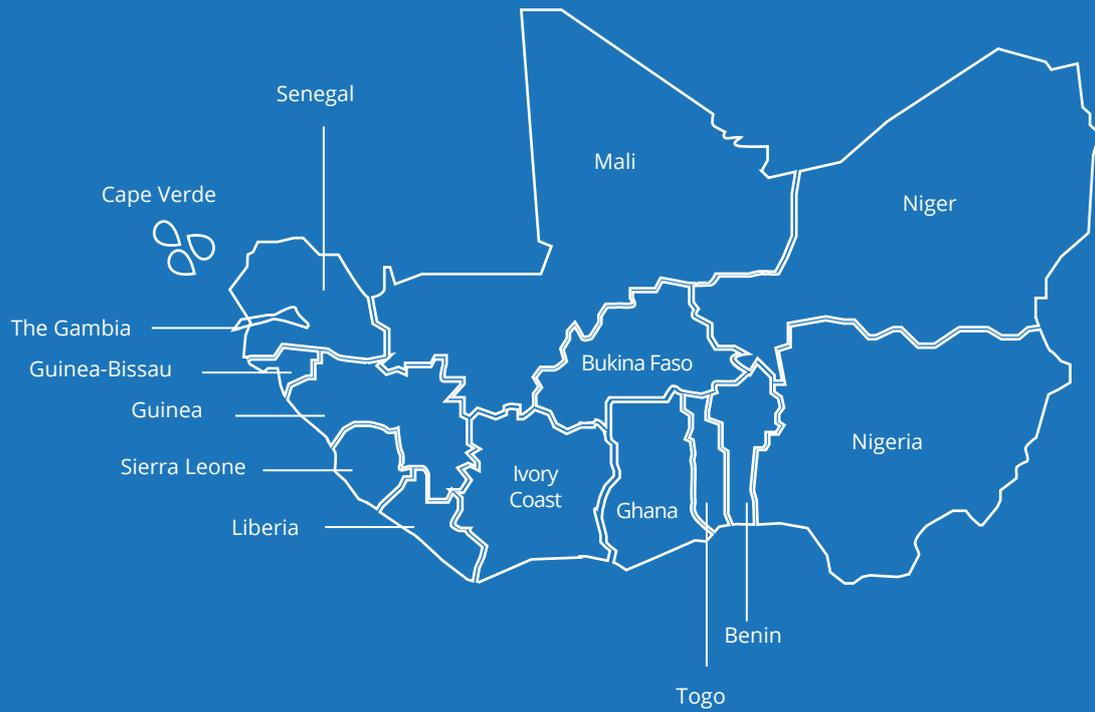


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DEBT MANAGEMENT, RESTRUCTURING AND SUSTAINABILITY IN ECOWAS



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About Sustainable Debt

Sustainable Debt is a multi-channel platform aimed at driving advocacy for sustainable debt management in Nigeria and across West Africa.

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Executive Summary

Concerns about the fiscal positions of ECOWAS members have grown in recent years due to the rate, quantity, and structure of public debt accumulation. The region's debt situation foreshadows a potential debt overhang and impending debt crisis. The dwindling government revenues due to low global commodity prices and tax revenues coupled with rising government expenditure have raised serious concerns about debt sustainability in the region. The COVID-19 pandemic compounded the debt situation as ECOWAS governments expanded borrowing to offset the negative impact of the epidemics on individuals and businesses. However, the growing debt level in ECOWAS has a wide range of macroeconomic consequences, including fiscal and interest rate pressures, financial and capital market instability, and foreign currency and inflation difficulties.

In the ECOWAS region, five major research issues emanated from the debt situation. To begin with, numerous ECOWAS countries benefited from debt elimination during the debt relief tsunami of 2005-2008. However, public debt has increased to the point where it is approaching crisis proportions just over a decade later. As a result, understanding the causes that contribute to the region's massive public debt is crucial. Second, future output and revenue growth have been connected to government borrowing. However, the current reality contradicts this position, prompting further research on the economic impact of public debt on ECOWAS member countries. Third, examining debt sustainability among ECOWAS countries is crucial since sovereign solvency concerns vary in severity and uniqueness. The potential of a financial crisis in one member country, such as Nigeria, spreading to others is the fourth item to consider. Finally, debt sustainability needs corrective actions such as debt restructuring and the discovery of viable debt alternatives.

A cursory look at the economic and fiscal conditions of ECOWAS members suggests that the region's members differ greatly on important development measures that determine the region's overall growth. Government revenue and production development potential have been hurt by low global commodity prices, the Ebola virus epidemic, and the current COVID-19 pandemic; therefore, some countries' growth rates are largely symptomatic of their financial woes. Nigeria's sluggish growth, which accounted for almost 63 percent of ECOWAS GDP and surpassed high-growth countries like Ghana, Côte d'Ivoire, Senegal, Guinea, and Benin,

contributed to the ECOWAS region's slow economic growth between 2015 and 2019. ECOWAS' progress was hampered even more by the COVID-19 outbreak, with the region's GDP falling by 2.5 percent in 2020, compared with 3.5 percent growth in 2019.

Other macroeconomic indicators in the region are demarcated across the blocs in the region – WAEMU and non-WAEMU. Following member countries' compliance with the WAEMU bloc's agreement, their currencies are formed and tied to the Euro. Hence, their inflation, interest, and exchange rates are relatively stable. As a result, all eight WAEMU countries now have the same 5% interest rate as of 2019, and the CFA580/US\$ exchange rate has been steady for the past five years. Due to the monetary policy independence, interest rates in non-WAEMU countries are exceptionally high, inflation is high, and the exchange rate is quite volatile. In 2019, the interest rate captured by lending rate was as high as 28% in the Gambia, 15.6% in Nigeria, 23% in Sierra Leone, 16% in Ghana and 9.14% in Cabo Verde. Meanwhile, their exchange rates have plunged despite adopting a managed float exchange rate regime. Between 2015 and 2019, the value of the Nigerian Naira fell by more than half. Currency depreciation hit Ghana, Gambia, Liberia, and Sierra Leone, increasing the risk of refinancing and the burden of debt repayment on foreign obligations.

The long-term viability of the government's budgetary plan is important to the increase of public debt. ECOWAS' public spending continues to outpace its revenue in recent times. Moreover, the recent economic fallout of COVID-19 has further impaired the fiscal policy positions with a widened outlay of government spending and constrained revenue. Consequently, ECOWAS countries have persistently maintained fiscal deficit position, by extension, growing the public debt stock in the region. Specifically, the total revenue accrued to the ECOWAS region in 2020 fell by 10% to US\$67.49 billion as a result of the COVID-19 pandemic. At 9.9% of GDP, revenue mobilisation in ECOWAS is very weak and poor relative to other regions. The primary issue with ECOWAS revenue lies in its high susceptibility to external shocks (both economic and political). This is due to the dependence of many ECOWAS countries on inflows from abroad – in the form of grants, rent, royalties and sales from mineral exploration.

Amidst a constrained revenue mobilisation framework,

ECOWAS expenditure climbed by 7.8% to US\$113.71 billion, nearly doubling revenue for the year. The increase in expenditure was due to the expansion in government spending to placate the economic impact of COVID-19 on businesses and households. Consequently, the overall fiscal environment in ECOWAS has remained in an uninterrupted deficit since 2009. Due to the fallout of the COVID-19 pandemic, the ECOWAS fiscal deficit reached an all-time high of 6.8% of nominal GDP in 2020, rising by 53% to US\$46.22 billion. Relative to the economic size, Nigeria has the largest fiscal deficit in the region in 2020 at US\$25.1 billion. Following the eventualities of COVID-19, almost all ECOWAS countries significantly exceeded the ECOWAS convergence for the fiscal deficit benchmark of 3% of GDP as the regional fiscal deficit to GDP increased to -6.8% in 2020. This heightens the public debt accumulation of countries in the region.

Consequently, public debts in ECOWAS have increased more than five folds in less than two decades. Following the outbreak of COVID-19 in 2020, ECOWAS' public debt stock increased by 15.9% to US\$296.76 billion in 2020, representing a spike of 80% from 2015. For many ECOWAS countries, public debt stocks have also expanded in manifolds with changes in structure. However, public debt is still dominated by external borrowing as it has persistently been the major source of financing for ECOWAS governments, particularly the WAEMU countries with an average share of external debt in total debt standing at 58.8% in 2019-2020 compared with 78.3% during the debt relief in 2005. Nevertheless, domestic public debt is gaining momentum, especially in the non-WAEMU bloc, as the average share of external debt shrunk to 45.7% in 2019-2020 from 60.6% in 2005. This reflects improvements in the domestic capital market development. As at 2019, the total external and total domestic public debts in ECOWAS are US\$98.92 billion and US\$157.12 billion, respectively.

Beyond growing debt, the recent wave of public debt accumulation has been accompanied by a spike in the debt ratios in ECOWAS countries, some of which have conveyed a distressing situation in some ECOWAS countries. The debt to GDP ratio for ECOWAS pointed at 36.7%, having increased by 14.2 percentage points from the average of 22.5% between 2014-2018. Following the outbreak of the COVID-19 pandemic that prompted increased borrowing, the ECOWAS' debt to GDP ratio expanded by 5.1 percentage points in 2020 from 31.6% in 2019. All member countries in the region recorded debt to GDP ratios above the regional figure except Nigeria at 35.1%. Likewise, the external debt to GDP ratio in ECOWAS expanded by 2.9 percentage

points to 17.3% in 2020. Beyond the distressing debt to GDP ratio, the debt service to revenue ratio has been the major cause for concern for stakeholders as debt can only be serviced with revenue. Accordingly, the debt service burden became relatively high for most ECOWAS countries. As at 2019, the debt service to revenue ratio stood at 45.4% and is projected to reach 60% in 2021. This is because revenue remains subdued while expenditure outlay continues to expand.

The data and analysis employed in this study supported stakeholders' concerns about ECOWAS' public debt sustainability. Findings from this study revealed that public debt in ECOWAS is driven by varying factors across member countries. Still, the habit of countries always spending more than they can make in revenue has been prevalent across board. Further evidence suggests that debt accumulation has not supported economic growth in the region. This is due to the crowding-out effect on investment as investors price down on investments in highly leveraged countries; state fragility as substantial resources that are supposed to go into development are spent on security; leakages and weak resource mobilisation etc. According to the debt sustainability analysis, eleven (11) ECOWAS countries – Benin, Burkina Faso, Cabo Verde, the Gambia, Ghana, Guinea-Bissau, Liberia, Niger, Nigeria, Senegal and Togo – are currently in debt distress. However, the remaining four countries – Côte d'Ivoire, Guinea, Mali and Sierra Leone – are at low risk of debt distress. We also find that a financial catastrophe occasioned by a debt crisis in one country may spread throughout the region. Financial woes in Nigeria, in particular, portends a serious threat to other nations in the region.

As it stands out that public debt accumulation in ECOWAS has become unsustainable, countries need to act early to avert the impending debt distress. This is important for ECOWAS countries to avoid a lost decade of getting to a debt crisis where debt settlement will be the government's only agenda for years to come. In essence, there is a need for a National Integrated Revenue-Spending-Debt Management Strategy with coordinated approaches for three cardinal areas: (1) revenue optimisation; (2) expenditure efficiency; and (3) debt management and sustainability. Harmoniously addressing these interrelated issues will give room to tackle the bedrock of unsustainable growth in public debt and manage the symptoms as reflected in the debt burden. Consequently, this report presents a 10 (ten) Point Policy Agenda with three (3) recommendations across the three cardinal areas and a broad recommendation that together form an integrated strategy for sustainable debt management in ECOWAS.



INTRODUCTION

The mounting public debt in the global economy has become a subject of concern for stakeholders. According to the International Monetary Fund (IMF), the world's public debt stood at 82.8% of global Gross Domestic Product (GDP) in 2019, an expansion from 81.2% in 2018. Beyond its public health implications, the outbreak of the COVID-19 pandemic escalated the public debt position around the world owing to its disruption of economic activities and reversed the trend of global economic growth. In 2020, the global economy contracted by 3.2% (IMF, 2021), which translated to declining government revenue from taxes and the commodities market. With the surge in public spending on emergency relief measures, countries' appetite for borrowing increased massively, further deteriorating the already concerning public debt position. Consequently, the debt to GDP ratio for 2020 spiked to 101.5%, according to the IMF.

The build-up to the recent episode of debt accumulation has been alarming for the Economic Community of West African States (ECOWAS). Following the persistently suppressed global commodity prices, government revenue among

ECOWAS countries has been plummeting. Reports on tax revenue across the region, around 7 – 10% of GDP, show domestic revenue mobilisation effectiveness has also been problematic. Moreover, the Resource Governance Index figures show that many ECOWAS countries are very weak in resource governance as most of them ranked in the lower half of ranked countries in 2017.

The concerns about the debt situation in ECOWAS countries emanates due to the pace, size and structure of public debt accumulation in recent times. Over the space of five years, the debt to GDP ratio of ECOWAS expanded from 26.3% in 2015 to 36.7% in 2019, which resulted from a cumulative increase in debts across member countries (see Tables 3 and 4). The outbreak of Coronavirus and its attendant impact on the economy and public finance further aggravated the debt situation among ECOWAS countries as governments embarked on more borrowings to placate the devastating impact of the pandemic on households and businesses. In 2020 alone, the debt to GDP ratio in ECOWAS expanded by 6.3 percentage points to 43%.

The harrowing situation of public debt burden in ECOWAS portends an imminent debt overhang and potential debt crisis considering how governments of many ECOWAS countries are either borrowing to service their debt obligations or accrue such obligations as more debt. The implications of this on the macroeconomy are numerous - it impacts the fiscal flexibility of the government and future capacity to deliver on developmental investment; puts pressure on the interest rate and monetary environment, which eventually stiffens the economy; distorts the financial and capital market stability; and exposes the economy to foreign exchange and inflationary risks.

Understanding the Issues

The dire consequence of the current debt situation in ECOWAS on the socio-economy of the region has given rise to calls for debt forgiveness for ECOWAS countries. It is noteworthy that most ECOWAS countries had been beneficiaries of debt forgiveness during the period of 2005-2008 wave of debt reliefs. These countries are expected to maintain prudence thereafter. Many have in actual fact instituted a debt management framework to ensure the sustainability of public debt. However, just over a decade after, public debts have subsequently been accumulated and are now approaching a crisis level. This suggests that debt relief or the establishment of debt management divisions are insufficient in keeping a sustainable debt level. It further suggests there is a knowledge gap on why debt keeps growing unsustainably. Hence, there is a need to understand what factors are driving the mounting public debt in ECOWAS.

The fiscal environment in the region has been in an uninterrupted fiscal deficit for over a decade, in which the outbreak of COVID-19 has occasioned an unprecedented budget deficit to a tune of 6.8% of GDP in 2020 against ECOWAS convergence of 3%. The anticipated impact of increased public spending on growth and future revenue has often been cited as the purpose for escalated borrowing. Though the economic growth reality across ECOWAS countries has been divergent, likewise, the general macroeconomic space (see Figures 1 and 2; Table 1) has not reflected the usefulness of the growing debt for most countries. Hence, what is the impact of public debt on macroeconomic performance in ECOWAS?

Beyond the debt figures, there are numerous indicators of debt sustainability position (Debt to GDP, External Debt to GDP, Debt Service to Revenue and a host of other ratios) in which the IMF has provided benchmarks. However, many countries have based their debt sustainability decisions on debt indicators that give room for more borrowing. However, the debt service to revenue ratio has been a major challenge for debt management in ECOWAS – close to 100% for some countries. This is more precarious for Nigeria that recorded 97% debt service to revenue in the first five months of 2021. Similarly, Ghana and the Gambia recorded a debt service to revenue ratio of 91.7% and 111.3% in 2019, respectively. This implies that after debt service is deducted from revenue, the government has virtually nothing left to spend on the economy. Then, how could the sustainability of the debt level be harmoniously measured for countries and is debt crisis looming in ECOWAS?

The situation where debt service to revenue is close or over 100% in some ECOWAS countries, as is in Nigeria, portends a debt cycle of borrowing to service debt and risk a potential debt crisis. The possibility of a debt crisis in some countries in the region, particularly in Nigeria, will have adverse impacts on public and private investment, foreign investment inflows, aggregate demand and the stability of the macroeconomy at large. Following the growing economic integration among ECOWAS countries and the relevance of Nigeria in the economic structure of the region, the fallout from a debt crisis in Nigeria could have a destabilizing impact on other countries in ECOWAS. Hence, what will be the spillover effects of public debt crises in Nigeria on other ECOWAS countries?

Learning from the rueful economic experience of Greece following its debt crisis, some ECOWAS countries are beginning to show signs of debt distress. There is a pressing need for remedial actions and sourcing for viable alternatives to debt accumulation and restructuring to achieve debt sustainability.

Research Objectives

Broadly, this study seeks to present a detailed understanding and analysis of the debt situation in ECOWAS with insights for potential remedial actions for member states to achieve debt sustainability. The specific objectives of this study include:

- 1** *To identify the underlying factors that drive up public debt in ECOWAS in an unsustainable manner;*
- 2** *To assess the economic impact of public debt in ECOWAS;*
- 3** *To determine the country-specific thresholds for debt crises among ECOWAS countries;*
- 4** *To investigate the interdependence and spillover effect of public debt crisis among ECOWAS countries; and*
- 5** *To highlight viable policy recommendations for ECOWAS countries for remedial and sourcing for alternatives to debt accumulation and restructuring to achieve sustainability.*

Structure of the Study

The study is structured such that the current section presents the introduction and preliminary understanding of the issues. Sections 2 and 3 present the landscaping of the fiscal environment and profiling of public debt in ECOWAS, respectively.

Sections 4, 5 and 6 present the public debt in ECOWAS and the macroeconomy; country-specific debt sustainability analysis for ECOWAS countries; and analysis of spillover effect of a debt crisis in Nigeria on other ECOWAS countries, respectively. The last section presents the policy recommendation.



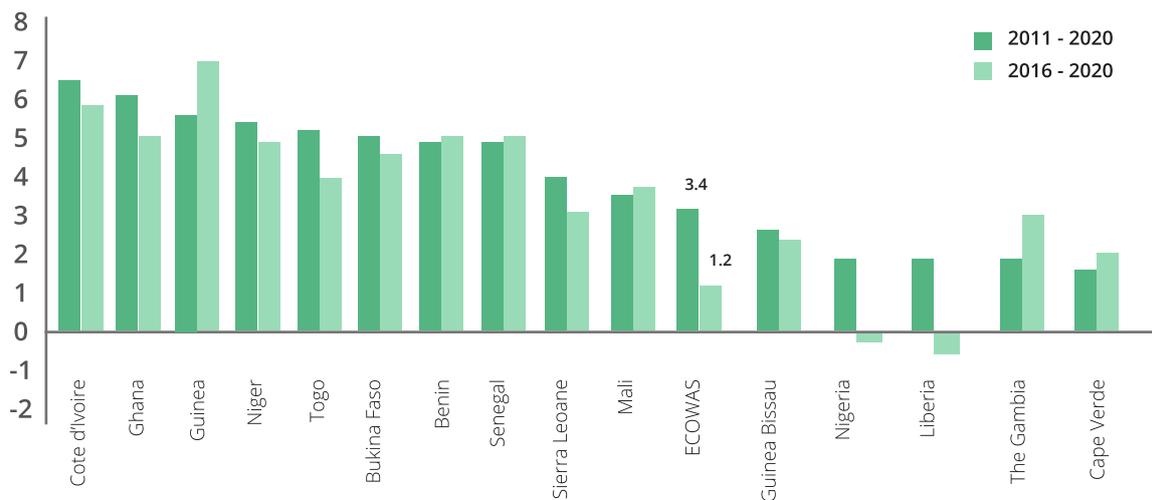
Macroeconomic Performance

ECOWAS comprises 15 countries that are diverse across notable development indicators. The varying economic performance and development stages play a significant role in the region's overall growth. Over the space of two decades, the nominal GDP of the ECOWAS economy has expanded by more than five folds (560.4%) from US\$121.7 billion in 2000 to US\$682.0 billion in 2020. However, the region experienced sluggish economic growth between 2015 and 2019. This was largely driven by the lethargic growth of Nigeria's economy that accounted for about 63% (US\$429.2 billion in 2020) of ECOWAS GDP. The slow growth in Nigeria has overwhelmed the performance of high growth countries like Ghana, Côte d'Ivoire, Senegal, Guinea

and Benin, among others (see Figure 1). Other slow-growth countries suppressing the economic growth of ECOWAS includes Liberia, the Gambia, Cabo Verde and Guinea-Bissau.

To some extent, the growth performance of some of the countries is reflective of their debt problem. The slower growth experienced in the region in the recent past is attributable to the lower commodities prices and impacts of the Ebola virus outbreak in some countries. The outbreak of the COVID-19 pandemic further stiffened ECOWAS growth as the region's economy slipped from real GDP growth of 3.5% in 2019 into the negative territory by 2.5% in 2020. Nevertheless, it is expected to recover and pull a positive growth of 3.0% in 2021.

Figure 1: Real GDP Growth rate of Economies in the ECOWAS region



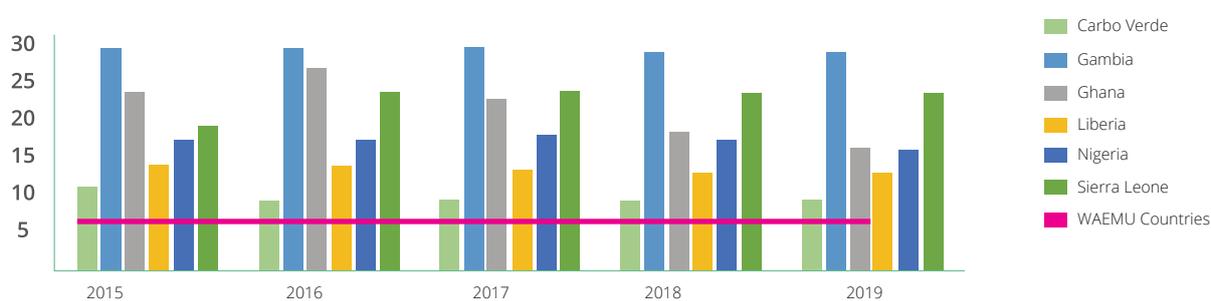
Data: IMF, WEO April 2021; Chart: NESG Research

Conventionally, a hike in interest rate is a curbing tool for inflationary pressure and positive net returns on investments. As a result, countries with high inflation in the region also have a high-interest rate. In 2019, the interest rate captured using lending rate was as high as 28% in the Gambia, 15.6% in Nigeria, 23% in Sierra Leone, 16% in Ghana and 9.14% in Cabo Verde. The high-interest regimes in these countries were aimed to make investments more attractive by offering positive real returns (interest rate minus inflation rate).

On the other hand, all the eight WAEMU countries have the same interest rate at a single digit and averaged 5% as of 2019. As opposed to public finance theory, many countries, especially non-WAEMU, adopt more borrowings to finance their fiscal deficit despite high inflation and interest rates. Thus, new debts are accumulated at more stringent conditions, which worsened the public debt sustainability position in terms of debt servicing to revenue and external debt to export ratios.



Figure 2. Trend of Interest Rate (Percent) in ECOWAS region



Data: World Bank, BCEAO, CBN, BoG; Chart: NESG Research

Furthermore, the peg of the CFA Franc to the EURO resulted in currency stability for WAEMU countries. This exchange rate management mechanism helped minimise the impact of the local macroeconomic performance on the currency's value. Between 2015 and 2019, the CFA Franc has appreciated by 0.9% against the US dollars (see Table 1). However, for the non-WAEMU countries, there has been considerable

depreciation in their local currencies partly due to high inflation, high interest, and other factors such as heightened current account deficit. In Nigeria, the Naira depreciated by more than 50% between 2015 and 2019 despite adopting a managed float exchange rate system. Similarly, Ghana, the Gambia, Liberia and Sierra Leone all experienced currency depreciation which has exacerbated the refinancing risk and debt servicing burden on external debts.

Table 1: Trend of Exchange rates (LCU/US\$) in the ECOWAS region

	WAEMU Countries	Cape Verde	The Gambia	Ghana	Liberia	Nigeria	Sierra Leone
2015	591.2	99.4	42.5	3.7	86.2	192.4	5080.8
2016	592.6	99.7	43.4	3.9	94.4	253.5	6290.3
2017	580.7	97.8	46.6	4.4	112.7	305.8	7384.4
2018	555.5	93.4	48.2	4.6	144.1	306.1	7931.6
2019	586.0	98.5	50.1	5.2	186.4	306.9	9010.2

Data: World Bank

¹WAEMU Countries operate a monetary union – single currency and alignment of key monetary policy

Fiscal Environment in ECOWAS

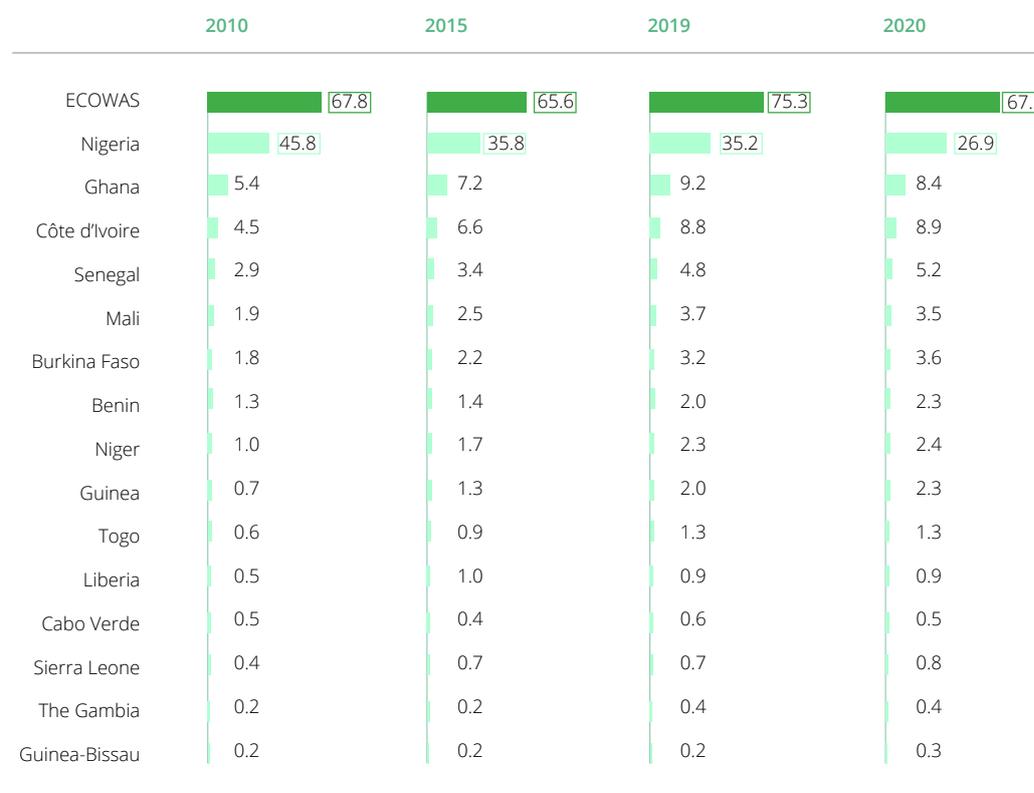
At the heart of public debt accumulation is the sustainability of the government's fiscal policy. Over the years, public expenditure in ECOWAS has outstripped revenue. ECOWAS countries have maintained an upward trend in expenditure while revenue growth has been oscillatory. Moreover, the recent economic fallout of COVID-19 has further impaired the fiscal policy positions with a widened outlay of government spending and constrained revenue. Put together, these have occasioned persistent expansion in fiscal deficit and, by extension, the growing debt accumulation among ECOWAS countries.

Revenue Analysis

The revenue mobilisation framework is increasingly being constrained while the outlay of governments

spending keeps widening. The total revenue accrued to the ECOWAS region in 2020 receded by 10% to US\$67.49 billion with reasons not far from the impact of the COVID-19 pandemic. But then, there exists a wide variation in revenue generation across countries ranging from as low as US\$0.25 billion in Guinea-Bissau to as high as US\$26.92 billion in Nigeria. Of the 15 countries in ECOWAS, 11 (Benin, Burkina Faso, Cabo Verde, the Gambia, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Sierra Leone, and Togo) recorded government revenue less than US\$5 billion in 2020. Others, Nigeria (US\$26.92 billion), Côte d'Ivoire (US\$8.85 billion), Ghana (US\$8.42 billion) and Senegal (US\$5.16 billion), commensurate to the size of their economies held the largest share of revenue in the region. The shallow tax base has constrained government revenue in the region, which is further compounded by the large informal sector, complex tax codes, and high compliance costs.

