
Member States' deviation from fiscal deficit threshold.

Year	2011	2012	2013	2014	2015	2016
Country						
The Gambia	-10.0	-10.0	38.3	23.3	31.5	23.1
Ghana	18.3	-0.6	-0.8	0.9	-10.0	0.0
Guinea	-10.0	-10.0	-10.0	-10.0	15.0	-8.1
Liberia	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
Nigeria	-10.0	-10.0	-10.0	-10.0	-10.0	-10.0
Sierra Leone	-8.9	-10.0	-8.3	-1.9	-10.0	23.1
Mean Deviation	-5.1	-8.4	-0.1	-1.3	1.1	3.0

Source: WAMI, Annual Report and Statement of Accounts (various issues).  
The central bank financing threshold used is 10.0 percent. A negative value indicates a country is below the threshold, while a positive value implies a country is above the threshold.

**Table A4.**  
Deviation from central bank financing threshold.

Year	2011	2012	2013	2014	2015	2016
Country						
The Gambia	3.1	1.8	1.6	0.7	-0.5	-0.6
Ghana	0.9	0.4	0.6	1.2	0.6	1.2
Guinea	1.3	0.0	0.5	0.2	-0.7	-1.6
Liberia	0.3	-0.2	-0.4	-0.3	-0.3	0.3
Nigeria	3.3	5.5	5.9	3.0	2.8	5.2
Sierra Leone	-0.5	0.4	0.2	0.6	1.8	2.3
Mean Deviation	1.4	1.3	1.4	0.9	0.6	1.1

Source: WAMI, Annual Report and Statement of Accounts (various issues).  
The GRMI threshold used is 3.0. A positive value implies a country is above the threshold (favorable development), while a negative value indicates a country is below the threshold (unfavorable development).

**Table A5.**  
Deviation from external reserves (in months of import cover) threshold.

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