Figure 3: Government Revenue in ECOWAS (US\$' Billion)



Source: IMF WEO Data

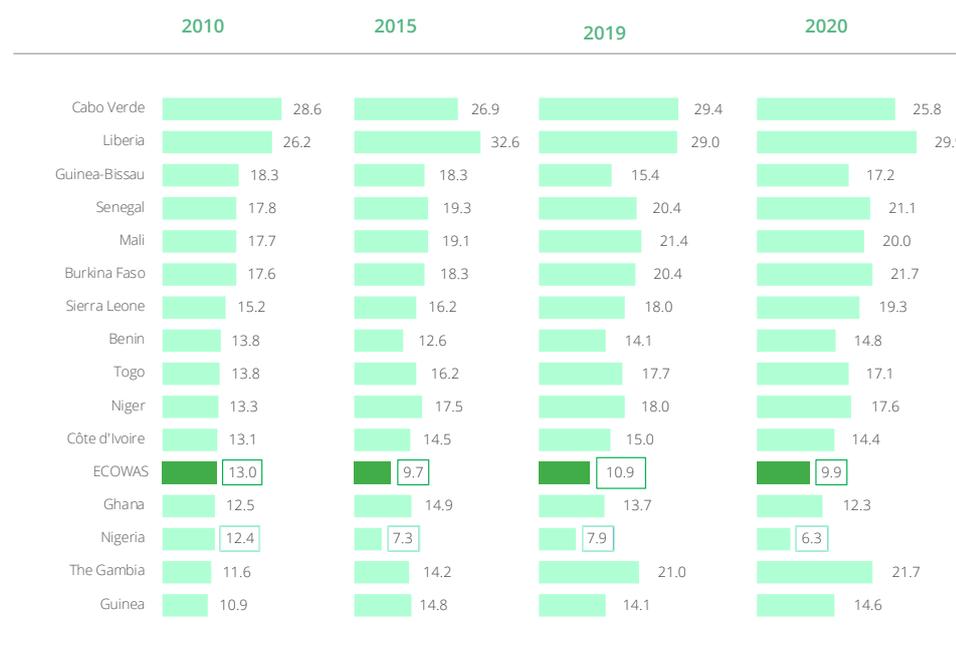
The major challenge with ECOWAS revenue lies in its susceptibility to external (both economic and political) shocks especially in countries like Togo, Niger, Burkina Faso, Mali, Senegal, and Côte d'Ivoire where grants account for the major source of non-tax revenue. This is also the case in Nigeria where rent and royalties from oil account for the largest share of total revenue. In a resource-rich country like Nigeria, heavy dependence on resource extraction for revenue has stagnated other types of taxes. Meanwhile, resource-poor countries have been making headways by leveraging non-oil tax such as Corporate Income Tax (CIT), Personal Income Tax (PIT) and Value Added Tax (VAT).

Since 2010, the tax structure in most ECOWAS has shifted toward revenues from Company Income Tax (CIT) and Value Added Tax (VAT). Increases in both CIT and VAT tax categories were significant in driving the overall tax potentials in 2018. Between 2010 and 2018, revenues from CIT (share of GDP) increased by 70 basis points while VAT (share of GDP) increased by 100 basis points, reaching 3.1% and 5% respectively in 2018. According to the 2020 report on Africa revenue statistics, VAT (share of revenue) increased to 29.7% in 2018 representing a 2.8 percentage points increase. Despite a 2.1 percentage points increase in PIT, the ratio of PIT to tax revenues (17.5%) remains lower than CIT at

19.2%. However, in Nigeria, taxes on income and profits accounted for the principal share of total tax revenue, particularly, CIT with approximately 50% of total tax revenue. This represents a greater share of total tax revenues. However, Nigeria accounted for the lowest VAT revenue ratio in ECOWAS.

Revenue as at 2020 was 9.9% of GDP suggesting a very weak and poor revenue generation capacity in the region. Revenue mobilization capacity in ECOWAS is low for the majority of the countries in the region. Worst still, Nigeria – the largest economy in ECOWAS – records the lowest revenue mobilization capacity amongst the countries at 6.3%. In the regional sub-divide, while the West African Monetary Zone (WAMZ) recorded a 17.9% decline in revenue, the West African Economic and Monetary Union (WAEMU) recorded a 3.7% increase, though slower when compared with over 7% increase recorded in 2019. Among the eight countries that recorded revenue decline in 2020, Nigeria was the most hit despite accounting for 39.9% of ECOWAS' revenue. While taxes account for the major source of revenue of the majority of the countries (Burkina Faso, Cabo Verde, Togo, Ghana, Senegal, Mali, and Côte d'Ivoire) in ECOWAS, Nigeria maintained the ratio of 67:33 for oil tax and non-oil tax with an abysmally low potential for tax revenue generation.

Figure 4. Government Revenue to GDP Ratio in ECOWAS (%)



Source: IMF WEO Data

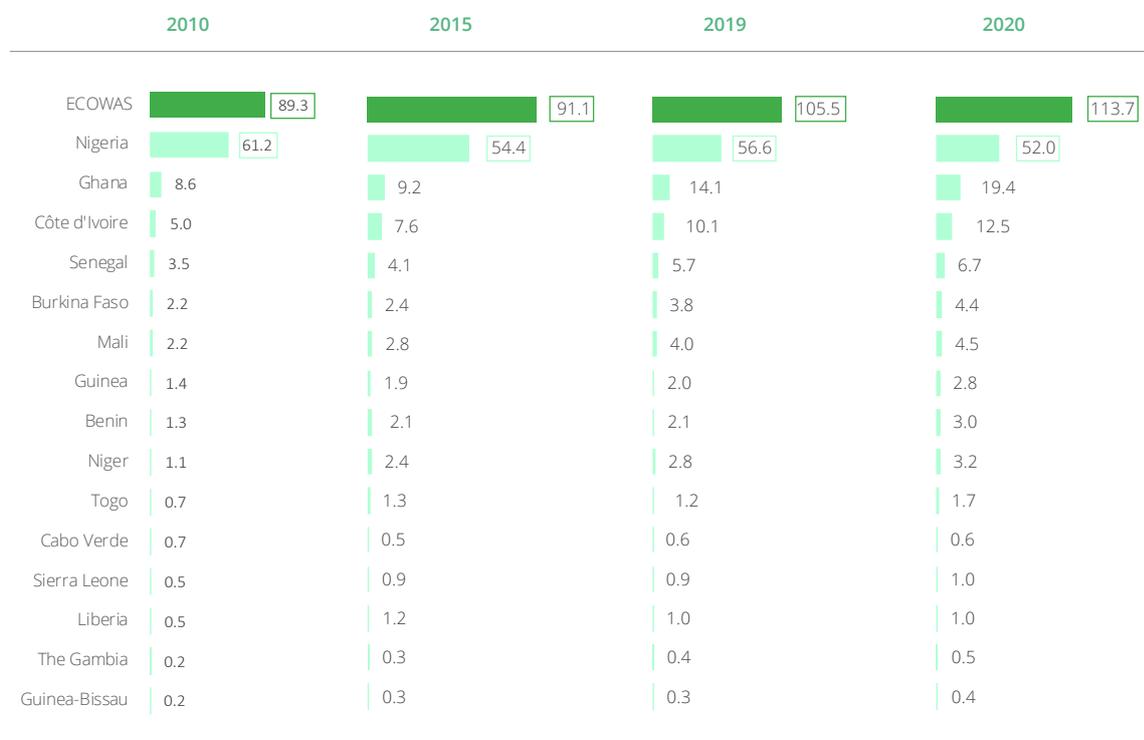
ECOWAS continue to experience significant disparity in non-tax revenue which is uncorrelated with the sources. For instance, between 2011 and 2012, Mali experienced a sudden drop in grant revenues, from 4.5% of GDP down to 0.1% during a year of multiple political crises. In 2018, the major sources of non-oil tax revenue were grants, rents, and royalties. In some countries like Nigeria, oil royalty provided a large chunk of non-tax revenue. The various non-tax revenues are predominantly affected by risks ranging from shocks such as COVID-19 to economic vulnerability and political changes. Little wonder why the majority of the ECOWAS countries are challenged by exploding deficits and the recent worrisome rise in indebtedness.

Expenditure Analysis

Amidst a decline in revenue in 2020, ECOWAS expenditure grew by 7.8% to US\$113.71 billion,

which almost doubled revenue for the year. The increase in expenditure was due to the expansion in government spending to placate the economic impact of COVID-19 on businesses and households. Consequently, this led to a rise in deficit, debt, and deficit financing. In 2019, the share of debt servicing in ECOWAS recorded a 100 basis points increase to 11% and amounted to US\$12 billion. Nigeria boasts as the largest spender in the region, accounting for 46% (US\$52 billion) of total spending in 2020. In ECOWAS, the expenditure-to-GDP ratio varies from 35% in Cabo Verde and 12% in Nigeria. As in Nigeria, where the average ratio of recurrent expenditure to capital expenditure is 81:19%, expenditure in ECOWAS is dominated by recurrent spending. Surprisingly, amidst the pandemic, three countries (Nigeria, Liberia, and Cabo Verde) recorded in decline in expenditure.

Figure 5: Government Expenditure in ECOWAS (US\$' Billion)



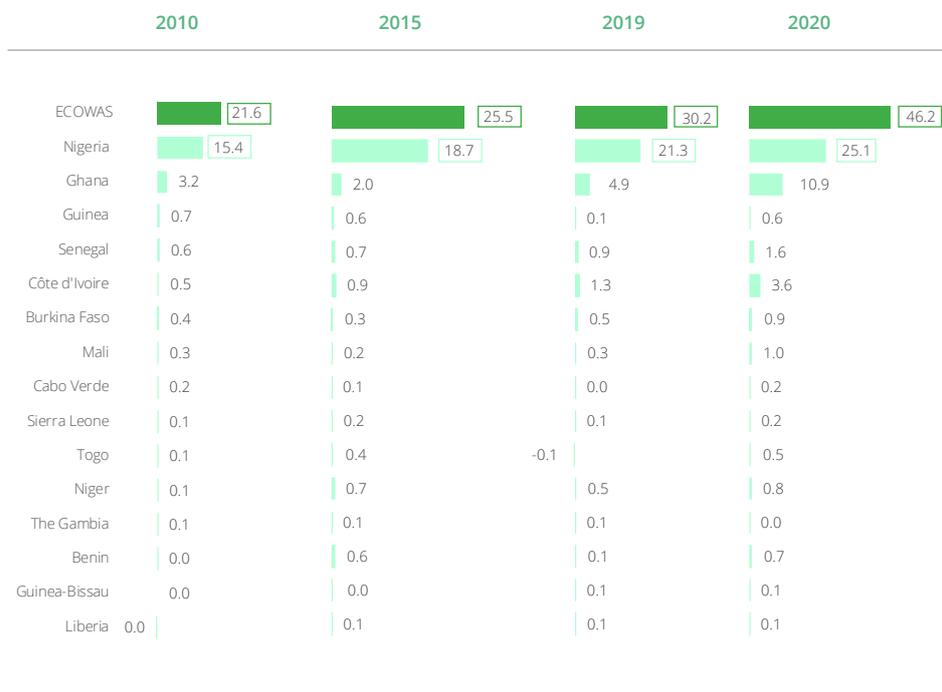
Source: IMF WEO Data

Fiscal Deficit in ECOWAS

The overall fiscal environment in ECOWAS has remained in an uninterrupted deficit since 2009. The COVID-19 pandemic, which engendered a global disruption in the economy's demand and supply side has consequently led to an unprecedented increase in fiscal deficit to a tune of 6.8% of the nominal GDP. The fiscal deficit of

ECOWAS in 2020 expanded by 53% to US\$46.22 billion. Meanwhile, the fiscal deficit expanded by 17.6%, 122.4% and 170.1% in Nigeria, Ghana and Côte d'Ivoire in order of the size of their economy, respectively. This makes Nigeria the country with the largest fiscal deficit in the region in 2020, while Ghana recorded the largest increase in the budget deficit in the year.

Figure 6: Nominal Fiscal Deficit in ECOWAS (US\$' Billion)

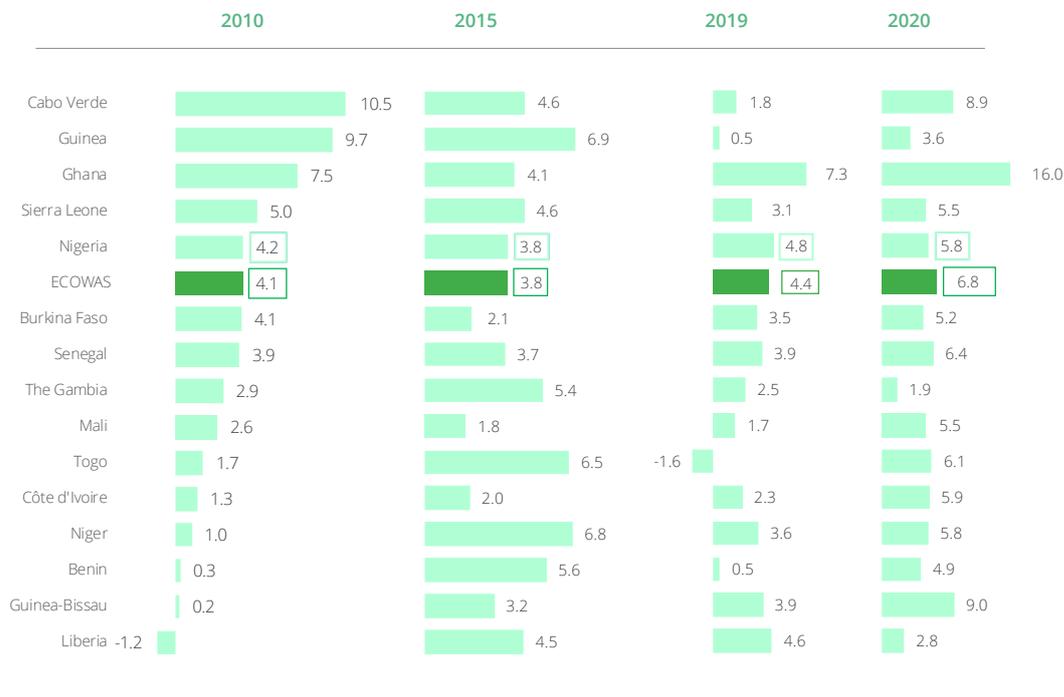


Source: IMF WEO Data

Following the eventualities of COVID-19, almost all ECOWAS countries significantly exceeded the ECOWAS convergence for the fiscal deficit benchmark of 3% of GDP as the regional fiscal deficit-to-GDP increased to -6.8% in 2020. This heightens the public debt accumulation of countries in the region. As at 2019, eight countries – Burkina Faso, Ghana, Guinea-Bissau, Liberia, Niger, Senegal, Sierra Leone and Nigeria – exceeded the ECOWAS's convergence of 3% of GDP benchmark for fiscal deficit (see Figure 7). The COVID-19 pandemic amplified the deteriorating fiscal balance position. In 2020, only two countries – Gambia and Liberia – managed to

keep to the convergence threshold. The inability of majority of ECOWAS countries to achieve the fiscal deficit convergence criteria was due to the weak domestic revenue. This was intensified by dependence on a single source of revenue (exports of primary commodities), persistent expansionary fiscal policy and the dominance of recurrent expenditure in government spending (AfDB, 2019). Also, efforts to diversify revenue sources have been hampered by the private sector's limited capacity and policy reluctance to implement difficult tax reforms to end costly government subventions. This culminated in the worrying upward trend in public debt.

Figure 7: Fiscal Deficit Position percentage of GDP in ECOWAS (%)



Source: Computed from IMF WEO Data

To manage the widening fiscal deficit, some ECOWAS countries adopted the monetisation of fiscal deficit as an alternative to raising government bonds or increasing taxes. The Federal Government of Nigerian, for instance, directly borrowed N2.8 trillion (1.9% of GDP) from the country's central bank to finance the fiscal deficit in 2020 . This increased the total CBN's financing of the government deficit to about 8.5% of the GDP. Similar situations are also obtainable in Ghana and some other countries except those under the IMF Programme. Therefore, this practice violates some of the agreements of the Accra Declaration – a commitment to restrict central bank financing of budget deficits to 10% of the previous year's government revenue.

The monetisation of fiscal deficit appears cost-effective for the government. However, it comes with money supply and inflation problems if not properly managed (Krugman, 2010). For countries like Nigeria and Ghana, the failure to securitise the monetised fiscal deficit with debt instruments led to an expansion of the monetary base. This contributed significantly to the inflationary pressure in West Africa, most especially in the West African Monetary Zone (WAMZ) countries. It also has a pass-through effect on their foreign exchange rates due to the huge reliance on imported goods, raw materials and equipment.

⁴The monetisation of Fiscal Deficit is also known as “money-financed fiscal programs” or “money-printing”—occurs when the government finances itself by issuing non-interest-bearing liabilities: either currency in circulation or central bank reserves; if the central bank can avoid paying interest on those reserves.

⁵Fitch Ratings. (2021). Rating Commentary: Fitch Affirms Nigeria at 'B'; Outlook Stable. Retrieved from <https://www.fitchratings.com/research/sovereigns/fitch-affirms-nigeria-at-b-outlook-stable-19-03-2021#:~:text=Fitch%20Ratings%20%2D%20Hong%20Kong%20%2D%2019,B%20with%20a%20Stable%20Outlook>



T H R E E (3)

PROFILING
PUBLIC DEBT IN
ECOWAS





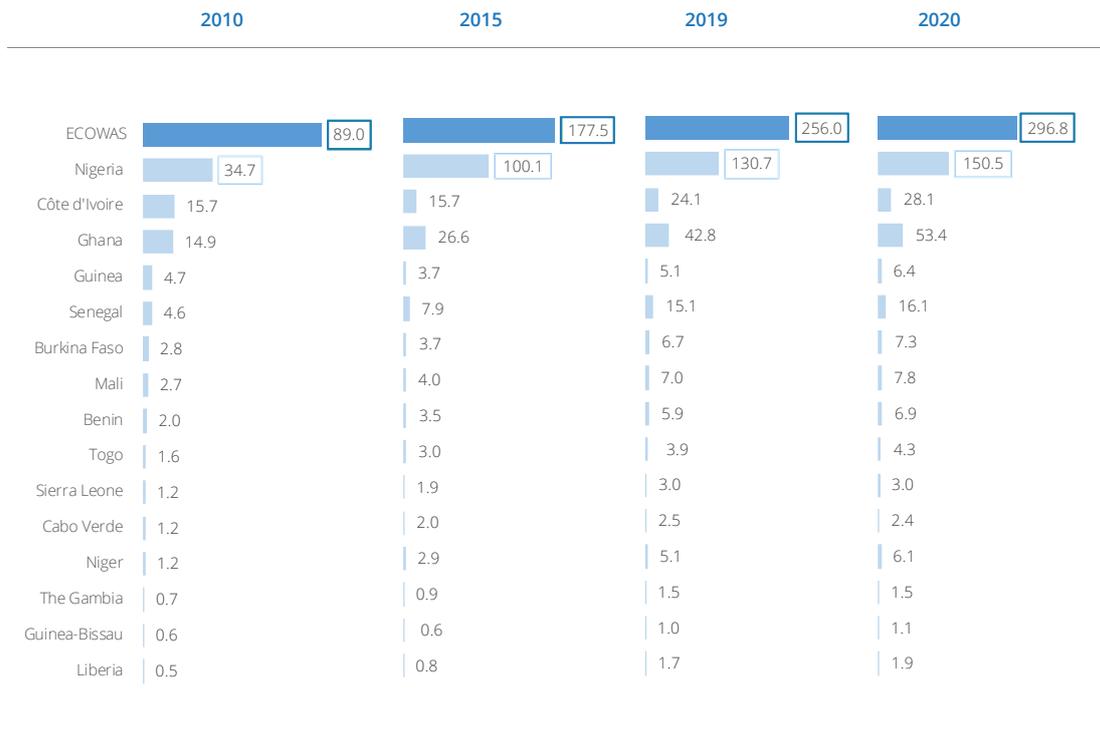
Public Debt Portfolio in ECOWAS

Public debts in ECOWAS have increased more than five folds in less than two decades. The ECOWAS economy has faced series of economic challenges in the recent past, which have motivated governments across countries to embark on ambitious debt engagement. During the period of debt relief, total public debt in ECOWAS stood at US\$58.50 billion, which expanded following the Global Financial Crisis (GFC) by 22.2% to US\$71.50 billion in 2010. Despite that many ECOWAS countries received debt forgiveness during this period, public debt in ECOWAS has since been on the rise. The aftermath of the GFC further affected ECOWAS economies as public debt stock more than doubled (130.6%) to US\$164.90 billion. Owing to the crash in commodity prices in 2013-2014, public debt in the region expanded further by 55.3% to US\$256.04 billion in 2019. Following the spread of the COVID-19 pandemic globally in 2020, the public debt stock of ECOWAS increased by 15.9% to US\$296.76 billion in 2020, representing a spike of 80% from 2015.

Based on the IMF estimate, Nigeria, Ghana, Côte d'Ivoire and Senegal have been the biggest borrowers in the region. Their debt portfolios as

at 2019 stood at US\$130.70 billion, US\$42.81 billion, US\$24.13 billion and US\$13.10 billion with an estimate of US\$150.53 billion, US\$53.37 billion, US\$28.07 billion and US\$16.09 billion in 2020, respectively. For many of the ECOWAS countries, public debt stocks have expanded in manifolds. In Nigeria, for instance, public debt has expanded by close to four folds within the period of debt relief (2005) and 2020, while it increased by 30.6% and 15.2% on an annual basis in 2019 and 2020, respectively. Also, in Ghana, public debt stock increased by over five folds between the debt relief period (2005) and 2020, with a growth of 60.8% and 24.7% in 2019 and 2020, respectively. In the case of Côte d'Ivoire, public debt stock doubled over the 15 years after debt relief and increased by 54% and 16.3% in 2019 and 2020, respectively. Likewise, in Senegal, public debt has expanded by more than three folds and increased by 90.9% and 6.6% in 2019 and 2020, respectively. Just like her share of the region's economy, Nigeria's public debt dwarfed other ECOWAS countries as it accounted for an average share of 53.2% of total debt in the region between 2005 and 2020. Meanwhile, Ghana, Côte d'Ivoire and Senegal accounted for 17.2%, 14.8% and 5.9%, respectively, over a similar period.

Figure 8: ECOWAS Total Public Debt Stock (US\$ Billion)

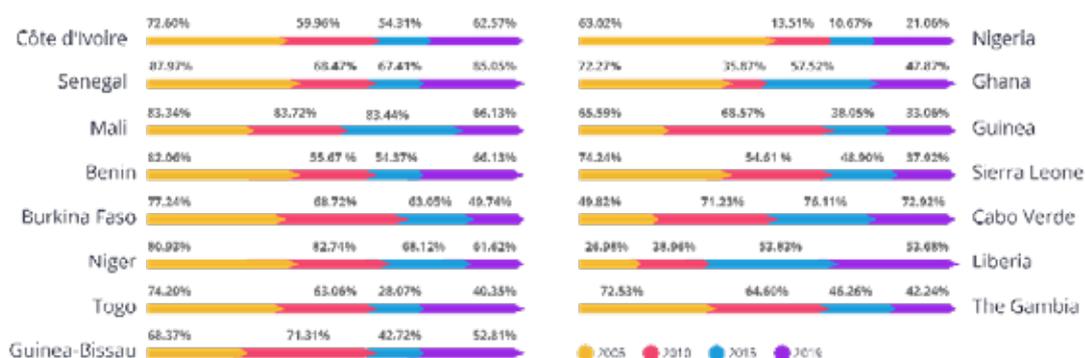


Source: Computations from IMF WEO Data & World Bank Statistical Databases

The public debt structure in the region has markedly changed; however, still dominated by external borrowing. External debt has persistently been the major source of financing for governments in the ECOWAS region. This is particularly the case for WAEMU countries predominantly funded with foreign borrowing, with the average contribution of external debt to government borrowings in the bloc standing at 58.8% in 2019-2020 compared with 78.3% during the debt relief in 2005. Despite, the external

debt dominance, domestic public debt is gaining momentum, especially in the non-WAEMU bloc as the average share of external debt shrunk to 45.7% in 2019-2020 from 60.6% in 2005. This reflects increased domestic borrowing and improvements in the domestic capital market development. The changed structure of public debt in the region has implications for the sufficiency of debt forgiveness for some of the countries in recent debt distress.

Figure 9: External Debt as a Share of Total Debt in ECOWAS (%)



Total external public debt in ECOWAS as at 2019 stood US\$98.92 billion (see Table 2). This represents an increase of 211.1% from 2006 after the debt relief for many ECOWAS countries and has expanded by an average of 10.4% since 2010. Despite its dominant share across the majority of the countries in ECOWAS, the total external public debt in the region accounted for 38.7% of total public debt in 2019. The smaller share of external public debt is driven by the substantially lower external public debt in Nigeria and Ghana that have the largest share of the public debt in the region. Owing to its economic size, Nigeria accounted for a share of 27.6% of external public debt in ECOWAS at US\$27.53 billion. The external public debt in Nigeria has since expanded by an annual average of 21.7% since 2010. Due to COVID-19, Nigeria's external public debt increased by 21.1% in 2020. Other countries with a substantial share of the external public debt in the region, as usual, are Ghana, Côte d'Ivoire, Senegal and Mali with external public debt stocks of

US\$23.32 billion, US\$15.10 billion, US\$12.84 billion and US\$4.64 billion, respectively.

A breakdown of external public debt (see Table 2) shows that majority of ECOWAS countries are exposed to multilateral debt, particularly in the WAEMU bloc. Meanwhile, big economies such as Nigeria, Ghana, Côte d'Ivoire and Senegal have a substantial part of their external public debt in commercial debt while Guinea and Togo are more exposed to bilateral debt. There is increasing utilisation of non-Paris Club funding in the region. For instance, in 2019-20, over 80% of bilateral loans to Guinea-Bissau, Niger, Liberia, Nigeria and the Gambia were attributed to non-Paris Club creditors. Similarly, there is increasing commercial debt via Eurobonds in the region. The high foreign currency interest rate associated with the commercial debts as well as other foreign debt heightens the external vulnerabilities of countries such as Nigeria, Ghana, Côte d'Ivoire, Senegal etc.

Table 2: Breakdown of ECOWAS Public Debt Portfolio as at 2019

	Breakdown of External Public Debt							
	Domestic Debt Stock (US\$ Million)	External Debt (US\$ Million)	Multilateral Debt (% of Total External)				Bilateral (% Total)	Commercial (% Total)
			Total Multilateral	IBRD	IDA	IMF & Other		
ECOWAS	157,116	98,924	41.3	0.5	25.6	15.2	19.1	39.6
WAEMU Countries								
Côte d'Ivoire	9,031	15,099	17.2	0.2	7.8	9.2	22.3	60.6
Senegal	2,258	12,842	37	-	20.7	16.3	22.6	40.5
Mali	2,374	4,636	76.3	-	42.5	33.8	23.7	-
Benin	2,319	3,611	58.4	-	30	28.4	12.2	29.5
Burkina Faso	3,378	3,342	89.9	-	50.1	39.8	9.8	0.4
Niger	1,973	3,167	77.5	-	42.5	35	22.5	-
Togo	2,309	1,561	41.9	-	10.6	31.3	50.7	7.4
Guinea-Bissau	453	507	51.1	-	24.9	26.2	24.1	24.9
Non-WAEMU Countries								
Nigeria	103,169	27,531	45.5	1.5	34.7	9.3	14	40.6
Ghana	22,318	20,492	26.8	-	19.5	7.3	15.7	57.5
Guinea	2,903	2,177	43.7	-	21.6	22.1	53.4	2.9
Sierra Leone	1,831	1,831	67.6	-	31.1	36.6	15	17.2
Cabo Verde	672	672	48.8	2.2	20.2	26.3	23.2	28
Liberia	787	787	77.3	-	49.8	27.5	22.6	-
The Gambia	843	617	73.1	-	19.1	54	26.9	-

Source: Computations from IMF & World Bank Data

The increasing adoption of Public-Private-Partnership (PPP) in project financing has locked up many ECOWAS countries in a debt trap by bilateral creditors. The inability of most African countries to bridge their rising infrastructural gap single-handedly has widened their exposure to bilateral loan agreements with countries including China, the United States, France, Saudi Arabia and the United Kingdom. For instance, China accounted for 80%, 46% and 45% of total bilateral loans contracted by Nigeria, Niger and Liberia, respectively in 2019. Most of these interventions from China are usually tied to specific capital projects under the PPP framework. For instance, ECOWAS countries had a total of 76 construction projects covering the transportation, energy and real estate sectors and valued at US\$79 billion in 2020 in which China provided 14.5% of the funding requirements.

The domestic debt market is increasingly gaining prominence among ECOWAS countries and is substantial for some countries. Especially, in Burkina Faso, Togo, Nigeria, Ghana, Guinea, Sierra Leone and the Gambia, domestic debt accounted for 50.3%, 59.7%, 78.9%, 52.1%, 66.9%, 62.8% and 57.8% of total public debt respectively. The steady shift towards domestic government debt sources is predominantly in government securities, accounting for over 60% for most countries. The growing domestic public debt is indicative of the development in the domestic financial and capital markets in the region. Domestic public debt in the region stood at US\$157.12 billion, increasing by an annual average of 17.2% since 2010. Domestic debt has in recent years grown in Nigeria as it accounted for 65.7% of total domestic debt in the ECOWAS region in 2019. In the same year, Nigeria domestic public debt stock stood at US\$103.17 billion. Among the other counties with substantial domestic public debt in the region are Ghana and Côte d'Ivoire with a domestic debt stock while US\$23.32 billion and US\$9.03 billion with shares of 14.2% and 5.7%, respectively.

The growing public debt portfolio in ECOWAS is a fallout from the low tax revenue base amidst rising funding needs to combat the negative impact of the COVID-19 pandemic on the economy. Nonetheless, the overreliance of many African countries on proceeds from primary commodity exports have strayed them from recalibrating their revenue mobilisation framework and

achieving fiscal consolidation. The negative terms of trade shocks and exchange rate depreciation have also contributed to the burden of external debt servicing as the oil and non-oil resource-dependent ECOWAS countries have been largely impacted by recurrent domestic production shocks and global commodity price volatility. The resulting negative terms of trade shocks have not only reduced their export earnings but also affected the domestic currency negatively relative to a basket of the world's major currencies. Consequently, currency depreciation-induced rise in external debt servicing would further complicate debt sustainability in these countries unless they resort to debt resolutions with their creditors. ECOWAS countries in this category include Nigeria, Burkina Faso, Ghana, Guinea, Liberia, Mali, Niger and Sierra Leone. Non-resource dependent countries such as Benin, Cabo Verde, Côte d'Ivoire, the Gambia, Guinea-Bissau, Senegal and Togo, have also suffered similar complications arising from the COVID-19 outbreak, which crippled tourism-dependent ECOWAS economies, such as Cabo Verde.



Review of Public Debt Ratios and Risk Exposure

The structure of debt among ECOWAS countries has significantly changed compared with the previous episode of debt crisis, particularly with the dominance of external borrowing. Above all, the debt position has been expanding and stakeholders have raised concerns about potential economic, financial and debt crisis risks that may ensue. However, growing debt alone is not sufficient to assess sustainability and risk of governments' debt position. Therefore, the global standard estimates series of debt ratios to determine the leverage the government has over some macroeconomic indicators. These ratios include the debt-GDP and debt service ratios to capture the capacity of the government to service its debt. Also, it is important to assess debt-export ratios, debt-reserves ratio and risk exposure analysis based on the terms and interest rates of debt.

Debt to GDP Ratio

The recent wave of public debt accumulation has been accompanied by a spike in the debt ratios in ECOWAS countries like other Emerging Market and Developing Economies (EMDEs). Moreover, some of the public debt ratios have conveyed a distressing situation in some countries in ECOWAS

given the pace of increase compared with past episodes of debt distress. On a regional scale, the debt to GDP ratio for ECOWAS pointed at 36.7%, having increased by 14.2 percentage points from the average of 22.5% between 2014 – 2018. Following the outbreak of the COVID-19 pandemic that prompted governments across countries to increase borrowing for social and economic interventions, the debt to GDP ratio for ECOWAS in 2020 expanded by 5.1 percentage points from 31.6% in 2019. A similar experience was recorded for the West African Economic and Monetary Union (WAEMU) as the debt to GDP ratio increased by 4.6 percentage points in 2020. All member countries in the region recorded debt to GDP ratios above the regional figure except Nigeria. Meanwhile, Ghana, Cabo Verde, and Guinea Bissau experienced the highest increase in debt to GDP ratio, expanding by 14.1, 14.0 and 11.2 percentage points, respectively.

The external debt to GDP ratio also reflects the dominance of external borrowing in ECOWAS. In 2020, the external debt to GDP ratio in ECOWAS expanded by 2.9 percentage points, contributing more than 50% to the recent increase in public debt compared with 5.1 percentage points on the total debt to GDP ratio. However, the expansion in external debt is alarming for the WAEMU group as the external debt to GDP ratio expanded by 4.0 percentage points, accounting for over 85% of debt external debt in 2020.



Table 3: Public Debt to GDP Ratios

	2014-2018	2019	2020	2021*	2022*	2014-2018	2019	2020	2021*	2022*
Countries	Total Debt to GDP					External Debt to GDP				
Cabo Verde	124.7	125	139	137.6	131.3	94	101.9	112.8	109	109
Guinea-Bissau	55.5	66.9	78.1	78.1	76.4	20.9	25	30.2	28	28
Ghana	56.9	63.9	78	81.5	83.2	29.6	30.3	34.5	32	32
Gambia, The	78.6	80	75.8	73.9	70	41	43.8	47.5	44.9	44.9
Sierra Leone	55.9	71.7	71.9	70.4	69.3	33.2	40	47.1	52.5	52.5
Senegal	51.8	64.8	65.8	66.8	66.6	34.9	47.1	49.2	45.1	45.1
Liberia	30.4	55.4	61.8	57	54.5	20.4	34.2	40.7	45.3	45.3
Togo	54.9	53.6	57.6	60	59.9	19.6	23.5	31.6	29.6	29.6
Côte d'Ivoire	35.8	41.2	45.7	46.3	46.6	22	26.7	32	30.6	30.6
Benin	34	41.2	45.4	47.7	46.3	15.9	24	25.1	24.7	24.7
Burkina Faso	32.5	42.7	44.3	46.8	48.1	21.4	23.5	26.7	24.1	24.1
Niger	31.6	39.8	44.2	44.5	42	20.6	25.4	31.2	31	31
Mali	33.1	40.5	44.1	46.1	46.8	23.1	26.2	28.6	26.6	26.6
Guinea	39.7	36.8	41.4	42.3	43.3	20.9	19.3	29.8	32.8	32.8
Nigeria	22.9	29.2	35.1	31.9	32.5	3.6	6.2	7.9	8.0	8.0
WAEMU	31.4	40.4	45.0	48.4	48.9	23.24	29.0	33.0	31.1	
ECOWAS	22.5	31.6	36.7	43.0	43.5	10.66	14.4	17.3	17.1	

Source: IMF, World Bank IDS, NESG Research; Note: * indicates projections

Debt Service to Revenue Ratios

Debt service burden became relatively high for most ECOWAS countries, especially with the fallout from COVID-19. One major tailwind to the debt situation in Africa and West Africa, in particular, is the slowdown in revenue due to the slump and persistently low level of commodity prices. Put together with the government's obligations on accumulated debt and COVID-19 interventions, this has led to a growing debt service burden on

government revenue. The regional average in 2019 stood at 45.4% and is projected to reach 60% in 2021. Beyond the distressing point with the debt to GDP ratio, the debt service to revenue ratio has been the major cause for concern for stakeholders on the debt situation in ECOWAS countries. Countries such as the Gambia, Ghana, Guinea Bissau, Niger and Nigeria have debt service to revenue ratios of over 50% in 2019. This implies that these countries spend over half and, in some cases, around 100% of government revenue to pay interest on debts and maturing principals.

Debt service burden in ECOWAS countries is heavy on domestic debt despite the dominance of external debt among most countries. Domestic segments of the capital market have driven this episode of the public debt distress for ECOWAS countries. This is because the domestic debt share of the debt to GDP ratio more than double the external debt to GDP for all the countries. Nevertheless, based on the World Bank/IMF standard of 14%, 18% and 23% for weak, medium and strong levels of distress for external debt service to revenue ratio, respectively, most

ECOWAS countries are not in much distress with external debt servicing. As at 2019, Benin, Burkina Faso, Guinea and Liberia were not at risk of external debt services to revenue, having recorded 7.4%, 6.3%, 3.5% and 6.2%, respectively. Ghana, however, in 2019 recorded 35% external debt service to revenue, higher than the strong level of distress for the ratio. The Gambia, despite spending 111.3% of revenue on debt servicing in 2019, maintained a medium level of distress with a 20.7% external debt service to revenue ratio.

Table 4. Public Debt Services to Revenue Ratios

	2014-2018	2019	2020	2021*	2022*	2014-2018	2019	2020	2021*	2022*
Countries	Total Debt Service to Revenue					External Debt Service to Revenue				
Gambia, The	151.1	154.7	111.3	120.1	100.9	44.8	41.8	20.7	21.4	15.3
Ghana	100.8	68.4	91.7	106.8	79.4	12.4	12	35	50	36.5
Guinea-Bissau	59	44.4	69.6	117.8	82.6	-	-	-	-	-
Niger	29.9	46.2	60.1	76.7	64.9	-	-	-	-	-
Togo	61.4	62.1	57.3	65	88.7	-	-	-	-	-
Nigeria	61.6	54.3	54.3	82.9	-	-	-	-	-	-
Benin	25.5	52.5	47.8	54.4	59.3	5.4	4.7	7.4	8.2	7.8
Côte d'Ivoire	39.1	32.5	38.1	37	35.1	9	9.5	14.8	12.1	13.5
Burkina Faso	22.6	27.8	31.6	37.3	45	5.7	5.7	6.3	5.6	6.4
Cabo Verde	48.7	53.5	29.7	35.6	39.4	18.1	16.3	14.6	17.8	17.8
Senegal	34.2	42.9	29	35	33.7	-	-	-	-	-
Sierra Leone	-	27.3	23.4	29.4	41.4	2.2	13.1	12.6	14.7	16.3
Guinea	6.1	12.2	20.5	15.4	19.5	4.1	4.2	3.5	3.5	5.9
Mali	111.5	15.4	13	16.4	18.4	-	-	-	-	-
Liberia	2.6	2.6	3.3	9.6	6.9	-	5.1	6.2	10.4	5.6

Source. IMF, World Bank IDS, NESG Research

Debt to Export and Foreign Reserves Ratios

External debt burden is relatively low for WEAMU countries compared with Anglophone West African countries. The external debt to export ratio has been on the rise for ECOWAS countries due, particularly, to dousing export value from commodity sales and the fallout of the drop in revenue that expanded public debt. According to the World Bank/IMF, external debt to export ratio of 140%, 180% or 240% signifies weak, medium or strong external debt burden respectively. Almost all ECOWAS countries are within the medium risk

level with Nigeria and Guinea being far below the weak burden benchmark in 2019. Liberia and the Gambia are the most at risk with external debt to export ratio of 235.8% and 202.1% inching close to the strong burden benchmark in 2019. A similar trend is obtainable with external debt service to export as only the Gambia has been crossing the critical point of 21% stipulated by the World Bank/IMF for low-income countries. In terms of reserves, the ability of the countries reserves to meet up with external debt and external debt services, Gambia remains the only country at risk in the region.

Table 5. Public Debt to Export Ratios

	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Countries	External Debt to Export			External Debt Services to Export			Reserves to External Debt			External Debt Services to Reserves		
Gambia, The	225	225.9	-	7.6	7.7	-	31.7	29	29.5	1.3	9.9	8.1
Ghana	249.5	219.8	235.8	3.4	6.3	7.1	53.5	45.6	27.5			
Guinea-Bissau	181	208	-	13	14	-				-	-	
Niger	197	201	-	9	8	-	-	-	-	-	-	-
Togo	254.5	199.6	202.1	25.4	27.5	-	19	19	20	31.2	26.2	14.2
Nigeria	216.8	177.1	175.2	6	7	7	34.5	34.3	40.5	9.9	5.9	5.4
Benin	103.9	124.6	-	2.8	3.3	-	-	-	-	-	-	-
Côte d'Ivoire	102	117	-	17	12	-	-	-	-	5.2	5.9	9
Burkina Faso	122	107	-	4	5	-	-	-	-	-	-	-
Cabo Verde	82.1	91.2	-	3	5.9	-	-	-	-	4.8	3.8	5.4
Senegal	90.9	89	-	5	6.8	-	-	-	-	-	-	-
Sierra Leone	92.2	83.1	-	10	12	7	30	25	26	4.8	5	14.3
Guinea	82	74	76	7	8	7	29	35	37	-	-	-
Mali	80	69	-	3	3	-	-	-	-	3.5	3.5	4.3
Liberia	51	62	71	2	3	3	39	44	42	1.4	1.7	1.6

Source: IMF, World Bank IDS, NESG Research

Public Debt Risk Exposure

The dominance of external debt exposes many ECOWAS countries to foreign exchange risk. Most ECOWAS countries in the past decade have relied much on external borrowing due to the higher interest environment within the countries and underdeveloped domestic capital market. On many occasions, the IMF, the World Bank and the AfDB have been the major interventionists for ECOWAS countries. Consequently, the regional average of foreign exchange debt to total points at 60.2% as at 2019. This is projected to expand to over 75% in 2021 following governments' heavy external debt engagement due to the economic disruption that accompanied the COVID-19 pandemic. Among other ECOWAS countries, Nigeria has the lowest foreign debt exposure with 22.5% foreign debt to total debt as of 2019 while countries such as Guinea Bissau, Ghana, and Benin recorded rates lower than the regional average. However, countries such as Cabo Verde, Côte d'Ivoire, Guinea, and Niger have high exposure (over 70%) to foreign exchange debt.

Refinancing risk, cost of debt and interest rate risks on foreign debt, however, are relatively low for ECOWAS countries. The average term to maturity on

the foreign currency dominated debts is 23.6 years for the region as at 2019 compared with 5.7 years on domestic currency dominated debts. At the height of this are Sierra Leone and Liberia with 29 years' average term to maturity on foreign debt and Ghana with the lowest at 15 years. Moreover, the regional average of foreign debt maturing in one year pointed at 4.9% of the total. This gives member countries of ECOWAS some respite in short to medium term on repayment of principal. However, the payment of interest remains challenging for the region, especially for countries like Ghana, Cabo Verde and Togo with high foreign debt exposure.

Refinancing risk and cost of debt are high on domestic debt for ECOWAS countries which manifests into a high domestic debt service burden. The cost of debt (Weighted Average Interest Rate) on domestic debt in ECOWAS countries has been high relative to the foreign debt component. As at 2019, the average cost of domestic debt in ECOWAS stood at 7.1% - as high as 13.4% in Ghana and 4.7% at the bottom in Niger. The situation is more concerning in the short to medium term for ECOWAS countries. The regional average term to maturity stood at 5.1 years as at 2019 and as low as one and three years in Sierra Leone and Niger, respectively.



Table 6: ECOWAS Public Debt Risk Assessment

Countries	FX Risk FX Debt (% of Total)	Cost of Debt		Refinancing Risk		
		Weighted Average Interest Rate	Dom.	Average Term to Maturity		Foreign Debt Maturing in 1yr (% of Total)
				Ext.	Dom.	
Benin	55.3	7.0	2.1	4	18	0.54
Burkina Faso	60.3	6.8	1.2	5	24	0
Cabo Verde	81.2	4.7	1.2	6	22	0
Côte d'Ivoire	70.0	5.5	3.9	4	18	4.6
Gambia, The	62.7	-	-	-	-	3.3
Ghana	44.2	13.4	4.1	5	15	17.2
Guinea	72.0	6.5	1.6	-	-	7.1
Guinea-Bissau	38.7	-	-	-	-	9.3
Liberia	65.9	9.1	1.7	20	29	0
Mali	64.9	5.7	0.9	4	28	2.1
Niger	70.6	4.7	1.8	3	27	2.6
Nigeria	22.5	9.1	3.4	-	-	0
Senegal	74.8	-	-	-	-	0
Sierra Leone	65.5	9.9	0.7	1	29	10.3
Togo	54.9	5.1	1.5	5	26	16.3

Source: IMF, World Bank IDS, NESG Research

Review of Public Debt Strategy in ECOWAS

Institutional framework and governance

Across the globe, the government's debt portfolio is usually the largest financial portfolio in any country. Beyond a potential balance-sheet risk for the government, poorly managed debt portfolios portend considerable economic and financial shocks to the economy. This, thus, made countries develop a set of guidelines and public debt strategies to sustainably reduce their vulnerability to debt-induced economic and financial shocks (IMF and World, 2001). Within the ECOWAS region, countries have developed mechanisms to effectively manage potential risks from over-bloated public debt.

West African Economic and Monetary Union (WAEMU)

The WAEMU Regulation No. 09/2007/CM/UEMOA (WAEMU) of 04 July 2007 provides the reference framework for member countries' public debt policy and debt management systems. This framework was suspended due to countries' needs to mitigate the ravaging impacts of COVID-19 (IMF, 2021). Also, other binding conditions stipulated by the monetary union are national government debt must be monetised by the central bank; member countries are solely responsible for their debt ("no-bailout clause"), and interest rates must be market-determined to moderate governments' fiscal behaviour.

Table 7: Fiscal Framework of WAEMU Countries

Key Indicators	Fiscal Balance to GDP	Overall Debt to GDP	Government expenditure	Annual inflation
Conditions	Zero or positive	< 70 percent	Governments are prohibited from accumulating arrears in the following years	Not more than 3 per cent

Source: WAEMU, 2007

Just like the European Union, the WAEMU has in place an Excessive Deficit Procedure (EDP) - revised in 2005, as a correcting mechanism for countries within its union. In recent times, these criteria have been breached without implementation of the EDP - as stipulated in the footnote. Fuelled by Article 71 of the WAEMU Treaty, which stated that member countries experiencing economic distress or are susceptible to such distress are exempted from these obligations, including the EDP mechanism.

Historically, most WAEMU countries are susceptible to critical economic stress, droughts, terms of trade problems and frequent political instability. Therefore, the need to boost aggregate demand, invest in infrastructural development – especially in the post-conflict period and maintain security are major drivers of debt accumulation for countries in the union. Thus, the situation makes the functionality and effectiveness of this debt management strategy questionable. According to Hitaj (2013), Basdevant and others (2015) and Féler and Simard (2019), there is a need for refinement and improvements of the public debt management strategy of the WAEMU region.

Non-West African Economic and Monetary Union (Non-WAEMU)

The public debt management framework in the non-WAEMU countries either exists as stand-alone debt management institutions or units within the Ministry of Finance managing the debt activities of the government. In Nigeria, for instance, the Debt Management Office (DMO) established by an Act in 2003 is tasked with preparing and implementing plans and setting guidelines for a sustainable government debt programme. The DMO is supervised by an Advisory Committee, including members of the Presidency, Ministry of Finance and the Central Bank of Nigeria. However, in Ghana, Sierra Leone, and some other countries, the debt management framework is embedded as a division in the Ministry of Finance.

The debt management framework of some of these countries is not as comprehensive and transparent as expected. Irrespective of the institutional arrangement, it can be argued that public debt

management institutions, in many cases, could be more independent and less subject to fiscal policy discretionary actions.

Accountability and Transparency

Economic theories on development have posited that developing countries cannot do without accumulating debt. This postulation is premised on enormous financial requirements to implement development projects and address other rising socio-economic needs. While the necessity for debt is justifiable in the ECOWAS region and among developing countries, there is a need to ensure accountability and transparency to prevent countries from experiencing “Debt Overhang”. Consequently, there is a growing importance for transparency and accountability of fiscal rules, especially debt accumulation and management.

On a regional level, the WAEMU has regulations that stipulate that all member countries must publish an annual macroeconomic report that includes debt data (World Bank, 2008). In addition, these regulations require that external audits of debt management activities are performed. The provisions defer for the non-WAEMU countries. Each country has a dedicated office for debt management operations, and these bodies are backed by law to ensure they adhere to such reporting and transparency rules.

Also, the World Bank usually conduct Debt Management Performance Assessments (DeMPAs) across countries to examine the critical components of debt management such as data structure, governance, accountability and transparency measures. Countries with more recent DeMPA in the region include Guinea, Mali, Côte d'Ivoire, Cabo Verde and Nigeria. In its assessment of Guinea, the World Bank (2018) found that although Guinea produces an annual activity report and quarterly budget execution report on public debt, no external audit had taken place as of 2018 when the DeMPA was carried out.

For Nigeria, the country is assessed to have a robust legal framework for public debt management. Also, the government is noted to have met the minimum

* EDP stipulates that a member country that breached the fiscal deficit threshold would be given 30 days to develop a strategy to correct the situation. Afterwards, WAEMU will publish the strategy and support the country to seek financial support in implementing the measure and grant “priority access to available WAEMU resource”. In case the defaulting country doesn't comply with this provision, the union would take the following steps: i) the publication of a statement on the country's economic situation; ii) the withdrawal of the assistance discussed above; iii) the recommendation to the West African Development Bank to review its intervention policy vis-a-vis the country; iv) and the suspension of the resources of the union to the member state;

requirement across notable indicators investigated by the DeMPA framework. Also, Mali had been unable to produce its statistical bulletin on debt due to technical issues. The Directorate of Public Debt – Direction Générale de la Dette Publique (DGDP), one of the units responsible for debt management, failed

to produce an annual report on debt activities. In addition, there appeared to be inconsistencies in the execution of external audits. The World Bank also found that no external audit had been carried out at their last assessment.

Table 8: Debt Management Assessments for Selected ECOWAS countries

Performance Indicators		Guinea	Mali	Côte d'Ivoire	Cabo Verde	Nigeria
Government & Strategy Development						
DPI-1	Legal framework	D	D	D	C	A
DPI-2	Managerial structure	D	D	C	C	C
DPI-3	Debt management strategy	D	D	D	D	C
DPI-4	Evaluation of debt management operations	C	D	D	D	A
DPI-5	Audit	D	D	D	D	D
Coordination with Macroeconomics Policies						
DPI-6	Coordination with fiscal policy	D	D	D+	C	B
DPI-7	Coordination with monetary policy	D	A	B	C	B
Borrowing and Related Financing Activities						
DPI-8	Domestic Borrowing	D	A	A	D	B
DPI-9	External Borrowing	D	C	D	D	B
DPI-10	Loans guarantees, on-lending and derivatives	D	N/N	C	C	B
Cash Flow Forecasting and Cash Balance Management						
DPI-11	Cash flow forecasting and cash balance management	D	D	C+	C	D
Operational Risk Management						
DPI-12	Debt administration and data security	D	D	D+	D	A
DPI-13	Segregation of duties, staff capacity and business continuity	D	D	D	D	C
Debt Records and Reporting						
DPI-14	Debt records	D	C	C+	D	B
DPI-15	Debt reporting	D	C	B	D	C

Source: World Bank's DeMPA of selected countries

⁹ The scoring methodology assesses each dimension and assigns a score of either A, B or C based on the criteria listed. The evaluation starts by checking whether the minimum requirement for that dimension has been met, corresponding to a score of C. A minimum requirement is the necessary condition for effective performance under the particular dimension being measured. If the minimum requirements set out in C are not met, then a D score is assigned. In the cases where a dimension cannot be assessed, a N/R (not rated or assessed) score is assigned. The A score reflects sound practice for that particular dimension of the indicator. The B score is an in-between score lying between the minimum requirements and sound practice.

¹⁰ The DeMPAs were carried out in the following years: Guinea (2018), Mali (2011), Côte d'Ivoire (2015), Cabo Verde (2016), Nigeria (2012).

Similar to Mali, Côte d'Ivoire was found by the World Bank (2015) to have failed to produce a yearly report on debt management activities to the National Assembly, in addition to being unable to produce and publish a statistical bulletin. External audits were also found to be inconsistently executed. Like Nigeria, Cabo Verde performed well in providing sufficient statistical information on the nation's debt. However, the World Bank found the audit process in Cabo Verde unsatisfactory, as with the other countries.

Policy coordination

It is paramount to harmonise all countries' economic performance and stabilisation at the regional level. The ECOWAS Convergence Council established primary and secondary criteria to bring about macroeconomic coordination among countries to achieve sound fiscal and financial outcomes for the region. In light of this, earlier sections have explored the different convergence criteria provided by ECOWAS and the WAEMU bloc. Member countries have shown commitments to this regional effort but are still lagging on many aspects of the criteria.

ECOWAS countries are making important strides in the implementation of appropriate measures to ensure coordination between public debt management policies and macroeconomic policies. This is especially the case considering some of the conditions attached to the World Bank and the IMF loan programmes. In Nigeria, amidst the functional distinction between debt management by the DMO and the monetary policy operations by the CBN, several platforms like technical workshops, committees and meetings have been created to ensure and nurture alignment and information sharing between stakeholders, monetary policy and fiscal policy institutions. These platforms in Nigeria include Committees of the NASS for Public Debt Management, Debt Sustainability Analysis (DSA) Workshops, Medium-Term Debt Management Strategy (MTDS) Workshops, Monetary and Fiscal Policies Coordinating Committee (MFPCC), FSS 2020 committee, Fiscal Liquidity Assessment Committee (FLAC) etc. Particularly, the DMO is being supervised by an Advisory Committee comprising of these bodies.

Consequently, there has been synergy in the positioning of the DMO and CBN around debt

programming. Nigeria's government has relied heavily on borrowing and the interest environment has been configured to keep FGN Bond and Treasury Bill rates attractive to domestic and foreign investors over the past six years. This has consistently put the interest rates on government securities at double-digit. This has, however, affected the debt structure adversely as debt servicing has become the major challenge in the recent debt crisis risk. Moreover, this positioning conflicts with the CBN agenda of driving credit to the private sector with the Loan to Deposit Ratio of 65%. A similar situation can be reported, especially for non-WAEMU countries as the WAEMU countries operate a monetary union in which they have all agreed to some bloc convergence guidelines.

Resource Management in ECOWAS

The governance of a nation's resources, efficiently or otherwise, have pervasive effects on its current state and future socially, environmentally, economically and politically. The utilisation of these resources is a major determinant of its wealth. Hence, resource governance has been a crucial point of discussion in mitigating fiscal weakness.

Mono-commodity dependence in the ECOWAS region increases vulnerability to market volatilities and consequently cause a revenue crunch. Like most countries and regions in Africa, the ECOWAS region is bountifully endowed with natural resources. These natural resources contribute significantly to foreign earnings in the region and present an opportunity to offset growing debt levels. However, there is an over-reliance on exporting certain commodities for public revenue among member countries. The concomitant market volatilities of commodity export have adversely affected the economic growth of ECOWAS countries and foreign earnings, which translate to a decline in public revenue. For instance, in Nigeria, crude oil export accounted for 75.4% of exports in 2020 and about 51% of government revenue between 2015 - 2020. Similarly, the mining and the oil & gas sectors cumulatively accounted for 27% of GDP, 68.3% of exports and 18% of government revenue in Ghana. However, the Ghanaian government's increased attention to its oil & gas sector in recent times has shifted focus away from the mining sector and has impacted their contributions accordingly. Ghana's export portfolio will closely resemble Nigeria's if

this pattern is sustained, making the country more susceptible to external shocks.

The current size of governments in the ECOWAS region facilitates fiscal weakness. A common challenge with resource management in ECOWAS is the size of the government. This is reflected in Nigeria as the projected 2021 revenue fall short of budget expenditure on recurrent and statutory expenditure without considering capital expenditure and debt services. This is reflective of how unsustainable the size of government is and how it has been driving debt overboard. Consequently, the ECOWAS region has consistently recorded fiscal deficits from 2015 – 2021 at an average of -4.74% of nominal GDP exceeding the ECOWAS benchmark for fiscal deficit to GDP ratio of 3%. The incommensurate size of the government relative to the government’s revenue mobilisation framework is pushing the government to borrow at an unsustainable level.

Resource mobilisation from natural resources is constrained by federating laws. The ECOWAS region is bountifully endowed with a plethora of natural resources: gold, crude oil, diamonds, manganese, tin, iron ore, columbite, natural gas, coal, limestone niobium, and zinc. Most of these mineral resources lay untapped as a result of the legal framework governing the control and allocation of the resources. Hence, the viability of the natural resources to enhance the un-robust nature of the tax base in the region is hampered. Therefore, the economy is robbed of the potential opportunities to ease fiscal pressure. For instance, in Nigeria, the Petroleum Act and the Mining Act of 2007 are the principal legislation governing the mining and crude oil sector. These legislations vest the control of mineral resources in the Federal Government. For many decades, the federal government has favoured the development of the oil and gas sector while the mining sector has laid back.

Meanwhile, the subnational governments are handicapped by the law that ceded the control of mineral resources to the federal government. Consequently, the mining sector’s contribution has been very low over the years. Also, the conflict between the Land Use Act and the Mining Act of 2007 is corrosive to the growth of Nigeria’s solid mineral industry as the latter legislation stipulates that the Federal government owns minerals beneath

the land surface while the former affords the state government authority over state land titles.

The unfavourability of the natural resource investment climate in the ECOWAS deters the productivity of the extractive industry and its capacity to contribute to public revenue. The cost-ineffectiveness in the use of natural resource revenue and the lack of accountability and transparency in its management creates leakages in revenue mobilisation in the ECOWAS, thus easing the region’s path to debt distress. For instance, efforts to streamline overlapping institutional mandates, reduce the cost of governance in Nigeria’s oil and gas sector, and improve the accountability and transparency of the sector have been embedded in the Petroleum Industry Bill (PIB) passed in 2021. However, despite the years of advocacy on the passage of the PIB, the Bill still await presidential assent. This has discouraged the influx of investment into the sector and has facilitated public revenue leakages and an exorbitant governance cost in the sector.

ECOWAS Performance on the Resource Governance Index

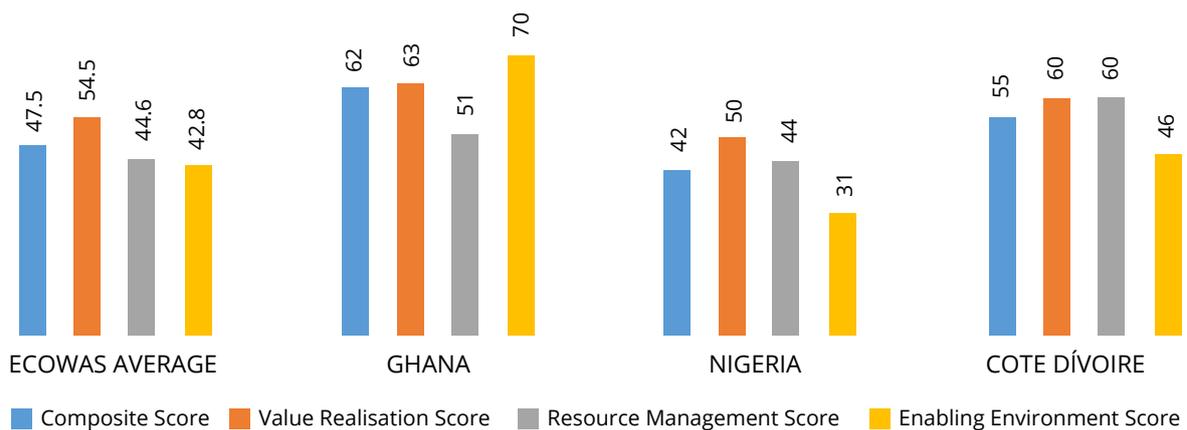
Amongst the 81 countries assessed in the 2017 Resource Governance Index, 10 are ECOWAS member states. The resource governance report suggests that 67% of ECOWAS members are considered resource-rich which stress the endowments in the region. However, the efficiency of resource governance is pertinent to the effective and inclusive utilisation of resources in the region. At the regional level, the ECOWAS has an average score of 47.5 points, which testifies to the mixture of strong and weak areas of resource governance in the region. On the sub-indices, ECOWAS performs weakly value realisation and resource management scoring 55 and 45 points respectively. The ECOWAS situation is more appalling on the enabling environment indicator with an average score of 43 points. This indicates the corrosiveness of governments’ resource management practices and policies in the natural resource industry.

At the national level, Ghana is the highest-ranked country on the Resource Governance Index in the region scoring 70 and 61 points on the enabling environment and the value realisation indicators respectively. This attests to some level of

robustness and effectiveness of Ghana’s governance framework for allocating extraction rights, exploration, production, environmental protection, revenue collection and state-owned enterprises. However, Ghana performs poorly on the revenue management indicator. This is reflective of the poor adherence to numeric fiscal rules that set the standard for public finance. Côte d’Ivoire trailed Ghana, ranked 28th, having performed reasonably well on the value realisation and the revenue management indicators with the same score of 60 points. Meanwhile, its performance was weak on the enabling environment indicator which is due to the political instability that has ravaged the nation in

the recent past. Nigeria, however, performed below the regional average ranked 55th with poor scores of 44 and 31 points on the revenue management and the enabling environment indicators. Although some countries performed laudably on some of the indicators, most countries in the region require aggressive reforms to improve their natural resource governance. It is key to unlocking the natural resource potential of member states, thereby improving their contribution to employment and domestic productivity, which translates into growth and robustness in public revenue and debt sustainability.

Figure 10: Resource Governance Index in ECOWAS



Good	≥75	A country has established laws and practices that are likely to result extractive resource wealth benefiting citizens, although there may be some costs to society.
Satisfactory	60-74	A country has some strong governance procedures and practices, but some areas need improvement. It is reasonably likely that extractive resource wealth benefits citizens, but there may be costs to society.
Weak	45-59	A country has mix of strong and problematic areas of governance. Results indicate that resource extraction can help society, but it is likely that the eventual benefits are weak.
Poor	30-44	A country has established some minimal procedures and practices to govern resources, but most elements necessary to ensure society benefits are missing.
Failing	<30	A country has almost no governance framework to ensure resource extraction benefits society. It is highly likely that benefits flow only to some companies are elites.

Source: 2017 RGI Report; Chart: NESG Research



F O U R (4)

PUBLIC DEBT IN
ECOWAS AND THE
MACROECONOMY





Drivers of Public Debt Accumulation in ECOWAS

Public debt data for ECOWAS countries have strengthened the position of stakeholders wary of the region's debt situation. According to IMF (2019), countries such as Cabo Verde, Ghana, Sierra Leone and the Gambia are either at a high risk of debt distress or being in debt distress. Despite that, many of these countries had received some form of debt relief just over a decade ago. These countries were expected to maintain prudence thereafter. However, in many of these countries, public debts have been accumulated and are now approaching a crisis level. Many have instituted a debt management framework to ensure the sustainability of public debt but is ineffective in stemming debt accumulation. This suggests that debt relief or the establishment of debt management divisions have not been sufficient in keeping a sustainable debt level. Hence, there is a need to understand the drivers of public debt in the region for governments to position appropriately for debt sustainability remedial.

The drivers of public debt in many countries are often country-specific. This could be in the form of governments' economic stabilisation efforts, infrastructural and development spending, and human capital development in some countries (IMF, 2019; World Bank, 2019). It could be driven by unanticipated economic shocks such as the fall in commodity prices and in more recent instances of government engagement to mitigate the socio-economic impact of the COVID-19 pandemic on households and businesses (Chiminya and Nicolaidou, 2015; AfDB, 2019; Atta-Mensah and Ibrahim, 2020). For some countries, political instability and crisis are observed to have amplified the rate of accumulation of new debts (IMF, 2019; AfDB, 2021).

Further in the literature, a number of other drivers of public debt have been identified (see Figure 11), which can either be economic or non-economic drivers of public debt (Anaya and Pienkowski, 2015; Mothibi and Mncayi, 2019; Nagou, Bayale and Kouassi, 2021).

Figure 11: Common Drivers of Debt Accumulation in ECOWAS Countries



The economic drivers of debt accumulation in developing countries include, but are not limited to, interest rate movements (domestic and foreign), domestic real GDP growth, fiscal deficit, commodity price volatility/terms of trade shocks, trade and financial deficits, as well as, external reserves and exchange rate fluctuations (Anaya and Pienkowski, 2015; IMF, 2019; World Bank, 2019; Mothibi and Mncayi, 2019; Nagou, Bayale and Kouassi, 2021). We also have non-economic drivers of debt accumulation including environmental factors (issues around climate change etc.), political instability and corruption, debt relief arrangement with multilateral, bilateral and private creditors, habit hypothesis (otherwise known as debt persistence) and the IMF's engagements with developing countries including special monitoring program, extended credit facility (ECF) and pandemic-driven rapid financing instrument (RFI) (Chiminya and Nicolaidou, 2015;

AfDB, 2018; Atta-Mensah and Ibrahim, 2020). Hence, the following subsection presents some specific cases that manifest debt accumulation drivers among ECOWAS countries.

Country-specific drivers of debt accumulation in ECOWAS

Economic Drivers

Interest rate movements: This is a peculiar problem for non-WAEMU ECOWAS countries such as Cabo Verde, the Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone with monetary policy independence. Unlike the WAEMU countries under a monetary union that specifies a convergence for interest rates and fiscal deficit and debt to GDP level, non-WAEMU countries have control over their monetary policy. They often adjust the interest rate level to attract foreign and domestic

investors to government securities. Consequently, the interest rate (lending rate) level goes as high as 28% in the Gambia, 23% in Sierra Leone, 16% in Ghana, 15.4% in Nigeria, 12.4% in Liberia, and 9.1% in Cabo Verde. This is against the reality for WAEMU countries with interest rates at below 5%. The high-interest environment, particularly, as obtained in Nigeria, Ghana and the Gambia, constitutes a high cost of borrowing, which causes a high debt service burden for the government. The debt service to revenue ratio for the Gambia and Ghana reached 111.3% and 91.7%, respectively, in 2019 while it reached 82.9% in Nigeria in 2020. This implies that these countries rely on borrowing to fund government spending, further, driving up public debt levels and burden in these countries. Hence, the affected countries need to stabilise the interest rate level to keep the cost of borrowing at a sustainable level that does not dry up government revenue.

Commodity price volatility/terms of trade shock: This is particular to resource-dependent countries like Nigeria (oil exporter), as well as, Burkina Faso, Ghana, Guinea, Liberia, Mali and Sierra Leone (non-oil exporters). These countries depend on primary commodities as the main source of fiscal revenues and foreign exchange. Hence, a plunge in global commodity prices would imply limited fiscal space and the need to borrow to plug the fiscal gap. In a typical case of Nigeria; the crash in crude oil prices in 2014 has been the propeller of recent debt accumulation in the country and compounded by the COVID-19 induced oil price crash. According to the Debt Management Office (DMO), Nigeria's public debt has increased by 194.5% between 2014 and 2020 following the oil price crash in 2014. Being the second-largest exporter of cocoa in the world, Ghana also has had a fair share of commodity price volatility as demand for the chocolate end product is reducing due to the effect of the pandemic on household income. Since these countries barely influence global commodity prices, these countries need to diversify the sources of their revenue and foreign exchange, develop value chains and expand their tax base to increase revenue from non-resource sources.

Exchange rate volatility and external reserves position: These are also issues peculiar with the non-WAEMU countries with independent monetary policy units which easily adjust the exchange rate as they deem fit. A relatively weak local currency against the US dollar would imply a higher external debt service burden for these countries. Two countries in this group – Nigeria and Ghana – are highly exposed to

commercial external debts, particularly, Eurobonds (which are foreign currency-dominated debt instruments), jointly accounting for over 20% of total issuance in ECOWAS. In the last four years (2018-2021), the Nigerian Naira and the Ghanaian Cedi have, respectively, depreciated by 34.4% and 24%. Weak domestic currency due to lack of reserves accretion required to support the Naira makes external borrowing a matter of compulsion. In more specific terms, Nigeria in 2020 acquired a US\$3.4 billion IMF loan for external balance equalisation to stabilise the exchange rate and foreign reserve depletion rate. Also in Côte d'Ivoire and Senegal, despite adopting the stable WAEMU exchange rate, they are increasingly being exposed to Eurobonds. With the rising exchange rate volatility, most of these countries are subjected to external debt servicing burden. Hence, this necessitates the need for countries to consider concessional debts over commercial debts.

Non-economic Drivers

Environmental and social factors: The most vulnerable countries to environmental crises in ECOWAS include Mali and Niger. According to scientific findings, these countries are drought-prone and are landlocked areas with the highest vulnerability index of over 80%. Likewise, Sierra Leone and Liberia, more than other countries in ECOWAS, were hit by the Ebola outbreak in 2015. The Ebola period was commensurate with an increase in the debt to GDP ratio by 26.7 and 14.0 percentage points to 69.2% and 33.7% in Sierra Leone and Liberia, between 2013 and 2017, respectively. Faced with weak domestic resource mobilisation, these countries would require emergency funds to tackle challenges posed by natural and environmental disasters on their economies. Countries have often resorted to borrowing and other forms of external finance to ameliorate the adverse outcomes of disasters. Countries in the region needs to maintain intervention funds for some of these unforeseen occurrences to placate the impact on the economy and reduce the tendency of borrowing during such crisis.

Political and Civil Instability: The key conflict zones or fragile countries in ECOWAS, according to the IMF, are Côte d'Ivoire, the Gambia, Guinea, Guinea Bissau, Mali, Sierra Leone and Togo. This group of countries are better described as war zones, having one civil conflict or the other over the past decade. In addition, Nigeria has been battling terrorism, banditry, and kidnapping, driving up military expenditure over the past decade and

having negative externalities on neighbouring countries. There is currently a military take-over in Mali and Guinea, which poses political risks to the ECOWAS region and often comes with fiscal disruption. Meanwhile, Mali and other fragile ECOWAS members require huge military presence, assistance and higher fiscal spending to counter terrorism. Four of these countries – Côte d'Ivoire, Guinea-Bissau, Mali and Togo are beneficiaries of the French military aid. Others had to borrow to secure their countries from being socially and politically disintegrated.

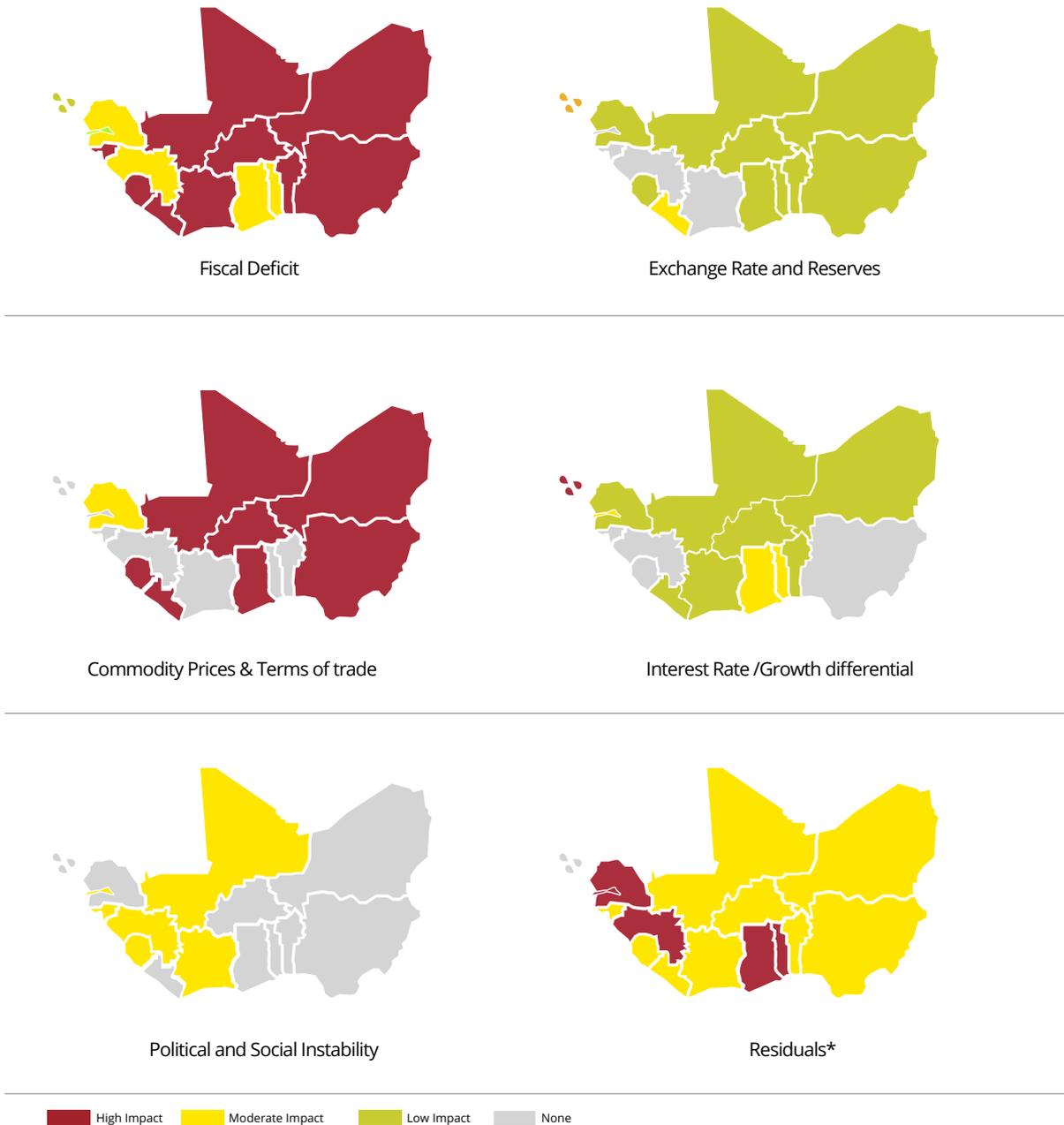
IMF Engagements: ECOWAS members currently under the economic and financial surveillance of the IMF include the Gambia, Liberia and Sierra Leone. The three countries are currently engaged with the Fund under the latter's Extended Credit Facility (ECF) having earlier been adjudged to be running a high risk of debt distress. This is not unexpected as the three non-WAEMU members have higher exposure to external debts to the tune of 55%-65% of total debt stocks in their respective domains. The only advantage they have is that they leverage highly on concessional financing from the IMF, World Bank etc. Similarly, in response to the COVID-19 pandemic, the IMF has also extended some credit facilities to its member-states (ECOWAS inclusive) with a balance of payments problem, offering them no conditionality and granting them 100% access to their reserves with the IMF. This is

not unprecedented as most ECOWAS members had to resort to multilateral loans due to tight global financial conditions.

Debt relief arrangements with multilateral, bilateral and commercial creditors: Similar to the Paris Club reliefs to developing countries in 2005/2006, ten ECOWAS members have so far benefitted from the COVID-19 pandemic-induced debt Service Suspension Initiative (DSSI). These countries include Benin, Burkina Faso, the Gambia, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Sierra Leone and Togo. Debt relief arrangement is expected to reduce the debt servicing burden of countries that are mostly exposed to external debt accumulation, particularly, the WEAMU countries, which were the main beneficiaries of the G20's DSSI in 2020. Since debt relief is a short-term arrangement, most of these countries are advised to reduce their exposure to short-term external debt instruments to avoid issuing new debts (with fairly long debt redemption tenor) to service the former – a condition referred to as “a Ponzi-game scheme”. This is becoming more of a habit in Nigeria and indicates the existence of debt persistence in the country where growth in public debt outpaces the growth in nominal GDP and total revenue. Other countries with huge exposure to short-term external debts in ECOWAS include Côte d'Ivoire, Ghana, Guinea, Mali, Sierra Leone and Togo.



Figure 12: Schematic Presentation of Specific Drivers of Public Debt in ECOWAS countries



*Residuals cover non-economic drivers, including IMF's engagement, debt relief and environmental and social factors, among other

Debt Accumulation and Economic Growth in ECOWAS

The countries in ECOWAS based on diverse drivers have had motivations to accumulate public debt. Against the backdrop of insufficient capital to finance developmental projects that are targeted at economic growth and future revenue growth, developing countries have resorted to exploring alternative financing sources, deeply rooted in borrowing. However, these developing countries'

significant levels of public debts have only landed most of them in debt distress, leaving them with no option but to seek debt re-negotiation and resolution. This has ignited wide-ranging debates among academia, policymakers, investors and other relevant stakeholders regarding the impacts of public debt accumulation (total or external) on growth. In affirmation, theoretical guidance suggests that public debts promote growth, however, to the extent that a country does not exceed its debt carrying capacity. Otherwise, excessive debt

accumulation would serve as a tax on future investment returns, which can create a disincentive for investment in a highly indebted country (Adekunle et al., 2021).

A number of studies have investigated the validity of two recurring theories in the development economics literature: debt overhang theory and the crowding-out effect hypothesis. The debt overhang theory suggests a non-linear relationship between public debt and economic growth, indicating that public debt enhances output growth at lower levels but has a contractionary effect if accumulated excessively beyond an optimal level (Jarju et al., 2016). The optimal level of debt is the maximum debt carrying capacity of a country beyond which it experiences investment cuts and consequently a shortfall in output growth. On the other hand, the crowding-out effect hypothesis holds that the accumulation of a large debt may stifle economic growth through lower private investment. In this way, debts would be beneficial to investment up to a certain threshold, beyond which excessive leverage will start to constrain the gross capital formation or the rate of capital accumulation (Banayed et al., 2015). Though there is no direct link between debt (whether external or domestic) and growth, a possible transmission mechanism has been identified through the investment channel (see, Pattillo et al., 2002; 2004 and Adekunle, 2018).

Debt-Growth Nexus in ECOWAS – Empirical Findings

The analyses conducted in this section are presented in three alternative dimensions: (1) Baseline models without and with debt indicators; (2) Alternative models Set I (country pooling without accounting for cross-country heterogeneity): tests for the existence of debt overhang (non-linear effects of debt accumulation) and crowding-out effects of private investment; (3) Alternative Models Set II (accounting for cross-country heterogeneity): growth effects of debt accumulation via channels including income status, economic structure, state fragility/political instability and currency union membership. The following presents the empirical results of the alternative dimensions as earlier expressed. (see Appendices 1 – 7 for results presentation).

Debt accumulation constitutes a key driver of economic growth in ECOWAS (see Appendix 1). On the whole, debt accumulation has a negative impact on growth in the ECOWAS region, but three out of the five debt indicators used in our analysis exert more significant influence, and they include public debt to GDP, external debt to GDP and external debt to export ratios. The results suggest that every 10 percentage point increase in public debt to GDP, external debt to GDP and external debt to export ratios reduces regional growth, on average, by 0.4, 0.48 and 0.01 percentage points, respectively. This implies that the uncontrolled accumulation of public and external debts is inimical to regional growth in ECOWAS. Irrespective of the indicator used, the growing debt accumulation has a downside effect on economic growth. In light of the aforementioned, this study inquires further into the factors underlying the inverse relation between debt accumulation and economic growth in ECOWAS. The inclusion of the debt indicator in the growth equation magnifies the positive impact of aggregate investment and the negative impact of inflation on regional growth .

ECOWAS runs a high risk of debt overhang problem (see Appendix 2). Findings from this study support the existence of the debt Laffer curve which shows an inverted U-shaped relationship between debt accumulation and economic growth with respect to debt service to revenue ratio. Though the non-linear effect is not significant, the adverse impact of uncontrolled debt accumulation by member-states on regional growth cannot be overemphasised, considering the weak local resource mobilisation across ECOWAS countries. The insignificance of the non-linear effect term could be partly due to considerable progress that some member states have made in tax revenue mobilisation , though others still find it difficult to improve on tax collection in their domains. For instance, Nigeria accounts for half of ECOWAS total debt portfolio in the region but has the lowest revenue mobilisation capacity of about 6% revenue to GDP ratio (6.3% in 2020). Besides, the susceptibility of most ECOWAS economies to commodity price volatility and terms of trade shocks magnifies their debt repayment risks with huge pressure on their meagre resources.

¹¹ The list includes but not limited to Pattillo et al. (2002; 2004), Clements et al. (2003), Schclarek (2005), Osinubi and Olaleru (2006), Checherita and Rother (2010), Tuffour (2012), Dogan and Bilgili (2014), Forgha et al. (2014), Mupunga and Roux (2015), Jarju et al. (2016), Omatoshio et al. (2016), and Ebi and Imoke (2017), Adekunle (2018).

Box 1. Methodology for Debt – Growth Nexus

This study follows the standard growth regression as follows:

$$Growth_{it} = \lambda Growth_{i,t-1} + \gamma DEBT_{it} + \beta' X_{it} + \mu_i + e_t + \epsilon_{it}$$

The non-linear or quadratic version of the growth model is given as:

$$Growth_{it} = \lambda Growth_{i,t-1} + \gamma DEBT_{it} + \alpha DEBT_{it}^2 + \beta' X_{it} + \mu_i + e_t + \epsilon_{it}$$

Where $Growth_{it}$ is the real GDP growth in country i in the current period t ; $Growth_{it}$ = real GDP growth in the immediate past period $t - 1$; $i = 1, 2, 3, \dots, 15$; $t = 2009, 2010, \dots, 2015, \dots, 2020$; $DEBT_{it}$ is a proxy for debts (the explanatory variable of interest); $DEBT_{it}^2$ is the quadratic or non-linear debt term; X_{it} is a matrix of “fundamental” determinants of growth (otherwise, called control variables), and the error term components including μ_i , e_t and ϵ_{it} represent a country-specific unobservable effect, a time-specific effect, and an idiosyncratic disturbance term, respectively; λ is the first-order autocorrelation coefficient included to test for the persistence of a country’s initial economic conditions; γ , β and α are partial slope coefficients. In line with the Debt overhang theory, it must have that $\beta > 0$ and $\alpha < 0$. This implies that lower levels of debt are pro-growth, whereas excessive levels of debt are anti-growth.

In growth empirics, the traditional determinants of output are labour, capital and technology, hence the inclusion of gross capital formation as a proxy for capital stock. In order to control for the role of macroeconomic environment, variables including trade openness and inflation rate are included in the growth model. We also seek to uncover the country-specific effects, most especially, to examine the dynamics in debt-growth nexus when controlling for factors including income status of ECOWAS countries (middle and low-income class), economic structure (commodity-dependent and non-commodity dependent countries), political instability (fragile and non-fragile ECOWAS members) and Currency Union membership (WAEMU and non-WAEMU countries) are accounted for in the baseline debt-growth regression. Therefore, we consider both baseline and alternative specifications within our estimation scope. We estimate a total of 36 models using the Panel Generalized Methods of Moments (GMM) technique, most suitable for modelling dynamic relationships, whereby the number of sampled cross-sections or panel units (15 ECOWAS countries, in this case) is greater than the full sample period (12 years, in this case).

¹²See, Models 2-6 in Appendix 1.

¹³ECOWAS members with the highest tax revenue-to-GDP ratio in 2018 in the region include: Togo (19.4%), Burkina Faso (16.8%), Mali (14.1%), Ghana (13.1%), Côte d'Ivoire (13.1%) and Niger (11.1%) (see OECD, 2019).

This particular finding is a clarion call on member states to operate far below their solvency thresholds so that they would not be immersed in a debt trap and debt overhang problem, going forward. This study also affirmed the validity of the debt overhang theory for 9 out of the 15 ECOWAS members (see Appendix 8). This, therefore, proves the point that regional growth is indeed a decreasing function of the level of debt. By implication, uncontrolled debt accumulation would only streamline development projects in many member countries as their revenues would be otherwise spent on servicing their growing debt stock.

Debt accumulation substantially crowds out private investment in ECOWAS (see Appendix 3). The study also offers evidence that suggests an uncontrolled debt accumulation would lead to a reduction in gross capital formation in ECOWAS. This is because prospective creditors and investors price down the sovereign and investment ratings of, particularly highly leveraged member states. Estimates show that every 10 percentage point increase in external debt to GDP and external debt to export ratios slow down regional growth, on average, by 0.03 and 0.01 percentage points, respectively via the investment channel. We corroborate this result with the weak positive correlation between gross capital formation and each of the five debt indicators. To this end, efforts need to be made to boost the efficiency of debt accumulation in the region and hitherto channelling debts to productive uses. In other words, debt accumulation should not be considered an end in itself, but a means to an end. There are instances of ECOWAS economies that are highly leveraged but command high economic growth. Six ECOWAS members were among the high growth economies in SSA in 2019, according to the IMF. These countries include Benin (6.9%), Ghana (6.5%), Burkina Faso (5.7%), Guinea (5.6%) and Senegal (4.4%), which jointly accounted for 38.5% of ECOWAS' total debts in 2019. However, Nigeria and Liberia – which accounted for 51.6% and 0.7% of ECOWAS' public debt portfolio, respectively, recorded the weakest growth rates at 2.2% and -2.5% in the region in 2019.

The group of high-income class countries plays a key role in reinforcing the adverse growth

effects of debt accumulation in ECOWAS (see Appendix 4). While it has been established that middle-income class ECOWAS economies (led by Nigeria) constitute a drag on regional growth due to their relatively large economic sizes and weak country-specific growth trajectory, the role of income status on regional growth is not significant. This is not unexpected as all five middle-income ECOWAS economies, except Nigeria, are among the high growth countries in SSA. Moreover, estimates showed that debt accumulation ignites a deceleration in regional growth while accounting for higher-income class status in the debt-growth regression. The huge economic sizes of the region's weakest growth country, Nigeria, masks the potency of high growth economies that are low-income countries to ultimately drive up regional growth overtime. This result suggests that the efficiency of debt accumulation in Nigeria needs to be improved as urgently as possible since the country is the largest economy and the largest driver of economic growth and public debt accumulation in the ECOWAS region.

The Resource-curse phenomenon has taken its full course in ECOWAS, with resource dependence magnifying the negative growth impact of debt accumulation in the region (see Appendix 5). The study offers evidence of a resource-curse hypothesis, where it was observed that resource dependence constitutes a drag on both the rate of acceleration of regional growth and debt accumulation. This finding cannot be dissociated from the huge pressure of the Nigerian economy on the regional growth being the region's largest economy and the largest contributor to the region's public debts, whilst she has continuously recorded a weak growth together with Liberia. Meanwhile, Nigeria is the largest crude oil exporter in ECOWAS and Liberia is one of the region's largest exporters of gold, iron ore and rubber. The findings, generally, suggests the urgent need for economic diversification in resource-dependent ECOWAS economies, as the growth trajectory in these countries cannot be dissociated from the performance of its main resource sector.

State fragility undermines the growth effects of debt accumulation in ECOWAS (see Appendix 6). This study found that the region's conflict zones

¹⁶ The contributions of the six countries to regional public debt portfolio are: Ghana (17.4%), Ivory Coast (8.7%), Senegal (6.4%), Benin (2.3%), Burkina Faso (2.2%) and Guinea (1.5%).

¹⁷ Other middle income countries in ECOWAS are: Cabo Verde, Côte d'Ivoire, Ghana and Senegal.

¹⁸ With the exception of Liberia (which is the only low income country with the region's weakest growth), the countries in question include: Benin, Burkina Faso, The Gambia, Guinea, Guinea-Bissau, Mali, Niger, Sierra Leone and Togo.

impose huge constraints on regional growth relative to member-states that are politically stable. Estimates showed that these war-prone ECOWAS countries exert positive influence over regional growth since they are high-growth countries in the region. Meanwhile, uncontrolled debt accumulation to wage war against terrorism and incessant civil conflicts would rob off these countries' resources that could have been put into productive uses. Hence, there is a negative growth impact of debt accumulation through the conflict channel. We showed that a 10 percentage points increase in regional debts would slow down average growth in ECOWAS by -0.75 to -0.16 percentage points. To this end, there is a need for regional coordination and cooperation in the fight against terrorism in ECOWAS.

Currency union membership plays a key role in enhancing the growth impact of debt accumulation in ECOWAS (see Appendix 7). The study's estimates showed that a 10 percentage points increase in regional debts would push up average growth in ECOWAS by 0.32 to 0.66 percentage points due

to the eight ECOWAS members belonging to a currency union, the West African Monetary Union (WAEMU), relative to the non-WAEMU countries. This result suggests that the fact that some fiscal rules and convergence criteria unconditionally bind WAEMU member states ensures efficient fiscal management and improves economic performance in the bloc relative to the non-WAEMU bloc. Coupled with this, the WAEMU countries are among the fastest-growing economies in the world and the majority of them have in recent years invested massively in infrastructural development which was the reason for debt accumulation. Moreover, the WAEMU countries have largely benefited from their age-long economic ties with France - their former colonial master. Beyond the unlimited currency convertibility guaranteed by the French treasury, the WAEMU countries continually receive military aid and assistance from the French government. It is, therefore, important for the non-WAEMU countries to draw useful lessons from the economic performances of their WAEMU counterparts for the overall benefit of the ECOWAS region.



¹⁹ Other resource-dependent countries in ECOWAS include: Burkina Faso, Ghana, Guinea, Mali, Niger and Sierra Leone.

²⁰ The countries in question are: Côte d'Ivoire, The Gambia, Guinea, Guinea-Bissau, Mali, Sierra Leone and Togo.

²¹ See, Models 27-29 in Appendix 6.

²² See, Models 33 and 34 in Appendix 7.

²³ The WAEMU countries include: Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo. The non-WAEMU countries, on the other hand, are: Cabo Verde, The Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone.

²⁴ See, AfDB (2021).



F I V E (5)

DEBT
SUSTAINABILITY
ANALYSIS - A
COUNTRY-SPECIFIC
DEBT THRESHOLD





Findings from the previous section have emphasised some negative transitioning of growing public debt to the economy of ECOWAS. This, however, does not directly translate to the fact that public debt is bad as different scenarios around some specific characteristics of ECOWAS countries have proven to enhance debt outcomes. Rather, the region has a debt carrying capacity, which varies across member countries given some country-specific differences as explored in the section. Hence, this section presents the analysis of the specific benchmark for the debt carrying capacity of each ECOWAS countries which could be termed the “debt distress” point. This would allow these countries to be cautious of the risks associated with excessive debt accumulation and the need to keep borrowings within sustainable limits dictated by their capacity to pay back.

The analysis herein relies on the debt overhang theory. According to Krugman (1988), debt overhang is the presence of an existing, “inherited” debt level, sufficiently large enough that creditors do not expect with confidence to be fully repaid. A country, therefore, enters a debt trap to the extent that the expected present value of its potential future resource transfers is less than its debt. This also is not to say that debt accumulation is

bad because a debtor country benefits partially from a resulting increase in outputs or exports, which helps to service the debts into the future (Sawides, 1992). This gives rise to the “Debt Laffer Curve (DLC)”. The DLC shows that along the left or “good side” of the curve, increases in the face value of debt service is associated with increases in the chances of debt repayment. In contrast, increases in the face value constrain the repayment capacity on the right or “wrong” side of the curve. The peak of the curve is the point at which growth is maximised at the optimal debt carrying capacity level, beyond which the chances of repayment become more difficult. A number of empirics have dealt extensively with this issue by particularly paying more attention to the growth maximising level of debt threshold and not necessarily the solvency threshold that is proposed in this Report.

Current State Assessment of Debt Sustainability Analysis: Solvency Threshold

The International Monetary Fund (IMF)'s current solvency threshold remains the most widely accepted measure of debt distress for countries based on five debt indicators: namely, external debt to GDP ratio, external debt to exports ratio, total debt service to exports ratio, total debt service

to revenue ratio and total debt to GDP ratio. The solvency thresholds are used to measure the capacity of countries to pay back debt as at when due without recourse to any form of renegotiation. External debt to GDP and total debt to GDP ratios imply to what extent a country can repay and service its external and total debt stocks, respectively, from its aggregate income. External debt to exports and debt service to exports ratios imply the extent to which a country can redeem its external debt stock and service its total debt stock from its export earnings. Total debt service to revenue ratio implies that to what extent a country can service its total debt stock from its current revenue.

Across the five debt indicators, the IMF provided benchmarks for Low-Income Countries (LICs). Based on these benchmarks (see Table 9), a country's capacity to pay back principal debt and interest charges at the end of the debt tenure is assessed. The reality, however, shows that many countries are at varying critical levels across the debt indicators relative to the benchmark set by the IMF (see Tables 3, 4 and 5). In essence, many countries have based their debt sustainability decisions on debt indicators that give room for more borrowing. For instance, based on the debt to GDP ratio that is widely used, the debt

situation in countries like Nigeria (35.1%), Guinea (41.4%), Niger (44.2%), Mali (44.1%) and Côte d'Ivoire (45.7%) appears subtle since they have not reached the 70% threshold. However, it has become worrying for countries such as Cabo Verde (139.0%), the Gambia (75.8%), Ghana (78.0%), Guinea Bissau (78.1%) and Sierra Leone (71.9%), which have exceeded the threshold.

Meanwhile, in terms of debt services to revenue ratio, many of these countries that appear in a safe situation are already in critical debt condition with debt service to revenue ratio of close and over 100%. This is particularly concerning given that debt is serviced with revenue and not the GDP or the exports. The situation is peculiar for Nigeria as it recorded 97% debt service to revenue in the first five months of 2021. Similarly, Ghana and the Gambia recorded a debt service to revenue ratio of 91.7% and 111.3%, respectively, in 2019. By implication, after debt service is deducted from revenue, the government has virtually nothing left to spend on the economy. Therefore, the oversight on the part of affected countries puts them at high risk of debt distress (or risk of external debt default) as they continue to accumulate debts when they have a weak revenue base and export earnings.

Table 9: Debt Burden Thresholds and Benchmarks Under the DSF of the IMF

	PV of external debt in percent of		External debt service in percent of		PV of total public debt in per-cent of
	GDP	Exports	Exports	Revenue	GDP
Weak	30	140	10	14	35
Medium	40	180	15	18	55
Strong	55	240	21	23	70

Source: IMF

¹⁹ see, for instance, Schclarek (2005), Osinubi and Olaleru (2006), Mupunga and Roux (2015), Omosho et al. (2016), and Adekunle et al. (2021).



Alternatives to Existing Debt Sustainability Analysis – Debt Sustainability Index

This study proposes a Debt Sustainability Index that adopts the five debt indicators provided by the IMF in their Debt Sustainability Analysis (total debt to GDP, external debt to GDP, external debt to exports, debt service to exports, and debt service to revenue ratios). As an improvement to the process, the proposed approach compresses the five indicators into a single time-varying “Debt Sustainability Index” (DSI) (see Box 2) across the 15 ECOWAS countries over the period of 1990-2020. Instead of considering a country's debt position based on the five indicators in which the countries are at varying levels of debt exposure, the DSI gives a holistic measure that aggregates the exposure of countries across the indicators. Based on the DSI, this study establishes the solvency threshold (debt distress point) specific for each country in the ECOWAS region in which the country is said to be in debt distress.

The indexing process of the DSI follows Transparency International in computing the Corruption Perception Index (CPI). But then, the approach here differs slightly as the indicators are weighted based on the peculiarity of the countries in terms of the indicators they are

having challenges. Specifically, the debt service to revenue ratio carries the largest weight given that the soundness and the distress of debt situations are functions of their ability to generate enough revenue to cover for debt service and repayment of principal comfortably. The idea of the DSI is an aggregated country-specific solvency threshold that measures the optimal debt carrying capacity of countries. Any point above the benchmark will mean the country in question is insolvent, does not have the capacity to service its debt and payback principals, and is in debt distress.

Similar to the IMF's Debt Sustainability Analysis (DSA) usually conducted on less developed countries, this study replicated the same to categorise ECOWAS members into three using the computed DSI against the established country-specific solvency threshold. The classification obeys the following rules based on quantile measures: (1) low risk of debt distress implies that a country's DSI in 2020 is less than or equal to 50% of its established solvency threshold; (2) high risk of debt distress implies that a country's DSI in 2020 fall between 51% and 100% of its debt threshold; and (3) a country is said to be in debt distress when its DSI in 2020 exceeds its solvency threshold (debt distress point).

¹⁹ See, for instance, Schclarek (2005), Osinubi and Olaleru (2006), Mupunga and Roux (2015), Omosho et al. (2016), and Adekunle et al. (2021).

Box 2. Methodology for Estimating Debt Sustainability Index

The index generation process follows a data normalizing process using the Z-score as follows:

$$Z_{t,j} = \frac{x_{t,j} - \bar{x}_j}{\sigma_{x_j}}$$

where $Z_{t,j}$ represents Z-score for indicator j at time t ; $x_{t,j}$ represents the value of indicator j at time t ; \bar{x}_j represents mean for indicator j across time t ; and σ_{x_j} represents standard deviation for indicator j across time t .

This study utilized the year 2005 as the base year for constructing the index for the main reason that it coincides with the period when many developing countries, including ECOWAS members, benefited from the multilateral debt relief initiative of the IMF and other institutional private creditors. Hence, the mean and standard deviation of 2005 data across the indicators were obtained for the distribution. In order to capture the reality in these countries, this study also ranked the five debt indicators per country - debt service-to-revenue, debt service-to-exports, external debt-to-exports, external debt-to-GDP and total debt-to-GDP ratios - based on the relative capacity of countries to meet their principal debt, debt servicing obligations and overall sovereign solvency.

The most important debt indicator that matters for solvency in ECOWAS is debt service-to-revenue ratio, that is, the proportion of revenue that is devoted to debt servicing. At a low level of debt service-to-revenue ratio, between 20% to 30% for example, a country will continue to maintain a sound fiscal standing, irrespective of the debt level across other indicators. However, debt becomes distressing when debt service-to-revenue ratio inches close or over 100%. To this end, this study assigns a weight of 60% to debt service-revenue ratio and a weight of 10% to each of the remaining four indicators. Afterwards, the weighted sub-indices were obtained for each indicator using:

$$\tilde{x}_{t,j} = (Z_{t,j} * \mu_{2005} + \sigma_{2005}) * S_{t,j}$$

where $\tilde{x}_{t,j}$ represents standard normal version of $x_{t,j}$; μ_{2005} represents mean for the distribution across the five indicators at 2005 base year; σ_{2005} = Standard deviation for the distribution across the five indicators at 2005 base year; and $S_{t,j}$ represents weight assigned to each of debt indicators $x_{t,j}$. The sum of the absolute values across the five sub-indices per annum are obtained to determine the time-varying Debt Sustainability Index, which is replicated across the 15 ECOWAS countries over the period of 1990-2020.

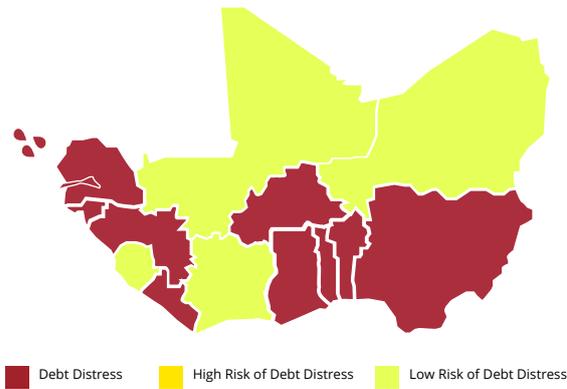
The country-specific debt distress point is determined from amongst the computed Debt Sustainability Index by firstly identifying the threshold position and determining the eventual country-specific debt distress point. In a similar fashion with the median position and the median value, the threshold position is determined where the average of Z-scores across the five debt indicators are zero. The single-valued debt index or the sum of debt index values corresponding to the threshold position automatically becomes the debt distress point. This study hereafter gauged the computed Debt Sustainability Index for the year 2020 against the estimated country-specific debt threshold in order to determine if a country is at low risk or high risk of debt distress, or is even in debt distress in the reference period.

Utilising the stated decision rule, our debt sustainability analysis (see Figure 13) is as follows. As at 2020, eleven ECOWAS countries – Benin, Burkina Faso, Cabo Verde, the Gambia, Ghana, Guinea-Bissau, Liberia, Niger, Nigeria, Senegal and Togo – with 72.2, 149.7, 133.2, 192.9, 77.0, 370.1, 938.4, 167.7, 81.2, 62.2 and 126.2 points on the debt sustainability index which have already passed their respective distress points of 39.6, 91.1, 57.9, 103.8, 71.9, 299.8, 938.4, 112.8, 58.1, 47.8 and

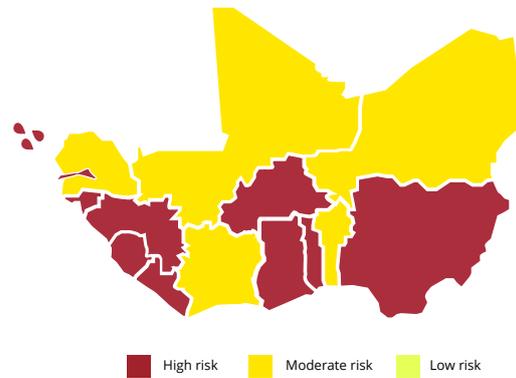
74.0 index points respectively. Having crossed their respective distress points, these eleven countries can be said to be in debt distress. However, the remaining four countries – Côte d'Ivoire, Guinea, Mali and Sierra Leone – with debt sustainability index of 23.1, 52.4, 24.9 and 89.8 index points lower than 50% of their respective 49.2, 148.6, 65.5 and 227.6 index distress points are at low risk of debt distress.

Figure 13: Results of Debt Sustainability Analysis for ECOWAS in 2020

ECOWAS Countries in Debt Distress



IMF's latest Assessment (2020)



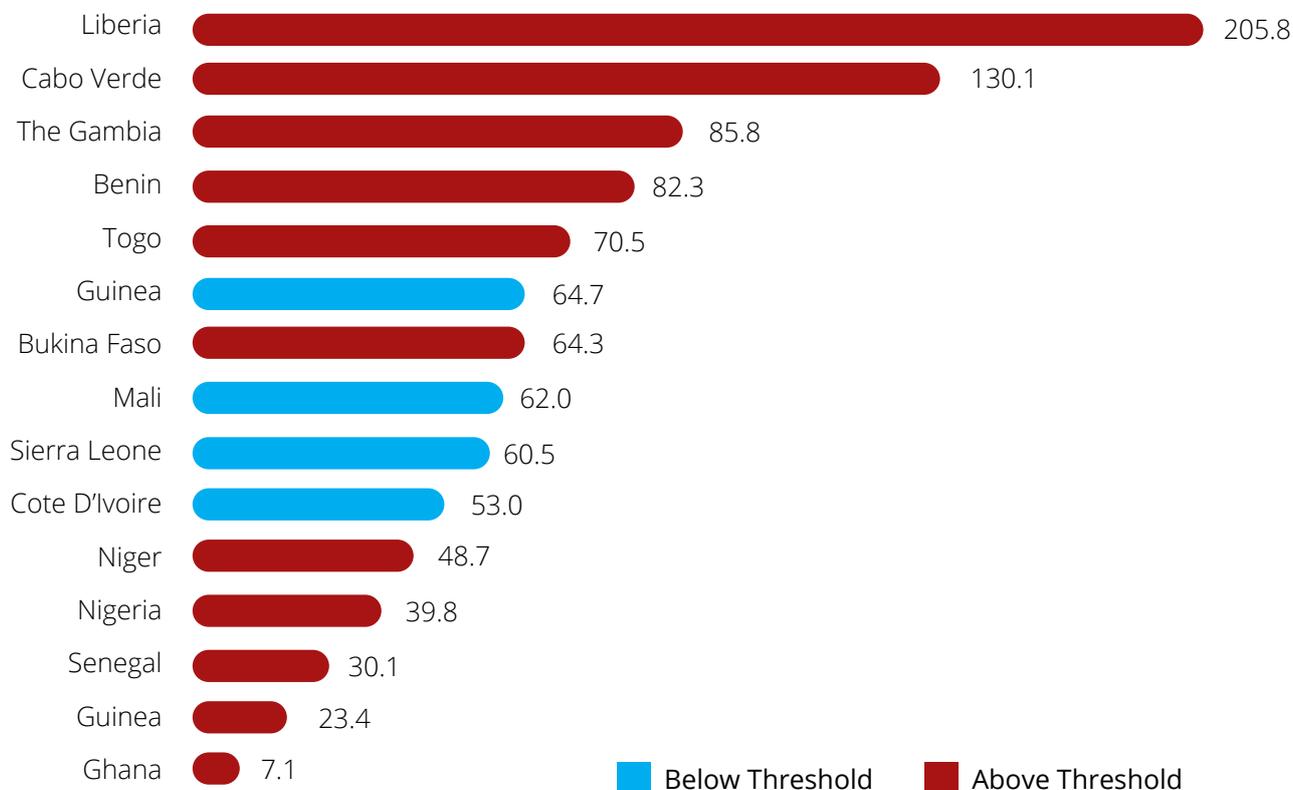
Source: IMF/World Bank Debt Sustainability Report; NESG Research

Figure 6 presents how far off these countries are from their distress point in terms of deviation. The findings show that the likes of Liberia and Cabo Verde have exceeded their debt distress points by over 100% - Liberia by 205.8% and Cabo Verde by 130.1%. Though below 100%, the Gambia, Benin, Togo and

Burkina Faso have exceeded their debt distress point by over 50%, while Niger, Nigeria, Senegal, Guinea Bissau and Ghana are still within 50% range away from their debt distress point. However, countries such as Guinea, Mali, Sierra Leone and Côte d'Ivoire are over 50% below their distress.



Figure 14. Deviation of Debt Sustainability Index from Distress Point



Policy Implication of Findings

The results of our debt sustainability analysis for the year 2020 showed that 11 ECOWAS countries - Benin, Burkina Faso, Cabo Verde, the Gambia, Ghana, Guinea-Bissau, Liberia, Niger, Nigeria, Senegal and Togo – are currently in debt distress as they have all exceeded their respective debt distress points (see Figure 13). Unfortunately, six of these countries belong to the WAEMU region with clear-cut convergence criteria and fiscal rules guiding the countries. While being adjudged by the IMF as running a high risk of public debt distress, the Gambia and Sierra Leone are currently under the IMF’s extended credit facility (ECF). As a result, we expect both countries to reduce their debt portfolios to sustainable levels in the near to medium term, barring unforeseen contingencies. In the specific case of the Gambia, the government’s

support of SOEs has constituted a strain on public finances. The only advantage here is that the country leverages highly on concessional financing from the IMF, World Bank, etc. It is advised that it maintains this stance going forward, considering its huge exposure to external debts.

While Burkina Faso is more exposed to external debts to the tune of 56% of total public debt in 2019, Ghana is more exposed to domestic debts, which accounted for 53% of the public debt portfolio in 2019. In the case of Burkina Faso, considering the fact that domestic debt is currently gaining momentum (its share of total debts quadrupled between 2004 and 2019), there is a need for the country to extend average domestic debt maturities. Currently, Burkina Faso is exposed to domestic and external debt servicing to the tune of 77% and 23% of total debt servicing expenses .

Similarly, for Ghana, about 90% of domestic debts have short to medium-term maturities, which is indicative of refinancing risks. This, therefore, calls for a fair mix in the country's holdings of domestic and external debts.

With the increasing exposure of Ghana to Eurobond issuance, the country is becoming more exposed to commercial sources, which accounted for 45% of its total external debt portfolio in 2019. To this end, there is a need for the Ghanaian authorities to follow the path of Burkina Faso in exploring concessional financing sources considering the foreign exchange risks associated with commercial loans.

More importantly, attention needs to be paid to Nigeria's rising debt profile as this might be a source of concern for the ECOWAS region given her more than 50% contribution to the region's total debts. The debt servicing-to-revenue ratio in Nigeria is rather huge; hence, efforts should be geared towards boosting non-oil revenue and improving domestic resource mobilisation via tax collection in order to cover the widening debt service expenses.

It is important to note that Cabo Verde, Togo, Burkina Faso and Senegal are the top four tax collectors in ECOWAS, respectively, in 2018. Efforts should therefore be mustered to maintain the tempo going forward. Also, low tax collectors in the region, including Nigeria, should learn from other countries' experiences on boosting their tax

revenue generation, particularly by exploring the e-filing of tax assessments and collection.

Another important area of concern is the deteriorating sovereign credit rating of countries including Nigeria, Ghana and Senegal due to their increasing exposure to Eurobonds. There is a need for these countries to de-emphasise their holdings of commercial debts in order to improve their credit ratings and re-build investors' confidence in their respective economies.

Moreover, urgent measures need to be taken in countries with a low risk of debt distress, including Côte d'Ivoire, Guinea, Mali and Sierra Leone, so their sovereign debt rating does not deteriorate further. This is important considering the drivers of debt dynamics in these countries. For instance, Mali is resource-dependent and is therefore vulnerable to terms of trade shocks. Due to recurring social and political instability, the country is also under military rule. With Mali being exposed to external debts to the tune of 64% of total debts in 2019; hence, the country is more vulnerable to foreign exchange risks. Therefore, Mali is expected to comply with the debt rules under the current IMF's ECF program to limit its external borrowing to concessional sources. In addition, non-resource dependent countries, including Côte d'Ivoire, Guinea and Sierra Leone, are expected to improve their domestic revenue mobilisation. Specifically, Côte d'Ivoire is the 7th largest tax collector in ECOWAS, after Ghana.



²⁶ See, AfDB (2021). African Economic Outlook for 2021, retrievable at: <https://www.afdb.org/en/>

²⁷ ibid

²⁸ See OECD (2019). Revenue Statistics in Africa 2019 - Nigeria. Retrieved from: <https://www.oecd.org/countries/nigeria/>

²⁹ See, OECD (2019). Revenue Statistics in Africa 2019 - Nigeria. Retrieved from: <https://www.oecd.org/countries/nigeria/>



F I V E (5)

SPIILLOVER EFFECTS
OF THE PUBLIC
DEBT CRISIS
AMONG ECOWAS
COUNTRIES





For many countries in the region, public debt is increasingly becoming unsustainable given the ensuing challenges with repayment and debt servicing. Whilst the accumulation of public debt is not all bad, excessive public debt over and above a certain level permissible by the economy could lead to a worrisome situation and degenerate into a “Public Debt Crisis”. Findings from the debt distress analysis in the previous section based on the Debt Sustainability Index show that 11 out of the 15 ECOWAS countries are already in distress while the remaining four are at low risk of debt distress (see Figure 13). Beyond the domestic economic fallout of a debt crisis in one country, there are growing concerns about the potential adverse effects of high and unsustainable public debt on economic performance and the likely intraregional spillover to other economies in the region.

What does Public Debt Crisis mean?

Several authors have provided definitions to explain what a “public debt crisis” means and some

of its distinctive attributes. The Standard & Poor’s (S&P’s) definition appears more encompassing and commonly used (Balteanu and Erce, 2014; Gennaioli, Martin, and Rossi, 2014). According to Standard and Poor’s, (2002) public debt crisis is a situation where: (1) the government is unable to meet scheduled debt service as at when due; or (2) the creditors are offered either a rescheduling (bank debt) or a debt exchange (bond debt) in less favourable terms.

A country is said to be experiencing a debt crisis when it is unable to meet debt obligations or pay back government debt. This situation usually generates huge consequences for macroeconomic stability and overall economic performance. Government defaulting in paying back debt and/or increasing the risk of default could dampen investors and creditors’ confidence, thus, making it difficult for the government to find credit facilities. Therefore, investors become insistent on higher interest rates to compensate for higher risk. In the same vein, the government would find it difficult to keep rolling over existing debt and may eventually

default. In addition, the crowding-out effect of government debt would become magnified as the lending rate increases (Woo and Kumar, 2015; Ostry et al, 2015). The ripple effect of the general macroeconomic collapse could lead to capital flight/reversals.

The consequences of a debt crisis are multi-faceted and have destabilising effects on the economy. Firstly, this would lead to a decline in the real sector activities and occasion contraction in GDP. Thereafter, employment will decline (escalating unemployment rate), drop in income, lower aggregate demand and decline in trade (both export and import). Experiences of countries such as Greece in 2009, Spain in 2008, the United States in 2011, among others, are reference cases.

Greece had grappled with a debt crisis that spanned between 2010-2014. The build-up to the

debt crisis in Greece dates back to 2001 when Greece adopted the Euro as its official currency, thereby causing an influx of capital on the back of increased investor's confidence in the Greek capital market. In 2009, the Greece government announced that its actual budget deficit ratio was 12.7%, four times the European Union's (EU) 3% limit. In 2010, the Greek economy contracted by 10%, and Greece said it might default on its debt, thereby threatening the viability of the Eurozone. However, to avoid this, the EU provided a bail-out but on the condition that Greece adopts tight austerity reforms, which landed Greece in a recession and the unemployment rate peaked at 27.9% in 2013. By 2014, Greece debt-to-GDP ratio reached 181%, one of the highest in the world. The Greece crisis triggered the Eurozone debt crisis, creating fears that it would spread into a global financial crisis. It was a warning to other EU members of the consequences of being heavily indebted.

Figure 15: Features and Implications of Public Debt Crisis



Source: NESG Research

Unlike Eurozone countries such as Greece, Portugal and Italy, Spain entered the 2007/08 global financial crisis with a low debt to GDP of 35.8% in 2007 (FRED). Spain's debt to GDP ratio became problematic in 2011 when it breached the Maastricht criterion of 60% to reach 69.9% and skyrocketed to 100.70% in 2014. The austerity measures implemented as imposed by the EU to curb rising debt levels led to a reduction in public debt, however, it worsened economic conditions (Royo, 2020). The Spanish economy still contends with high debt levels, but the debt position has improved as debt to GDP ratio declined to 95.51% as at 2019.

Lessons from the reviewed crisis suggest some early warning signs, which include a large influx of foreign private capital that is highly susceptible to shocks; a high debt ratio of more than 100% of GDP; a high deficit ratio above the regional limit; and a decline in credit rating by international financial institutions such as Standard & Poor.

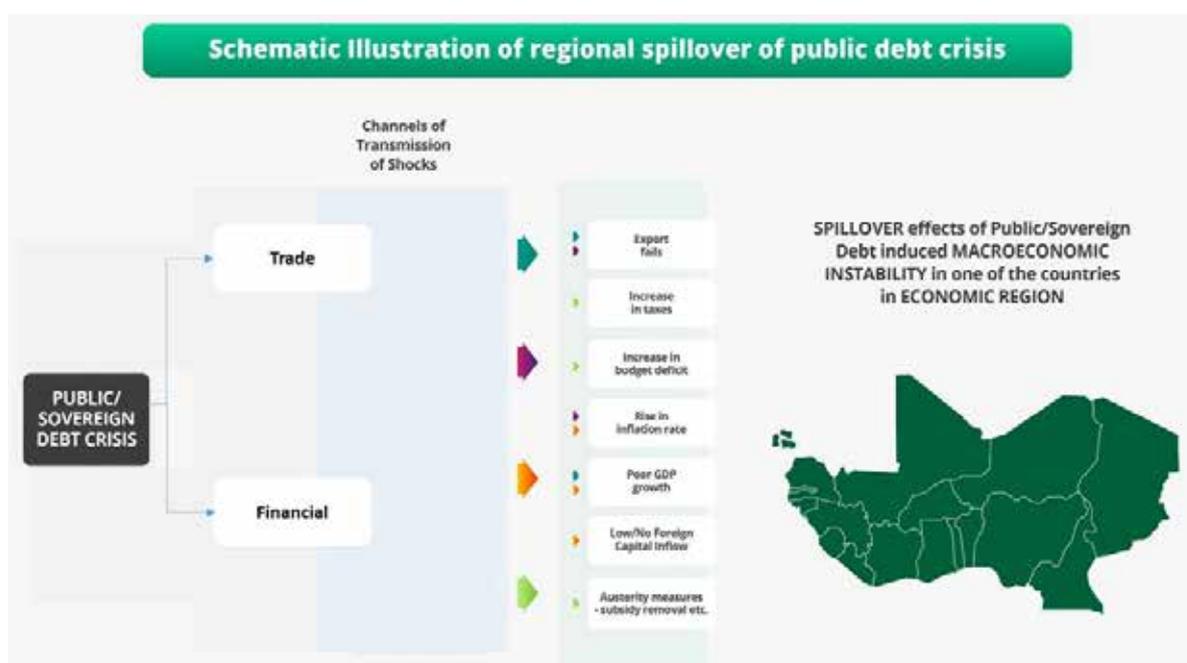
Channels of Transmission of Public Debt Crisis Shocks in ECOWAS

The relative achievements in ECOWAS' drive for regional integration in trade, cross-border expansion of banks, financial markets integration, customs and monetary unions have heightened the possibility of a spillover of a public debt

crisis in the region. In essence, a disruption in economic activity in one economy has a cascading chain of effects on the macroeconomic stability, economic growth and welfare level of households of other economies, especially trade partners and countries within the same regional bloc (Robe, 2003; Berument et al., 2012). A cursory review of the extant literature shows different potential transmission channels of macroeconomic shocks, including a public debt crisis. Aguar and Gopinath (2007), Alfio (2013), Mutiu and Christopher (2018), Kanwara et al. (2021) and other recent studies have identified trade, financial markets and financial aids, investments, among others, as the main channels of transmission of shocks among close economies.

Building on the foregoing, there are two pathways that a regional or country-specific public debt crisis will likely spillover into other countries in sub-Saharan Africa: trade and financial (Banking Sector or Banks' Balance Sheet, foreign capital inflow) channels. Therefore, it holds that through these channels, a public debt crisis in an economy may produce a direct shock or amplify existing shocks that affect the macroeconomic performance of trading partners. Also, the cross-country relevance of these channels to transmit debt-induced economic or geopolitical shocks among ECOWAS economies is a crucial question to clarify.

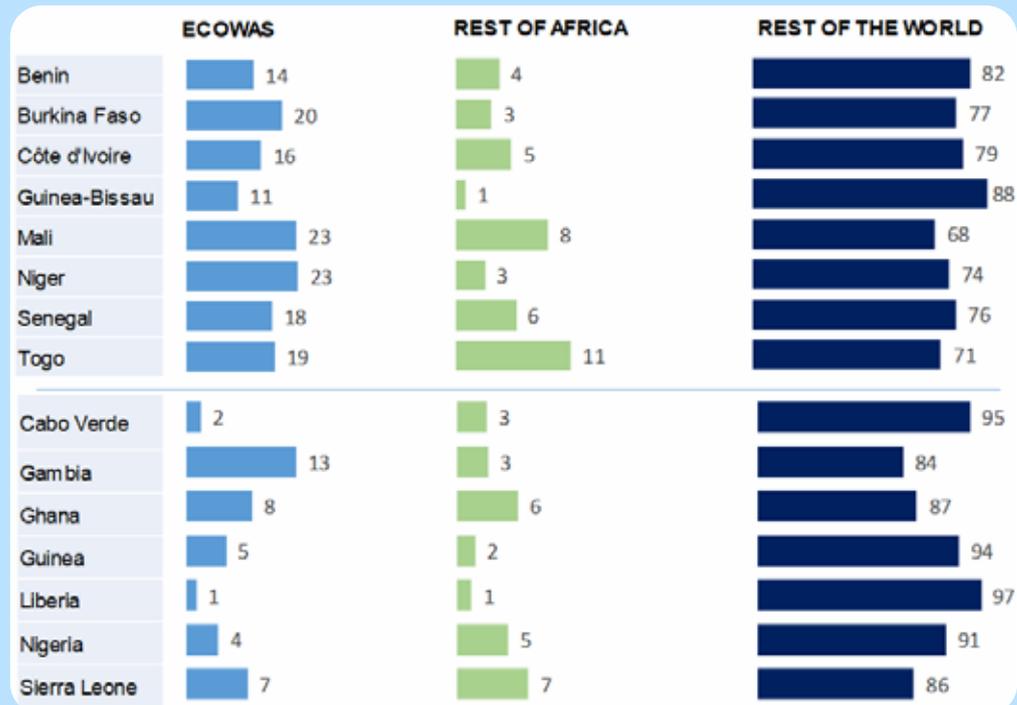
Figure 16: Transmission Channels of Public or Sovereign Debt Crisis in ECOWAS



Box 3. Trade Exposure Among ECOWAS Countries and to other Regions

The level of trade connectivity or interdependency among countries in ECOWAS remains modest. The region trades more with other parts of Africa and the rest of the world. According to World Bank (2016), there is prevalence of strong and informal cross-border trading activities in the region which are mostly not reflected in official trade statistics.

Figure 18: Trade Exposure of ECOWAS Countries Average 2016-2020 (Share of Total Trade)

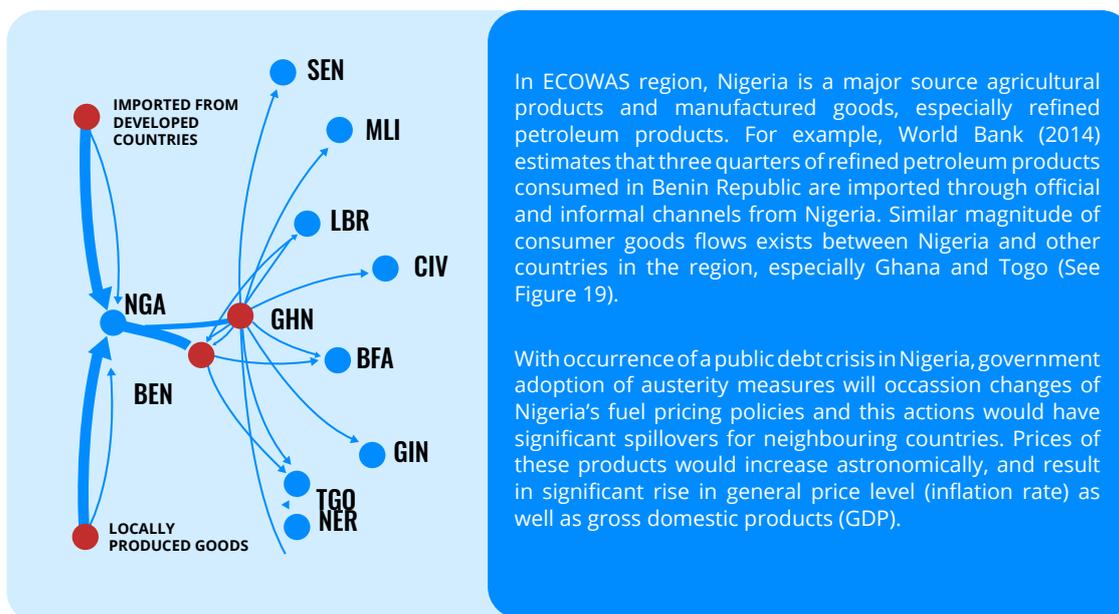


Data: UNCTAD, Statistics Database, Chart: NESG Research

Also, a major linkage point within the trade channel is the consumer price or inflation transfer through trade. Empirical studies and trade statistics on West Africa have shown that most countries are net importers of manufactured goods. Interestingly, there is a robust cross-border trade link among ECOWAS countries that exist informally, especially in

grains, livestock and other basic products such as refined petroleum products. This is, particularly, the situation between Nigeria and neighbouring countries. According to Afrika and Ajumbo (2012), this informal cross-border trade, estimated at 20% of GDP in Nigeria, is unrecorded.

Figure 19: Trade Linkages between Nigeria and Other ECOWAS Countries



In ECOWAS region, Nigeria is a major source agricultural products and manufactured goods, especially refined petroleum products. For example, World Bank (2014) estimates that three quarters of refined petroleum products consumed in Benin Republic are imported through official and informal channels from Nigeria. Similar magnitude of consumer goods flows exists between Nigeria and other countries in the region, especially Ghana and Togo (See Figure 19).

With occurrence of a public debt crisis in Nigeria, government adoption of austerity measures will occasion changes of Nigeria's fuel pricing policies and this actions would have significant spillovers for neighbouring countries. Prices of these products would increase astronomically, and result in significant rise in general price level (inflation rate) as well as gross domestic products (GDP).

In effect, inflation spillover via changes in commodity prices is significant among countries in the region. Also, inflation problems resulting from public debts could cause spillovers to neighbouring countries (World Bank, 2018). For illustration, a substantial proportion of refined petroleum products consumed in the Benin Republic, Niger, and other Central African countries like Chad and Cameroun are imported from Nigeria (World Bank, 2018). Also, landlocked countries - Mali and Gambia, rely heavily on manufactured imports from neighbouring countries (UNCTAD, 2019). An upward movement in commodity prices will translate to imported inflation for importing countries.

Spillover Effects of Public Debt Crisis in Nigeria via the Trade Channel

In recent times, regional trade linkage among ECOWAS countries is gaining strength despite the massive trade exposure to the rest of the world. This trend has amplified the potential of regional spillover of economic fluctuations, which affect the growth of individual economies in the region. Looking at the Weighted Trade Interdependency Index (see table 10), Nigeria accounts for significant portions of intra-regional trade in ECOWAS. Aside from Cabo Verde, Nigeria is a major trading partner of all countries in the region and accounts for more than 40% of trade

flows within ECOWAS. While, Cabo Verde trades more with Ghana, Côte d'Ivoire, Gambia, and Guinea in ECOWAS.

The contagion effects of a public debt crisis in Nigeria will trigger macroeconomic fluctuations in the region except for Guinea and Cabo Verde. Despite not being a member of the WAEMU bloc, most WAEMU countries are primarily exposed to Nigeria. This is due to the significant reliance on Nigeria for imports of crude oil and other petroleum products, which have topped the trade list of most countries in WAEMU with Nigeria. The contagions are, particularly, anticipated in Senegal, Ghana, Côte d'Ivoire and Togo. Thus, a transmitted macroeconomic shock from the strongest economies and topmost trade partners in the region – Nigeria, Ghana, Senegal, and Côte d'Ivoire - would create significant changes across the region. This is especially the case with WAEMU countries which have high intra-trade connections among one another.

A cross-country contagion of a public debt crisis in Nigeria shows that key regional trading partners would experience deterioration in their trade balance but at low intensity. However, the impact intensity would be higher for Benin, whose real sector is closely tied to the Nigerian economy (see Table 10). Also, countries within the Gulf of Guinea will be negatively impacted

directly or indirectly via the trade channel. For instance, Nigeria is an important export market for agricultural goods from Guinea-Bissau (more than 6% of export), Côte d'Ivoire (more than 3% of export) and Niger Republic (more than 3% of export). For Ghana and Togo, Nigeria is a major export destination for their manufactured goods (UNCTAD, 2019). Therefore, a drop in Nigeria's demand for these countries' export would result in a huge trade deficit.

On the occasion of a debt crisis, Nigeria would be forced to enter a lot of trade relationships for its main export - crude oil, at a price lower than market value to raise the needed funds. As a result, the imports position of many countries - like Burkina Faso, Gambia, Ghana, Guinea, Guinea Bissau, Mali, and Togo - would improve. Noting that crude oil and other mineral fuels account for a significant share of intra-trade in the region. According to UNCTAD (2018), the products accounted for one-third of trade among countries in the ECOWAS region. Also, the export of Benin, Cabo Verde, Côte d'Ivoire, Ghana, Liberia, Niger and Sierra Leone will significantly decline at varying intensity (see Table 10). For Mali and Niger, Nigeria is their primary export market for live animals, and this account for more than 80% of both country's total live animal exports. Considering that live animal is a major export of these countries, Nigeria's public debt crisis would affect their total export and other related economic activities, especially the countries' agricultural sector. This situation will increase Mali and Niger's imports of agricultural products - at present, these account for 14% and 18% of Mali's and Niger's total imports respectively.

Trade statistics have shown that Benin, Cabo Verde, Côte d'Ivoire, Ghana, Liberia, Niger and Sierra Leone export mainly manufactured and intermediate goods to Nigeria. As government make attempts at increasing aggregate demand and production level, these types of goods would be higher in demand from Nigeria. Changing the position of imports and exports also affect inflation and exchange rate. Significant transfer of inflation from Nigeria would occur during a debt crisis. Many of the WAEMU countries are expected to experience a depreciation of currency except for Togo. This is because

Togo's export to Nigeria is mainly manufactured goods primarily done through entrepot. Noting that exports from Cabo Verde, Ghana, Liberia and Sierra Leone to Nigeria are also mainly manufactured goods or semi-intermediate goods, these countries' currencies will slightly appreciate owing to significant exports of these types of commodities.



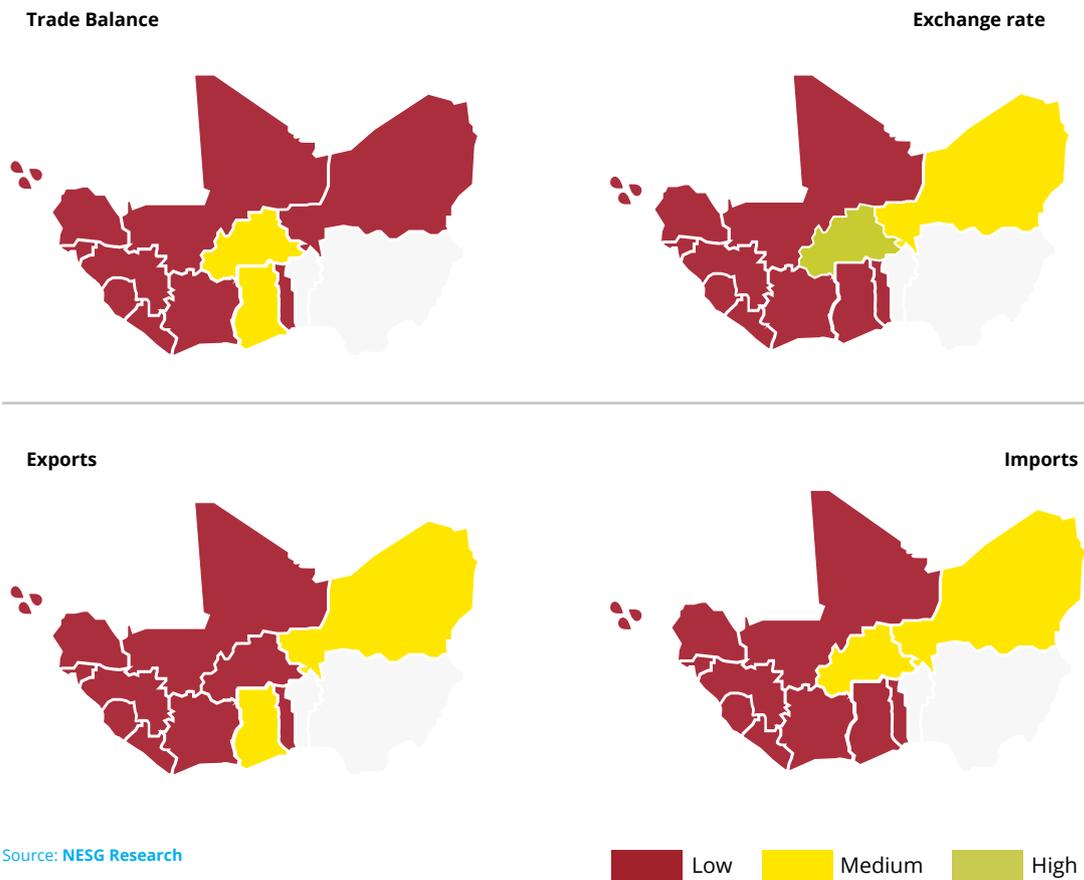
Table 10: Weighted Trade Interdependency Index among ECOWAS countries (Based on country's total trade to ECOWAS only)

		WAEMU COUNTRIES							NON-WAEMU COUNTRIES							
		BEN	BUR	COT	GUB	MAL	NIG	SEN	TOG	CAB	GAM	GHN	GUI	LIB	NGR	SIE
WAEMU COUNTRIES	BEN	-	0.013	0.026	0.003	0.005	0.007	0.097	0.137	0.004	0.015	0.080	0.007	0.004	0.591	0.012
	BUR	0.085	-	0.024	0.003	0.004	0.007	0.090	0.127	0.001	0.014	0.074	0.003	0.005	0.553	0.011
	COT	0.086	0.012	-	0.003	0.004	0.007	0.091	0.128	0.001	0.014	0.075	0.003	0.045	0.519	0.011
	GUB	0.084	0.012	0.024	-	0.004	0.006	0.089	0.126	0.001	0.013	0.074	0.022	0.071	0.463	0.011
	MAL	0.084	0.012	0.024	0.003	-	0.006	0.089	0.126	0.013	0.013	0.074	0.002	0.142	0.401	0.011
	NIG	0.084	0.012	0.024	0.003	0.004	-	0.089	0.076	0.015	0.014	0.074	0.115	0.022	0.458	0.011
	SEN	0.092	0.013	0.026	0.003	0.005	0.007	-	0.138	0.006	0.015	0.081	0.002	0.001	0.600	0.012
	TOG	0.096	0.014	0.027	0.003	0.005	0.007	0.101	-	0.000	0.015	0.084	0.001	0.071	0.563	0.012
NON-WAEMU COUNTRIES	CAB	0.004	0.003	0.142	0.003	0.005	0.007	0.030	0.030	-	0.305	0.152	0.284	0.004	0.001	0.030
	GAM	0.085	0.012	0.024	0.003	0.004	0.007	0.090	0.127	0.064	-	0.074	0.045	0.002	0.452	0.011
	GHN	0.091	0.013	0.026	0.003	0.005	0.007	0.096	0.135	0.001	0.014	-	0.038	0.142	0.419	0.011
	GUI	0.013	0.001	0.014	0.284	0.001	0.005	0.300	0.127	0.026	0.007	0.102	-	0.003	0.102	0.011
	LIB	0.012	0.064	0.013	0.003	0.005	0.007	0.007	0.097	0.024	0.074	0.022	0.038	-	0.605	0.030
	NGR	0.274	0.027	0.054	0.006	0.010	0.014	0.199	0.189	0.000	0.030	0.165	0.003	0.005	-	0.024
	SIE	0.085	0.012	0.024	0.003	0.004	0.007	0.089	0.127	0.000	0.014	0.074	0.001	0.071	0.489	-

Source: NESG Research

Notes: BEN – Benin Republic, BUR - Burkina Faso, CAB – Cabo Verde, COT – Côte d'Ivoire, GAM – Gambia, GHN – Ghana, GUI – Guinea, GUB - Guinea Bissau, LIB – Liberia, MAL – Mali, NIG - Niger, NGR – Nigeria, SEN – Senegal, SIE – Sierra Leone, and TOG – Togo.

Figure 20: Illustrative Impact of Public Debt crisis in Nigeria via the trade channel



Source: NESG Research

Financial Channel

Financial linkage is an effective transmission channel of a public debt crisis among countries in the same region. Financial spillovers are generally small or nonexistent among ECOWAS countries. This position is due to the relative underdevelopment of the financial system and the low financial depth of many economies in the region. There are three potential financial linkages across the region. These are banks' balance sheets, remittance and foreign capital spillover channels.

The increasing cross-border expansion among banks in the region has deepened

the economic integrations and likelihood of potential macroeconomic spillover among ECOWAS countries (Beck et al., 2014; Claessens and Van Horen, 2014). The situation has further enhanced the development of financial systems in the region. Recently, there has been an increase in the cross-border capital market listing for some commercial banks such as ECOBANK, Stanbic IBTC and others. This will further increase the intensity of financial shock transfers among economies in the region, especially Nigeria, where many banks have footprints and account for a significant share of banking industry assets in ECOWAS (see Box 4).

Box 4. Cross-Border Expansion of Nigerian Bank across ECOWAS countries

Nigeria is an important market destination for purchase of goods and services for many businesses and households in neighbouring countries in the region. As a result, there are substantial trade financing and payment opportunities for Nigerian banks, and these are some of the reasons for the increasing cross-borders expansion in recent time. Thus, many Nigeria-based banks are systematically important to financial system of these countries and a shock to the Nigerian financial system would be transmitted via impacts on these banks' balance sheet.

Figure 21: Nigerian Banks in Other ECOWAS Countries – 2019



N:B Countries in the figures greater than 2 percent and above are considered to have a high trade exposure to region

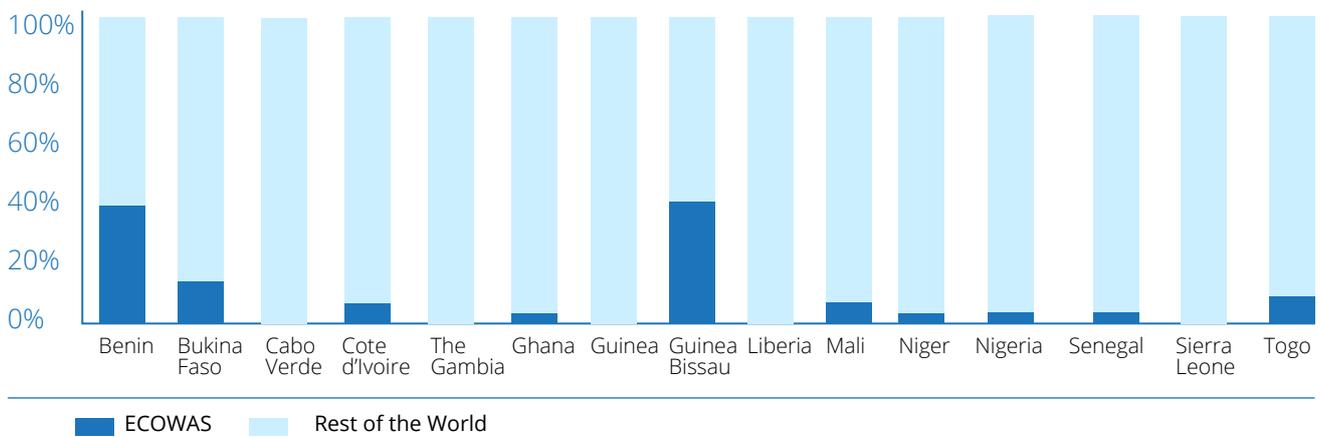
Source: BCEAO & other Central Banks Annual Reports; NESG research

The other two linkages – remittance and foreign capital spillover channels appear less significant and negligible. Intra-regional FDI flows were estimated below 5% of the total foreign capital inflows into the region (ECOWAS, 2019). A similar situation applies to remittance inflows among countries in the region. However, those linkages are strengthened and cannot be overlooked recently, especially among WAEMU countries. According to World Bank (2020), ECOWAS countries received US\$157 billion foreign direct investments inflows in 2018, and intra-regional inflows only accounted for 4.1% (US\$6.5 billion). Aside from Benin, Burkina Faso and Guinea Bissau, intra-regional FDIs are less

than 10% on a country-level across the region (see Figure 19). Of these intra-regional FDI inflows, Togo, Benin, Senegal and Côte d'Ivoire are the largest suppliers of these investments, and Nigeria is the biggest receiver.

Interestingly, these investments are primarily for WAEMU countries (See Table 11). Also, Nigeria has a spread of investment outflows into ECOWAS countries mainly driven by its banking sector expansion. This would establish a foundation for potential crisis spillover among these countries, especially with a banking sector crisis that usually accompanies every debt crisis across the globe.

Figure 22. Foreign Direct Investments in ECOWAS by Source



Data: Investment Map, World Bank; Chart: NESG Research

For this study, the last financial linkage considered is the remittance channel. According to World Bank, remittance was estimated as 6% of ECOWAS GDP in 2020. For some countries like Cabo Verde, Gambia, Liberia and Senegal, remittance from across the globe is more than 10% of their GDP (World Bank, 2020). This source of financial inflows is also significant in Guinea-Bissau (8.6% of GDP), Togo (5.9% of GDP), Mali (5.6% of GDP), Ghana (5.2% of GDP) and Nigeria (4.0% of GDP). Since migration is a crucial determinant of remittance sources, the international migration matrix of ECOWAS countries

shows significant movements within the region for economic and other reasons, except for Nigeria, Cabo Verde, Gambia and Senegal (see Table 11). Nigeria and Côte d'Ivoire are the major migration destination within the region and accounted for a significant share of remittance for other ECOWAS countries. Therefore, any major economic and political problems in these countries – Nigeria and Côte d'Ivoire, would trigger some adverse effects on remittance inflows and multiplier effects on socio-economic impacts of business, households and economic growth.



Table 11. Sources of Foreign Direct Investments Inflows in ECOWAS 2018 (US\$' Million)

	BEN	BUR	CAB	COT	GAM	GHN	GUI	GUIB	LIB	MAL	NIG	NGR	SEN	SIE	TOG	Rest of the World
BEN		67.38	0	262.47	0	0.61	0.19	0.01	0	1.97	14.66	38.1	167.03	0	560.73	1,711.42
BUR	0.49		0	163.11	0	6.75	0	0.09	0	177.88	6.19	26.52	16.68	0	82.52	2,841.29
CAB	0	0		0	0	0.02	0	0.21	0	0.24	0	7.62	0	0	0	2,097.87
COT	19.34	40.9	0		0	19	0.16	0.01	0.12	46.18	0.14	143.94	97.87	0	225.93	7,834.22
GAM	0	0	0	0		0	0	0	0	0	0	0	0	0	0	442.85
GHN*	0.53	0.31	-0.1	72.59	-0.09		-0.16	0	0.92	-1.54	-0.17	517.59	-0.01	-2.1	161.16	15,050.87
GUI	0	0	0	0	0	0		0	0	0	0	0	0	0	0	4,693.14
GUIB	0	0	0	32.26	0.05	0	0		0	17.95	0	0	30.11	0	16.03	141.46
LIB	0	0	0	0	0	0	0	0		0	0	0	0	0	0	8,724.01
MAL	21.89	36.61	0	57.41	0	0.04	0	0	0		0	0	151.37	0	54.64	3,607.97
NIG	0	12.72	0	67.3	0	0	0	0	14.15	8.96		39.74	55.52	1.62	28.29	5,833.56
NGR	1230.56	0	0	39.29	0	242.89	0.07	0.01	183.28	0.1	0		0	10.9	718	89,180.43
SEN	32.63	10.58	2.85	46.55	9.3	0.24	0	0	0	0	68.54	0		0	68.14	4,332.77
SIE	0	0	0	0	0	0	0	0	0	0	0	0	0		0	1,716.67
TOG	19.51	41.45	0.1	111.97	0.11	5.86	1.47	0	0	2.12	1.48	9.92	6.81	0		2,100.83

Source: Investment Map, Trade Map Project of the World Bank, 2020.

N:B BEN – Benin Republic, BUR- Burkina Faso, CAB – Cabo Verde, COT – Côte d'Ivoire, GAM –Gambia, GHN – Ghana, GUI – Guinea, GUB- Guinea Bissau, LIB – Liberia, MAL – Mali, NIG- Niger, NGR – Nigeria, SEN – Senegal, SIE – Sierra Leone, and TOG – Togo.



Table 12. Bilateral International Migration Matrix of ECOWAS Countries 2018 (Share of total Emigration)

	BEN	BUR	CAB	COT	GAM	GHN	GUI	GUIB	LIB	MAL	NIG	NGR	SEN	SIE	TOG	ECOWAS Region
BEN	0.0%	0.7%	0.0%	9.2%	0.0%	3.0%	0.2%	0.0%	0.0%	0.6%	3.2%	55.1%	0.5%	0.0%	11.1%	83.8%
BUR	0.7%	0.0%	0.0%	86.1%	0.0%	6.1%	0.0%	0.0%	0.0%	1.7%	1.5%	0.5%	0.0%	0.0%	0.9%	97.5%
CAB	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	1.7%	0.0%	0.0%	0.0%	2.1%
COT	1.3%	52.4%	0.0%	0.0%	0.0%	4.3%	0.7%	0.0%	14.1%	7.5%	0.2%	0.4%	0.3%	0.0%	0.6%	81.8%
GAM	0.0%	0.0%	0.0%	0.0%	0.0%	1.3%	0.5%	1.5%	0.7%	4.4%	0.0%	5.8%	4.7%	4.7%	1.0%	24.6%
GHN*	1.2%	3.8%	0.0%	5.6%	0.0%	0.0%	0.1%	0.0%	1.0%	2.3%	0.2%	26.5%	0.2%	0.2%	5.5%	46.6%
GUI	0.0%	0.0%	0.1%	22.8%	9.2%	0.0%	0.0%	1.1%	7.9%	4.0%	0.0%	1.3%	10.7%	15.3%	0.7%	73.1%
GUIB	0.0%	0.0%	4.8%	0.3%	12.3%	0.0%	4.1%	0.0%	0.4%	0.0%	0.0%	4.3%	26.9%	0.0%	0.1%	53.3%
LIB	0.0%	0.0%	0.0%	22.8%	0.3%	7.1%	29.2%	0.2%	0.0%	1.1%	0.0%	5.2%	0.0%	5.5%	0.0%	71.5%
MAL	0.1%	4.0%	0.0%	35.0%	0.9%	0.7%	4.5%	0.0%	0.1%	0.0%	7.9%	14.5%	2.9%	0.2%	0.7%	71.4%
NIG	20.4%	3.4%	0.0%	14.6%	0.0%	2.4%	0.2%	0.0%	0.1%	1.6%	0.0%	30.2%	0.4%	0.0%	17.5%	90.9%
NGR	3.5%	0.4%	0.1%	3.3%	0.0%	5.4%	0.0%	0.0%	0.4%	1.0%	7.6%	0.0%	0.1%	0.2%	2.5%	24.4%
SEN	0.0%	0.6%	0.2%	3.3%	19.6%	0.0%	0.7%	1.8%	0.1%	1.9%	0.2%	0.7%	0.0%	0.1%	0.2%	29.4%
SIE	0.0%	0.0%	0.0%	0.2%	0.7%	0.6%	60.4%	0.2%	5.0%	2.6%	0.0%	1.1%	3.9%	0.0%	0.0%	74.8%
TOG	9.5%	3.0%	0.0%	10.8%	0.0%	27.2%	0.2%	0.0%	0.1%	1.3%	2.2%	29.0%	0.3%	0.0%	0.0%	83.6%

Source: Investment Map, Trade Map Project of the World Bank, 2020.

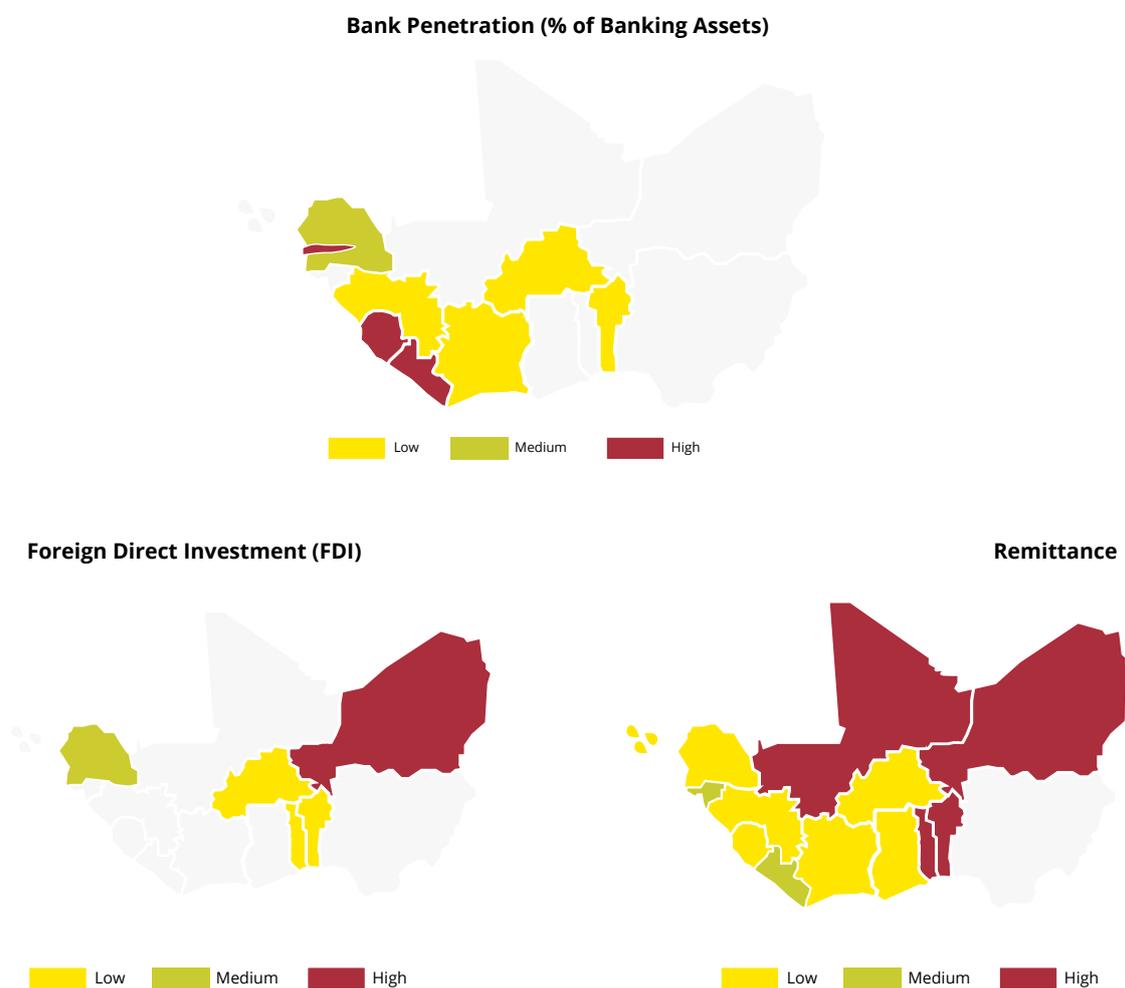
N:B BEN – Benin Republic, BUR- Burkina Faso, CAB – Cabo Verde, COT – Côte d'Ivoire, GAM –Gambia, GHN – Ghana, GUI – Guinea, GUIB- Guinea Bissau, LIB – Liberia, MAL – Mali, NIG- Niger, NGR – Nigeria, SEN – Senegal, SIE – Sierra Leone, and TOG – Togo.

A combination of all three financial linkages – banking sector, FDI and remittance, was adopted to assess the spillover effects of a public debt crisis in Nigeria. As illustrated in Figure 21 earlier, a public debt crisis in Nigeria would occasion a bank crisis and erode the quality of most banks' balance sheets. For the regional bank, these effects are transmitted to other countries where they operate. Since these banks are associated with real sector performance in the operating countries, banking sector crisis in the banks' country of origin, which restrains the supply of credit to the private sector, would adversely affect growth in other countries. The growing trend of intra-regional banking links from Nigeria presents a channel of potential spillovers. Nigeria is identified as being the primary country of origin of many of these regional banking groups. Togo could also be in the category of potential banking spillovers creator due to the

significant presence of ECOBANK Transnational Inc. (ETI) across the region and Sub-Saharan Africa (see Figure 23). However, the biggest market and largest shareholder in ETI is Nigeria (ETI, 2020).

In the event of a debt crisis, Gambia, Liberia, and Sierra Leone will be significantly affected. This is because Nigerian banks operating in these countries account for a substantial share of the country's banking sectors assets and deposits. WAEMU countries such as Benin, Burkina Faso, Côte d'Ivoire, Senegal and Togo will also experience mild public debt-induced shocks from Nigeria. Ghana and Guinea would also experience similar spillover effects. The gainers of a weak banking sector resulting from a public debt crisis are Attijariwafa and Standard Bank Group, which have their headquarters outside the region but with an extensive foothold across ECOWAS countries.

Figure 23: Nigeria’s Financial Linkages with Countries in ECOWAS Region



Source: NESG Research

On the other hand, intra-regional flows of FDI and total FDI inflows into ECOWAS may not decline significantly. This is because Nigeria accounts for less than 10% of total intra-regional FDI and its FDIs have limited country scope in the region. This outcome suggests that the public debt crisis spillover from Nigeria via FDI linkage will be insignificant, indicating that Nigeria has a weak investments link with the rest of the region. However, Senegal, Togo and Benin may be moderately affected due to recent and massive FDI inflows from Nigeria.

On the remittance linkage, Nigeria is highly connected and a major migration destination

for nationals of other ECOWAS countries for economic and other socio-economic reasons. Due to this, Nigeria accounts for a significant share of remittance inflows into many ECOWAS countries (see Table 12). This source of income served as a major determinant of welfare in these countries, especially in Benin, Togo, Niger, Liberia and Mali. For countries like Niger, Benin and Togo, this would adversely impact the productivity of the agricultural sector and output level of the real sector. This position conforms with Koyame-Marsh (2012) conclusion, which suggests that a decline in remittance inflows from Nigeria would have adverse effects on the real GDP growth of Benin and output growth of Mali, Niger and Togo.

Box 5. Policy Linkages in the ECOWAS region

Many empirical studies have established the transmission of monetary and fiscal policy shocks. Also, regional and international shocks or spillover from domestic spending and monetary policy impulses on growth and other macroeconomic indicators are positive and persistent in the short-term, mostly peaked in the second year of policy changes (Corsetti and Muller, 2013; and Faccini et al., 2016). For the region, institutional linkages are robust, especially for the WAEMU countries. In this sub-region, currency fluctuations and other monetary and fiscal policies circulate freely within a Custom, Currency and Monetary Unions like ECOWAS. Through these institutional linkages, policy actions in one country affect economic conditions in other related and closely linked countries. During a public debt crisis, budgetary spending and monetary policy adjustments usually generate significant externalities to other countries in the region (Persson and Tebellini, 1995; Auerbach and Gorodnichenko, 2012; Diop and Diaw, 2015). Kane (2013) noted that budgetary policy is strongly linked among WAEMU economies, while Kane (2018) found that public spending shocks in Côte d'Ivoire negatively affect the economic growth of all the countries in the WAEMU except for Niger and Togo.



S E V E N (7)

POLICY
RECOMMENDATION FOR
DEBT SUSTAINABILITY
IN ECOWAS:
RESPONSIBILITY AND
KEY PERFORMANCE
INDICATORS





Preceding sections of this report have emphasised the urgency of debt sustainability in the ECOWAS region. As in the case of countries like Greece and Spain that experienced public debt crisis in the past decade and Latin American in the 1980s, some ECOWAS countries are already exhibiting some early warning signs of debt distress. Hence, ECOWAS countries need to act early and avert the impending debt distress with counter policies that will reduce the associated impact of a debt crisis in the region. In accordance, this section presents the policy actions to remediate the gathering storms of public debt crisis and proffer action-based and sustainable debt management strategies in the region.

Distressing public debt status in ECOWAS reflects a prolonged policy habit of fiscal deficit. This is as a result of a persistent excessive and inefficient government spending way above revenue mobilisation capacity. Ultimately, the economy-wide implications of unsustainable public debt accumulation in the region are obvious. Empirical

evidence in this report established and identified direct nexus between public debt accumulation and general economic performance in the ECOWAS region, which has manifested in the following:

- » macroeconomic instability;
- » constrained fiscal space;
- » private crowding out effects (real sector investment and capital inflows);
- » financial and capital market distortion;
- » foreign exchange risk exposure; and
- » Inflationary risks.

African countries have had experiences with debt distress when their public debt levels become

unsustainable. Traditionally, they seek relief through debt restructuring with various classes of creditors: multilateral institutions – IMF, World Bank and AfDB; bilateral lenders (Paris Club and non-Paris Club creditors). They have also restructured private foreign debt through swaps, buybacks and the “London Club” (an informal group of commercial banks informal institutions) (Brooks et al, 2014). These have led to the launch of initiatives such as the Heavily Indebted Poor Countries (HIPC) Initiative in 1996, the Multilateral Debt Relief Initiative (MDRI) in 2006. These efforts have, however, proven transient for public debt sustainability as countries continue to accumulate debt unsustainably. The drawback of these efforts is that they were concentrated on public debt portfolio adjustment. Meanwhile, there was little or no consideration for structural and institutional drivers of public debt as they relate to how spending, resource mobilisation and fiscal governance culminate into a debt distress situation.

In essence, there is a need for a National Integrated Revenue-Spending-Debt Management Strategy with coordinated approaches for revenue optimisation, expenditure efficiency and debt management and sustainability. This will give room to address the bedrock of unsustainable growth in public debt and manage the symptoms as reflected in the debt burden. Consequently, this report presents a 10 (ten) Point Policy Agenda to provide one broad recommendation and three (3) specific recommendations each across the three cardinal areas that require integrated coordination: (1) policy actions for revenue optimisation; (2) policy actions for government expenditure efficiency; and (3) policy actions for public debt management and sustainability.

Broad Recommendation

Ensure macroeconomic stability and economic diversification: Broadly, the soundness and resilience of the economy feed into the public debt characteristic of a country. Due to the dependence of many ECOWAS countries on commodities export, their macroeconomic spaces have been highly susceptible to commodities price shocks. In essence, ECOWAS countries need to diversify their economy and increase productivity

across the sectoral composition of the industrial and service sectors to diversify export and expand sources of foreign exchange earnings and revenue. Moreover, ECOWAS countries need to ensure sound management of the macroeconomy to maintain a stable economic climate for businesses and households to thrive. Aside from commodity price fluctuations, structural issues such as insecurity, infrastructural deficit, and harsh policy and regulatory environment have also been major drivers of macroeconomic instability in the ECOWAS region, which have constrained growth in revenue and output. These require private-private sector collaborative and consultative interventions. This is important to guarantee sustainable growth in output and revenue and adequately respond to external shocks. Especially in debt management, the macroeconomic situation of a country influences the pricing of public debt. In a highly volatile macroeconomic space, the pricing on debt in the capital market is often very high, resulting in debt service burden and refinancing risk for the country. Most importantly, sustained and inclusive (socially and sectoral) economic growth remains the bedrock for expanding government revenue and favourable pricing of public debt.

Revenue Optimisation

Revenue optimisation is the strategic management of all the channels of government revenue sources to maximise and guarantee revenue growth over the long term. It involves diversifying revenue sources, taking full advantage of sources and overall growth in government revenue. In the face of the growing financial needs of the governments, sustained expansion in government revenue is the most important to ameliorate the public debt pressure in the short to medium term. Revenue mobilisation in ECOWAS countries, however, is among the lowest in the world, especially, as low as 6% of GDP in Nigeria. Even in ECOWAS countries where revenue to GDP is substantial, the developmental need far outweighs the revenue mobilisation capacity. When ECOWAS governments can mobilise sufficient revenue over the long term, their tendency to borrow reduces. Table 21 presents the three (3) policy areas for interventions to drive revenue optimisation in ECOWAS.

Figure 24: Schematic Presentation of 10 (ten) Point Policy Agenda for National Integrated Revenue-Spending-Debt Management Strategy

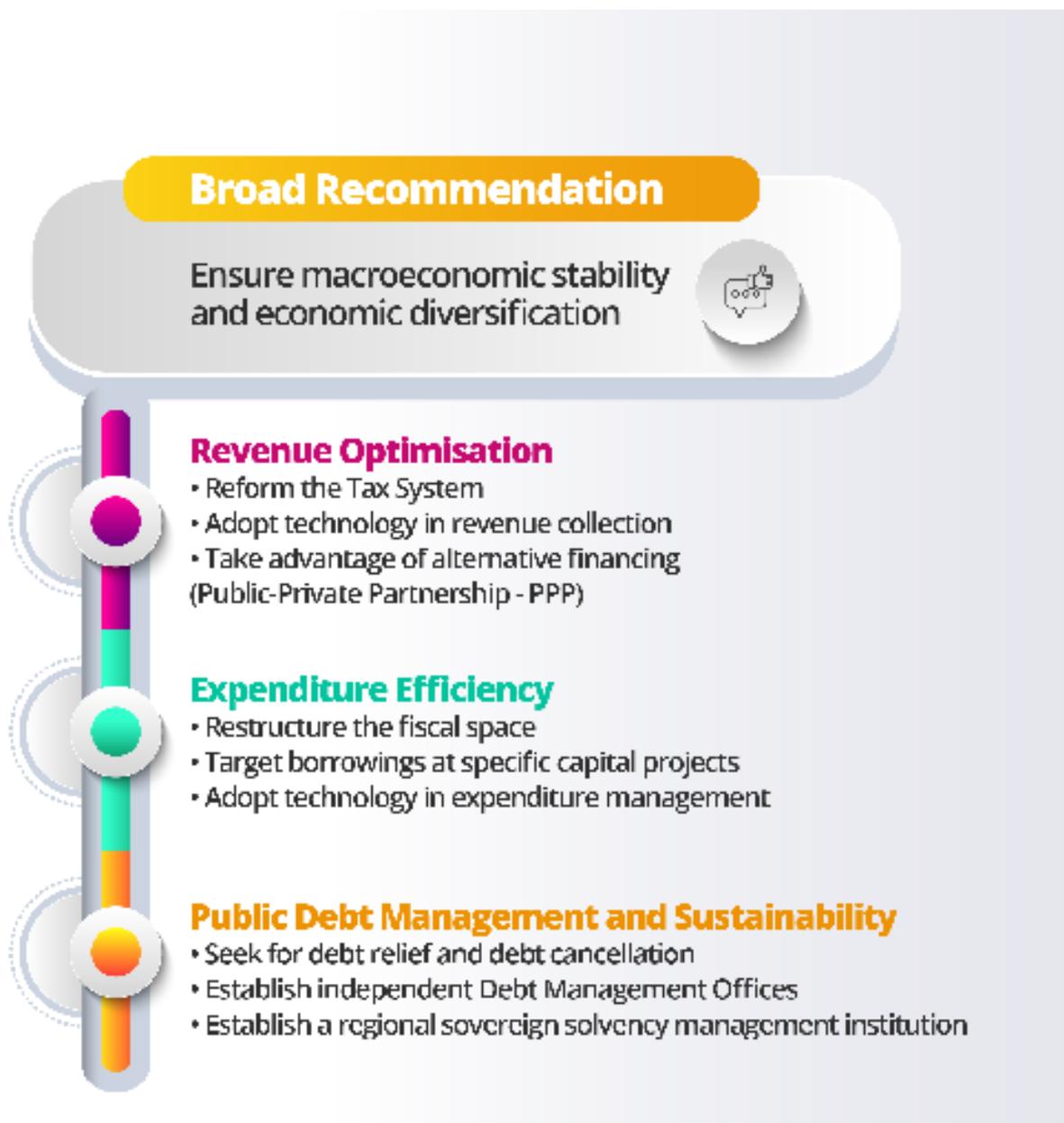


Table 13: Policy interventions for Revenue Optimisation in ECOWAS

S/N	Reforms	Responsibility	KPI	Horizon
01	<p>Reform the Tax System: The major downside to revenue growth among ECOWAS countries is leakages in the pipeline of revenue mobilisation. In the taxation framework of many ECOWAS countries, there are often too many government agencies involved in revenue collection from households and businesses. Also, there is a high presence of non-state actors who collect dues and charges (some partly on behalf of the government) from households and businesses. This has led to multiplicity and duplication of taxes and levies. With such an arrangement, a substantial part of the revenue would have gone into administrative cost, and very little ends up with the government. Besides, hardly does the revenue from the operations of non-state actors get to the government. Moreover, ECOWAS countries have the potential to broaden their tax base as many new generation businesses operate tax-free. Hence, below is a highlight of specific tax reforms that need to be implemented.</p> <ul style="list-style-type: none"> » Harmonise taxes: There government needs to harmonise the revenue collection process to reduce the number of institutions involved in tax collection and the number of taxes being collected by redefining the process and providing clarity for taxpayers. » Recalibrate the incentive management system to roll back incentives not yielding any meaningful result in growing the economy and focusing on getting the right set of people to pay tax. » Convert informal taxes and implicit taxes into formal government revenue. The fact that the people can pay these levies, the government can convert them into an official source of government revenue. » Introduce fiscal incentives that would encourage the transition of micro-enterprises in the informal economy into the formal economy for them to be captured in the tax bucket. In the light of this, the government need to expand the tax identity management to cover informal players. » Broaden the tax base: This can be done vertically by introducing new taxes such as the property tax, transport tax and luxury tax. It can also be done horizontally by expanding the existing tax base to bring in more taxpayers, especially with the changing structure of consumption among the people and changing nature of business formation due to innovation. Most importantly, ECOWAS countries need to situate the tax burden rightly to capture people who have the capacity to pay. 	National government (inclusive of subnational government alongside legislative backing)	Reduction in number of taxes and revenue collecting institutions; and increase in tax revenue	Short to medium term

Table 13: Policy interventions for Revenue Optimisation in ECOWAS

S/N	Reforms	Responsibility	KPI	Horizon
2	<p>Adopt technology in revenue collection: With the growing complexity in the economy and market structure, the ECOWAS governments need to introduce technology in the process of revenue collection. This is important to reduce the cost of revenue mobilisation, ease the process of revenue collection for both government and the taxpayers, streamline the parties involved, gather more commitment from taxpayers, engender transparency in revenue collection, and track defaulters (e.g. tax evasion/avoidance, delay in remittance of royalties, rent etc.).</p>	National government (inclusive of subnational government alongside legislative backing)	Reduction in the process of filing taxes; transition to online tax	Medium to long term
3	<p>Take advantage of alternative financing: The issue of resource mobilisation for government projects should not be limited to taxes and direct revenue accruing to the government. ECOWAS government should also tap into the savings of households and firms and channel their excess earnings into productive social investments. This can be done through several Public-Private Partnership (PPP) arrangements such as equity financing, infrastructural funds, crowdfunding and a host of others. At the same time, the income generated from charges from the project will be used as a return on investment. The PPP arrangement is evolving in some ECOWAS countries. The headwinds, however, are the weak institutions around PPP, lack of trust in the system and uncertainty around the government's commitment to contracts. To adequately tap into the private resource and encourage foreign resources into PPP programmes in ECOWAS, member countries need to provide incentives for the private sector and an enabling environment. ECOWAS governments need to provide institutional backing, perhaps legislative sign-offs or backing on PPP projects, to avoid any form of political interference or abrupt termination of contracts and provide confidence in PPP projects in the region.</p>	National government (inclusive of subnational government alongside legislative backing)	Increase in the number of PPP projects	Short to medium

Expenditure Efficiency

Expenditure efficiency involves strategic allocation of government resources to priority areas in order to achieve the maximum possible outcome given a limited amount of resources. In ECOWAS, government expenditure relative to GDP is among the lowest in the world (at 12% in Nigeria in 2020). However much countries would like to spend on infrastructural development, revenue will not always be sufficient as human wants remain insatiable. Therefore, the level of government

expenditure becomes a choice to be made in the light of macroeconomic stability and the reality of the resource mobilisation capacity of the country. The failure of ECOWAS governments to consider the macroeconomic outcomes of excessive spending has put some countries in debt distress and at risk of a debt crisis. In essence, the growth of government expenditure needs to be fiscally sustainable, efficient and limited. Table 14 presents the three (3) policy areas for interventions to ensure expenditure efficiency in ECOWAS.

Table 14: Policy interventions for Expenditure Efficiency in ECOWAS

S/N	Reforms	Responsibility	KPI	Horizon
1	<p>Overall restructuring of the fiscal space: Often, the focus has been on shortage of revenue without consideration on how indiscriminate growth in expenditure drives borrowing. Over the past two decades, most ECOWAS countries have persistently maintained an incremental budget system; persistent fiscal deficit position; and lopsided expenditure structure towards recurrent expenditure (overhead cost and debt services) over the past two decades. Also, the government spending budgeting process in many ECOWAS countries has been marred by budget padding, project cost inflation, provisions for dead and redundant projects, and high overhead cost. Hence, the ECOWAS governments need to restructure the fiscal space for efficient spending. In accordance, the following is a highlight of specific actions for fiscal restructuring.</p> <ul style="list-style-type: none"> » Cut the cost of governance across the tiers and levels of government. This is important to reduce fiscal constraint, give more room for capital spending and reduce borrowing. It will require the harmonisation of governments' MDAs. Moreover, ECOWAS governments must adopt legislative instruments to restrict government recurrent (overhead and debt services) expenditure to the current year's revenue, limit the share of recurrent expenditure in the budget and limit the rate of expansion. » Observe fiscal discipline: ECOWAS countries must maintain fiscal discipline by ensuring that their expenditure budgets mirror their revenue mobilisation capacity. » Adopt zero-based budgeting to prioritise spending: ECOWAS government need to adopt zero-base budgeting with ministries, departments and agencies of government presenting proposals for every allocation year. Besides, ECOWAS governments need to establish a mechanism for forensic matching of government programmes to cost. This is important to free up resources and reduce wastage in governance. » Privatise redundant and moribund assets: The government should deviate from the fixation of owning assets. A lot of government assets have become redundant and moribund, and continue to receive allocations from the government's annual budget. ECOWAS governments need to free themselves from these assets gulping resources while critical areas such as education and health suffer. Rather, these assets should be privatised and the government collect taxes from their operations. 	National government (inclusive of subnational government alongside legislative backing)	Fiscal deficit below 25% of revenue and 3% of GDP	Short to medium term

Table 14: Policy interventions for Expenditure Efficiency in ECOWAS

S/N	Reforms	Responsibility	KPI	Horizon
2	<p>Target borrowings at specific capital projects: In the light of infrastructural deficit and the need to continue to support the recovery of economies, government borrowing going forward should be project tied. This is alongside the efficient implementation of a working framework for PPP with a few government borrowing focusing, particularly, on health, education and other capital projects that cannot be covered by PPP but are important for future growth. Beyond self-financing projects popularly advocated, the social development dividend and positive externalities need to be emphasised.</p>	National government (inclusive of subnational government alongside legislative backing)		Medium to long term
3	<p>Adopt technology in expenditure management: A substantial part of resource leakages occurs during resource allocation. Due to the multitude of government programmes and the manual processing of annual budgets, it is difficult to fully track the effectiveness of disbursement. Hence, right from the point of budgeting to the final contractors, every aspect of expenditure planning needs to be electronically processed. This help the government to track allocations across MDAs, programmes and projects it will also help with matching cost to project and matching allocations to contractors.</p>	National government (inclusive of subnational government)		Short to medium term

Public Debt Management and Sustainability

Traditionally, the debt stock of ECOWAS countries comprises mostly multilateral and bilateral debts which gave room for relatively easy restructuring in periods of debt distress. However, over the past decades, the debt structure of ECOWAS countries has been changing with increased capital market activities (both external and domestic) among countries. Consequently, the relevance of the debt restructuring mechanism adopted in past is fading away in the face of impending debt distress for some ECOWAS countries that have

engaged in public borrowing in an unsustainable manner. As it stands, the stock of public debt in ECOWAS counties cannot be instantaneously reduced; rather it can be managed to ease the debt service burden on countries. Likewise, the region needs to develop a set of guidelines and public debt strategies and establish institutions to sustainably manage public debt portfolios and steer away from public debt-induced economic distress. Hence, Table 15 presents the three (3) policy areas for interventions for public debt management and sustainability in ECOWAS.

Table 15: Policy interventions for public debt management and sustainability

S/N	Reforms	Responsibility	KPI	Horizon
1	<p>Seek for debt relief and debt cancellation: Due to the devastating effect of COVID-19 pandemics on ECOWAS countries, they compounded their debt burden by borrowing more. ECOWAS countries need to seek further debt relief from both private, bilateral and multilateral debts, much longer, perhaps, until COVID-19 is faced out. This is particular for Benin, Burkina Faso, Cabo Verde, the Gambia, Ghana, Guinea-Bissau, Liberia, Niger, Nigeria, Senegal and Togo that this study has identified to be in public debt distress. However, mere debt relief could prove ineffective in easing the burden on ECOWAS countries. Therefore, ECOWAS countries should seek debt cancellation where possible, especially from bilateral and multilateral sources.</p>	National government (inclusive of Subnational Government)	Reduction in the amount of debt service and debt service to revenue ratio	Short term
2	<p>Establish independent Debt Management Offices: The current debt management arrangement in all ECOWAS countries are subservient to either the finance ministry or the monetary authority. ECOWAS countries need to establish autonomous and independent debt management units strengthened to rationalise government borrowing plans in the face of the sustainability of the current public debt portfolio and macroeconomic outcomes. More than just borrowing, the unit will be empowered to develop debt sustainability plans, de-risk government debt, establish timely and transparent debt recording system, improve transparency and accountability in debt procurement and disbursement, drive policy coordination for fiscal, monetary and financial outcomes, ensure proper pricing of government debt and instruments and institute good governance structure to manage public debt.</p>	National government (inclusive of subnational government alongside legislative backing)	Slowdown in the pace of borrowing	Short to medium term
3	<p>Establish a regional sovereign solvency management institution: As public debt distress among ECOWAS countries is gradually becoming an episodic issue of every decade, ECOWAS needs to establish a regional sovereign solvency management body that will, in conjunction with national debt management, units monitor the trend of public debt and sustainability in member countries. They will be saddled with the responsibility of articulating strategies to survive debt distress and fiscal policy coordination. It will also advise ECOWAS governments on expanding revenue base and expenditure management. This will strengthen the effectiveness of the national debt management units and immune them to fiscal policy discretionary actions; ensure adherence to national and regional fiscal rules; ensure resolution of public debt distress in an orderly manner (especially with the growth of private debt), and pave the way for a more flexible path for debt relief and cancellation.</p>	ECOWAS		Medium to long term

Box 7: Debt Sustainability in the Face of Inevitable Borrowing

Following the COVID-19 pandemic, economic output growth and government revenue have slowed in comparison to pre-pandemic levels. With the recent constriction on the fiscal space, ECOWAS countries have reached a tipping point where borrowing appears to be unavoidable. In the short to medium term, the government must continue to support the economy and spend to expand economic opportunities. With the high level of infrastructural deficit (across social, sector-specific and market linking), most member countries' public debt levels have reached an unsustainable level with little room for respite. In addition, debt relief spaces have become streamlined as a substantial portion of ECOWAS' public debt is now capital market debt (domestic and foreign). This category of public debt portfolio is held by private individuals and businesses, who may be unable to give up their hard-earned wealth for the government.

Indeed, the macroeconomic strain associated with the current level of public debt in ECOWAS will last for the next decade. As a result, ECOWAS countries must be strategic and innovative in their subsequent borrowings. The sustainability argument in this report rests on ECOWAS countries' limited revenue mobilisation capacity, as the government can only service debt with revenue, and not GDP. Recognising that borrowing is unavoidable despite sustainability concerns, ECOWAS countries must target sustainability in their borrowing programmes in short- and medium-term.

To work toward sustainability, the government must balance the national financial net worth optimally. This refers to the difference between all of the governments' assets and outstanding liabilities, also known as government net debt (in reverse). It reflects the government's ability to completely meet its debt obligations, given that the government can sell off some of the assets to pay off its outstanding debts. A positive net worth of the government implies that the government finances are in good shape. Meanwhile, a negative public net worth denotes fiscal insolvency and the need for austerity measures – either raising taxes or cutting government spending.

The optimal balancing of government's financial net worth in debt sustainability requires that increasing government outstanding should at least be offset by a commensurate increase in the national asset that can yield returns to services the debt - or better, lead to an increase in national net worth. Given that many countries (including ECOWAS) have a negative net worth, increase public debt remains sustainable as long as the associated increase in asset lead to improved government's net worth. At worst, the resultant increase in asset must be exactly equal to the increase in debt. In essence, ECOWAS governments must be deliberate about which capital projects they want to borrow to fund, as opposed to general borrowing to finance the budget. Furthermore, these projects must be designed in such a way that they can generate sufficient returns to investments to service and repay the debts.

The following can contribute to the optimal balancing government's financial net worth.

- » Borrowing for a specific project
- » Fiscal prudence is required ensure transparency and accountability
- » Fiscal restructuring and legislative reform for new borrowing to be solely for CAPEX
- » To make provision for economic slowdown, state-contingent debt instruments can be used to relieve debt service pressure
- » Public-private partnership to spread the cost of capital project

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Appendix

Appendix 1. GMM Estimates of the Growth Impact of Debt Accumulation in ECOWAS (Baseline Model)						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
$Growth_{t-1}$	-0.1966***(0.0824)	-0.1773***(0.0792)	-0.1987***(0.0782)	-0.2017***(0.0803)	-0.1931***(0.0819)	-0.1974***(0.0825)
Gcf_t	0.0114(0.0396)	0.0387(0.0388)	0.0351(0.0382)	0.0091(0.0386)	0.0132(0.0395)	0.0103(0.0398)
$\log(cpi_t)$	-0.7913(1.4409)	-1.1866(1.3852)	-1.3794(1.3844)	-1.0884(1.4139)	-0.8353(1.4327)	-0.8122(1.4489)
Top_t	0.0119(0.0128)	0.0099(0.0127)	0.0138(0.0122)	0.0088(0.0126)	0.0109(0.0129)	0.0125(0.0129)
Pd_g_t		-0.0402****(0.0127)				
Exd_g_t			-0.0487****(0.0147)			
Exd_e_t				-0.0072***(0.0032)		
Dsr_e_t					-0.031(0.0303)	
Dsr_r_t						-0.0029(0.0222)
Constant	7.8279(7.0429)	11.087(6.8179)	11.6846*(6.8139)	10.5879(6.9985)	8.4847(7.0212)	7.9824(7.0623)
Chi - square stat	8.24[0.083]	19.52[0.0015]	20.38[0.0011]	13.85[0.0166]	9.54[0.0893]	8.36[0.1375]

Note: $Growth_{t-1}$ is the previous period real GDP growth; Gcf_t is gross capital formation (% of GDP); $\log(cpi_t)$ is the natural log of the consumer price index; Top_t is trade openness; Debt indicators include: public debt-to-GDP ratio (Pd_g_t), external debt-to-GDP ratio (Exd_g_t), external debt-to-export ratio (Exd_e_t), total debt servicing-to-revenue ratio (Dsr_e_t), and total debt servicing-to-revenue ratio (Dsr_r_t). Superscripts ***, **, and * implies that statistical significance of estimates at the 1%, 5% and 10% respectively. The values in parentheses and block brackets are standard errors and probabilities, respectively.

Source: ECOM 19 Output, AFRIP Research

Appendix 2. GMM Estimates of the Growth Impact of Debt Accumulation in ECOWAS (Non-linear relation)					
	Model 7	Model 8	Model 9	Model 10	Model 11
$Growth_{t-1}$	-0.1819***(0.0797)	-0.1965***(0.0781)	-0.1903***(0.0778)	-0.1972***(0.0828)	-0.1942***(0.0835)
Gcf_t	0.0439(0.0393)	0.0402(0.0383)	0.0373(0.0383)	0.0155(0.0399)	0.0124(0.0401)
$\log(cpi_t)$	-1.2914(1.3896)	-1.6325(1.3914)	-1.7656(1.3802)	-0.7727(1.4368)	-0.9107(1.4706)
Top_t	0.0086(0.0126)	0.0172(0.0127)	0.0029(0.0123)	0.0106(0.0129)	0.0139(0.0133)
Pd_g_t	-0.0144(0.0468)				
$Pd_g_t^2$	-0.0002(0.0003)				
Exd_g_t		-0.0909*(0.0479)			
$Exd_g_t^2$		0.0003(0.0004)			
Exd_e_t			-0.0303****(0.0079)		
$Exd_e_t^2$			0.00003****(0.00001)		
Dsr_e_t				-0.0628(0.0945)	
$Dsr_e_t^2$				0.0006(0.0018)	
Dsr_r_t					0.0267(0.0646)
$Dsr_r_t^2$					-0.0004(0.0008)
Constant	10.9178(6.944)	13.4163*(6.9517)	15.8635***(6.9425)	8.4101(7.0297)	7.9567(7.0952)
Chi - square stat	20.32[0.0024]	21.66[0.0014]	25.44[0.0003]	9.7[0.1379]	8.65[0.1942]

Note: $Growth_{t-1}$ is the previous period real GDP growth; Gcf_t is gross capital formation (% of GDP); $\log(cpi_t)$ is the natural log of the consumer price index; Top_t is trade openness; Debt indicators include: public debt-to-GDP ratio (Pd_g_t), external debt-to-GDP ratio (Exd_g_t), external debt-to-export ratio (Exd_e_t), total debt servicing-to-export ratio (Dsr_e_t), and total debt servicing-to-revenue ratio (Dsr_r_t). The corresponding square terms of these debt indicators are represented by $Pd_g_t^2$, $Exd_g_t^2$, $Exd_e_t^2$, $Dsr_e_t^2$, and $Dsr_r_t^2$, respectively. Superscripts ***, **, and * implies that statistical significance of estimates at the 1%, 5% and 10% levels, respectively. The values in parentheses and block brackets are standard errors and probabilities, respectively.

Source: ECOM 19 Output, AFRIP Research

Appendix 3. GMM Estimates of the Growth Impact of Debt Accumulation in ECOWAS (Role of Investment-debt interaction)

	Model 12	Model 13	Model 14	Model 15	Model 16
$Growth_{t-1}$	-0.1761**(0.0795)	-0.1779**(0.0788)	-0.1920**(0.0795)	-0.1948**(0.0819)	-0.1997**(0.0827)
Gcf_t	0.1445*(0.0856)	0.1723**(0.0721)	0.1778**(0.0775)	-0.0163(0.0566)	-0.0001(0.0559)
$\log(cpl_t)$	-1.1614(1.3884)	-1.4975(1.3823)	-1.8801(1.4249)	-0.5977(1.4701)	-0.7345(1.476)
Top_t	0.0086(0.0123)	0.0099(0.0123)	0.0049(0.0125)	0.0088(0.0132)	0.0119(0.0131)
Pd_g_t	0.0103(0.0382)				
$Pd_g_t + Gcf_t$	-0.0018(0.0013)				
Exd_g_t		0.0278(0.0369)			
$Exd_g_t + Gcf_t$		-0.0031**(0.0014)			
Exd_e_t			0.0098(0.0074)		
$Exd_e_t + Gcf_t$			-0.001**(0.0004)		
Dsr_e_t				-0.0828(0.0785)	
$Dsr_e_t + Gcf_t$				0.0022(0.0031)	
Dsr_r_t					-0.0171(0.0532)
$Dsr_r_t + Gcf_t$					0.0005(0.0018)
Constant	8.3266(7.0731)	9.2303(6.8716)	11.6949*(6.9136)	8.1522(7.0285)	7.9446(7.0745)
Chi - square stat	21.14[0.0017]	25.57[0.0003]	20.74[0.002]	10.07[0.1218]	8.52[0.2023]

Note: $Growth_{t-1}$ is the previous period real GDP growth; Gcf_t is gross capital formation (% of GDP); $\log(cpl_t)$ is the natural log of the consumer price index; Top_t is trade openness; Debt indicators include: public debt-to-GDP ratio (Pd_g_t), external debt-to-GDP ratio (Exd_g_t), external debt-to-export ratio (Exd_e_t), total debt servicing-to-export ratio (Dsr_e_t), and total debt servicing-to-revenue ratio (Dsr_r_t). The interaction between domestic investment and each of the five debt indicators are represented by $Pd_g_t + Gcf_t$, $Exd_g_t + Gcf_t$, $Exd_e_t + Gcf_t$, $Dsr_e_t + Gcf_t$, and $Dsr_r_t + Gcf_t$, respectively. Superscripts ***, **, and * implies that statistical significance of estimates at the 1%, 5% and 10% levels, respectively. The values in parentheses and block brackets are standard errors and probabilities, respectively.

Source: STATA 19 Output, NEDP Research

Appendix 4. GMM Estimates of the Growth Impact of Debt Accumulation in ECOWAS (Role of Income Status)

	Model 17	Model 18	Model 19	Model 20	Model 21
$Growth_{t-1}$	-0.1797**(0.0801)	-0.2003**(0.0792)	-0.2041**(0.0804)	-0.1939**(0.0828)	-0.1942**(0.0836)
Gcf_t	0.0419(0.0403)	0.0433(0.0403)	0.0278(0.0408)	0.0211(0.0409)	0.0185(0.0412)
$\log(cpl_t)$	-1.2479(1.3974)	-1.4622(1.3966)	-1.1862(1.4129)	-0.9023(1.445)	-0.9146(1.4573)
Top_t	0.0087(0.0125)	0.012(0.0124)	0.0056(0.0128)	0.0092(0.0132)	0.0117(0.0132)
Pd_g_t	-0.0483****(0.0157)				
d_income	-2.557(1.8986)	-1.7609(1.8442)	-0.5586(1.9245)	-1.4774(1.8211)	-0.6669(1.8753)
$Pd_g_t + d_income$	0.0275(0.0289)				
Exd_g_t		-0.0499****(0.0171)			
$Exd_g_t + d_income$		0.0038(0.0366)			
Exd_e_t			-0.0065*(0.0034)		
$Exd_e_t + d_income$			-0.01(0.0106)		
Dsr_e_t				-0.0333(0.0391)	
$Dsr_e_t + d_income$				0.0054(0.0725)	
Dsr_r_t					0.0091(0.0312)
$d_sr_r_t + d_income$					-0.0259(0.0499)
Constant	12.206*(6.9109)	12.5963*(6.8964)	11.3625(7.0222)	9.2422(7.1193)	8.4818(7.1445)
Chi - square stat	20.75[0.0042]	21.08[0.0037]	16.07[0.0245]	10.13[0.1815]	9.21[0.2381]

Note: $Growth_{t-1}$ is the previous period real GDP growth; Gcf_t is gross capital formation (% of GDP); $\log(cpl_t)$ is the natural log of the consumer price index; Top_t is trade openness; Debt indicators include: public debt-to-GDP ratio (Pd_g_t), external debt-to-GDP ratio (Exd_g_t), external debt-to-export ratio (Exd_e_t), total debt servicing-to-export ratio (Dsr_e_t), and total debt servicing-to-revenue ratio (Dsr_r_t). The interaction between country's income status dummy variable (which takes 1 if a country belongs to the middle income class and 0 otherwise) and each of the five debt indicators are represented by $Pd_g_t + d_income$, $Exd_g_t + d_income$, $Exd_e_t + d_income$, $Dsr_e_t + d_income$, and $Dsr_r_t + d_income$, respectively. Superscripts ***, **, and * implies that statistical significance of estimates at the 1%, 5% and 10% levels, respectively. The values in parentheses and block brackets are standard errors and probabilities, respectively.

Source: STATA 19 Output, NEDP Research

Appendix 5. GMM Estimates of the Growth Impact of Debt Accumulation in ECOWAS (Role of Economic Structure)

	Model 22	Model 23	Model 24	Model 25	Model 26
<i>Growth_{t-1}</i>	-0.1981**(0.0792)	-0.2145****(0.0783)	-0.2206****(0.0801)	-0.2152****(0.0807)	-0.2179****(0.0816)
<i>Gcf_t</i>	0.0272(0.0399)	0.0234(0.0391)	-0.0043(-0.0388)	-0.0015(0.0393)	-0.0049(0.0396)
<i>log(cpi_t)</i>	-1.0202(1.3742)	-1.1991(1.3751)	-0.9082(1.3983)	-0.672(1.3998)	-0.6562(1.4202)
<i>Top_t</i>	0.0129(0.0126)	0.0166(0.0125)	0.0137(0.0128)	0.0173(0.0128)	0.0191(0.0129)
<i>Pd_t</i>	-0.0303(0.0186)				
<i>d_structure</i>	-1.8526(1.9154)	-1.8489(1.8236)	-2.6387(1.8111)	-4.1808**(1.6386)	-4.126**(1.6772)
<i>Pd_t * d_structure</i>	-0.0109(0.0266)			0.0622(0.0718)	
<i>Exd_t</i>		-0.0375*(0.0227)			
<i>Exd_t * d_structure</i>		-0.0114(0.0314)			
<i>Exd_{e_t}</i>			-0.0058(0.0046)		
<i>Exd_{e_t}</i> * d_structure			-0.0009(0.0066)		
<i>Dsr_{e_t}</i>				-0.0718(0.055)	
<i>Dsr_{e_t}</i> * d_structure				0.0622(0.0718)	
<i>Dsr_{r_t}</i>					-0.0254(0.0351)
<i>dsr_{r_t}</i> * d_structure					0.0361(0.0505)
<i>Constant</i>	11.2253*(6.773)	11.7658*(6.7668)	11.0386(6.9323)	9.9738(6.908)	9.4429(6.9749)
<i>Chi – square stat</i>	23.14(0.0016)	23.89(0.0012)	18.17(0.0112)	16.94(0.0178)	15.51(0.03)

Note: *Growth_{t-1}* is the previous period real GDP growth; *Gcf_t* is gross capital formation (% of GDP); *log(cpi_t)* is the natural log of the consumer price index; *Top_t* is trade openness; Debt indicators include: public debt-to-GDP ratio (*Pd_t*), external debt-to-GDP ratio (*Exd_t*), external debt-to-export ratio (*Exd_{e_t}*), total debt servicing-to-export ratio (*Dsr_{e_t}*), and total debt servicing-to-revenue ratio (*Dsr_{r_t}*). The interaction between country's economic structure dummy variable (which takes 1 if a country is resource-dependent and 0 otherwise) and each of the five debt indicators are represented by *Pd_t * d_structure*, *Exd_t * d_structure*, *Exd_{e_t}* * d_structure, *Dsr_{e_t}* * d_structure, and *Dsr_{r_t}* * d_structure, respectively. Superscripts ***, **, and * implies that statistical significance of estimates at the 1%, 5% and 10% levels, respectively. The values in parentheses and block brackets are standard errors and probabilities, respectively.

Source: ECTA 35 Output, AFRU Research

Appendix 6. GMM Estimates of the Growth Impact of Debt Accumulation in ECOWAS (Role of Political Instability)

	Model 27	Model 28	Model 29	Model 30	Model 31
<i>Growth_{t-1}</i>	-0.1867**(0.0806)	-0.2217****(0.0786)	-0.2329****(0.816)	-0.2267****(0.0839)	-0.2265****(0.084)
<i>Gcf_t</i>	0.0417(0.0383)	0.0496(0.0379)	0.0234(0.0388)	0.0161(0.0396)	0.0126(0.0396)
<i>log(cpi_t)</i>	-1.1919(1.3665)	-1.464(1.3583)	-1.3713(1.4082)	-0.8758(1.4362)	-0.9225(1.4428)
<i>Top_t</i>	0.0088(0.0121)	0.0125(0.012)	0.0033(0.0127)	0.0089(0.013)	0.0131(0.013)
<i>Pd_t</i>	-0.0173(0.0158)				
<i>d_instability</i>	4.4019**(1.8712)	4.4462**(1.7209)	4.7523****(1.7414)	3.1399*(1.8411)	1.0835(1.9906)
<i>Pd_t * d_instability</i>	-0.0548**(0.0266)				
<i>Exd_t</i>		-0.0239(0.0173)			
<i>Exd_t * d_instability</i>		-0.0748**(0.3183)			
<i>Exd_{e_t}</i>			-0.0038(0.0035)		
<i>Exd_{e_t}</i> * d_instability			-0.0163***(0.0077)		
<i>Dsr_{e_t}</i>				-0.0202(0.0436)	
<i>Dsr_{e_t}</i> * d_instability				-0.0225(0.0669)	
<i>Dsr_{r_t}</i>					-0.0255(0.0295)
<i>dsr_{r_t}</i> * d_instability					0.0631(0.0507)
<i>Constant</i>	9.1812(6.7648)	10.0991(6.7146)	10.4266(6.9686)	7.3862(7.0695)	
<i>Chi – square stat</i>	25.59(0.0006)	28.72(0.0002)	21.81(0.0027)	13.17(0.0681)	13.4(0.0629)

Note: *Growth_{t-1}* is the previous period real GDP growth; *Gcf_t* is gross capital formation (% of GDP); *log(cpi_t)* is the natural log of the consumer price index; *Top_t* is trade openness; Debt indicators include: public debt-to-GDP ratio (*Pd_t*), external debt-to-GDP ratio (*Exd_t*), external debt-to-export ratio (*Exd_{e_t}*), total debt servicing-to-export ratio (*Dsr_{e_t}*), and total debt servicing-to-revenue ratio (*Dsr_{r_t}*). The interaction between country's fragility/political instability status dummy variable (which takes 1 if a country is fragile or politically unstable and 0 otherwise) and each of the five debt indicators are represented by *Pd_t * d_instability*, *Exd_t * d_instability*, *Exd_{e_t}* * d_instability, *Dsr_{e_t}* * d_instability, and *Dsr_{r_t}* * d_instability, respectively. Superscripts ***, **, and * implies that statistical significance of estimates at the 1%, 5% and 10% levels, respectively. The values in parentheses and block brackets are standard errors and probabilities, respectively.

Source: ECTA 35 Output, AFRU Research

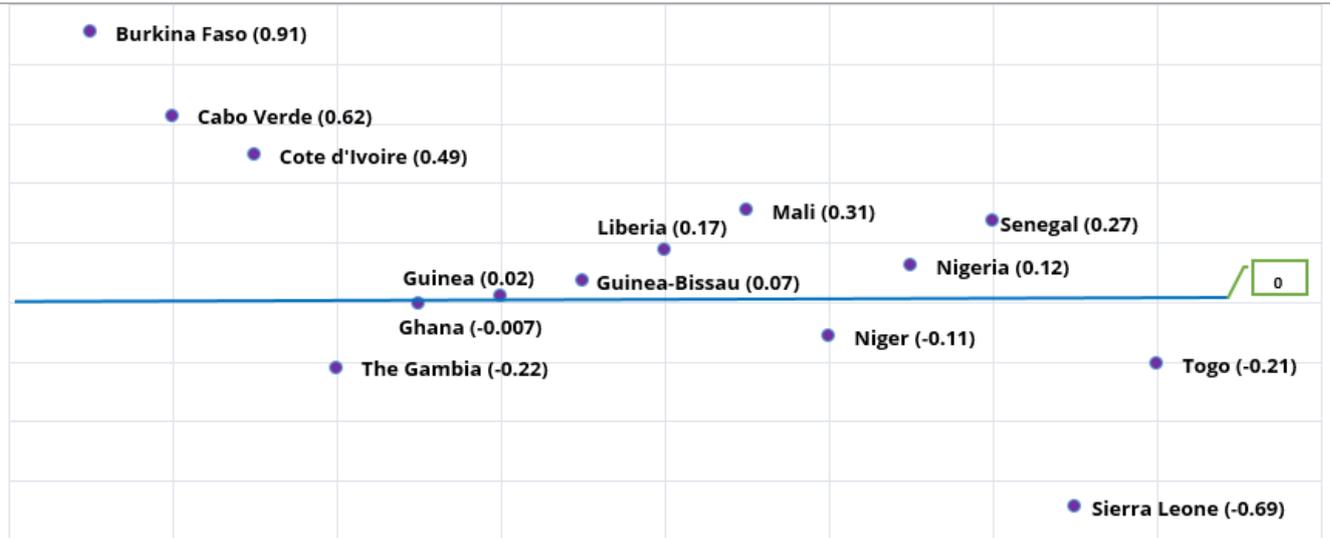
Appendix 7. GMM Estimates of the Growth Impact of Debt Accumulation in ECOWAS (Role of Currency Union Membership)

	Model 32	Model 33	Model 34	Model 35	Model 36
<i>Growth_{t-1}</i>	-0.1964**(0.0806)	-0.2096*** (0.0794)	-0.2002** (0.0774)	-0.2233*** (0.0829)	-0.2349*** (0.0839)
<i>Gcf_t</i>	0.0457(0.0389)	0.0481(0.0385)	0.0345(0.0368)	0.0125(0.0389)	0.0105(0.0396)
<i>log(cpi_t)</i>	-1.2419(1.3707)	-1.6001(1.3677)	-1.5539(1.3257)	-0.7157(1.4097)	-0.6303(1.4355)
<i>Top_t</i>	0.0082(0.0122)	0.0126(0.0121)	0.0015(0.0119)	0.0099(0.0127)	0.0125(0.0129)
<i>Pd_{g_t}</i>	-0.0626*** (0.02)				
<i>d_{union}</i>	-0.3608(1.7513)	-0.6907(1.6611)	-2.7217*(1.6279)	1.5045(1.5699)	2.1273(1.6723)
<i>Pd_{g_t}</i> + <i>d_{union}</i>	0.0407(0.0269)				
<i>Exd_{g_t}</i>		-0.0913*** (0.0257)			
<i>Exd_{g_t}</i> + <i>d_{union}</i>		0.0657** (0.0326)			
<i>Exd_{e_t}</i>			-0.0343*** (0.0073)		
<i>Exd_{e_t}</i> + <i>d_{union}</i>			0.0322*** (0.0081)		
<i>Dsr_{e_t}</i>				-0.0669(0.0488)	
<i>Dsr_{e_t}</i> + <i>d_{union}</i>				0.0531(0.0692)	
<i>Dsr_{y_t}</i>					-0.0179(0.0407)
<i>d_{sr_{y_t}}</i> + <i>d_{union}</i>					0.0139(0.0545)
<i>Constant</i>	11.57*(6.839)	13.149*(6.8275)	15.3405** (6.6997)	7.4026(6.9393)	6.2835(7.0459)
<i>Chi – square stat</i>	23.89[0.0012]	27.14[0.0003]	34.24[0.0000]	13.72[0.0564]	12.61[0.0823]

Note: *Growth_{t-1}* is the previous period real GDP growth; *Gcf_t* is gross capital formation (% of GDP); *log(cpi_t)* is the natural log of the consumer price index; *Top_t* is trade openness; Debt indicators include: public debt-to-GDP ratio (*Pd_{g_t}*), external debt-to-GDP ratio (*Exd_{g_t}*), external debt-to-export ratio (*Exd_{e_t}*), total debt servicing-to-export ratio (*Dsr_{e_t}*), and total debt servicing-to-revenue ratio (*Dsr_{y_t}*). The interaction between country's membership of the currency union (WAEMU) dummy variable (which takes 1 if a country belongs to the WAEMU region and 0 otherwise) and each of the five debt indicators are represented by *Pd_{g_t}* + *d_{union}*, *Exd_{g_t}* + *d_{union}*, *Exd_{e_t}* + *d_{union}*, *Dsr_{e_t}* + *d_{union}*, and *Dsr_{y_t}* + *d_{union}*, respectively. Superscripts ***, **, and * implies that statistical significance of estimates at the 1%, 5% and 10% levels, respectively. The values in parentheses and block brackets are standard errors and probabilities, respectively.

Source: ECOM 23 Output, ABRW Research

Appendix 8. Linear Growth Impact of Debt Accumulation in ECOWAS (1990-2020)*



Source: NESG Research

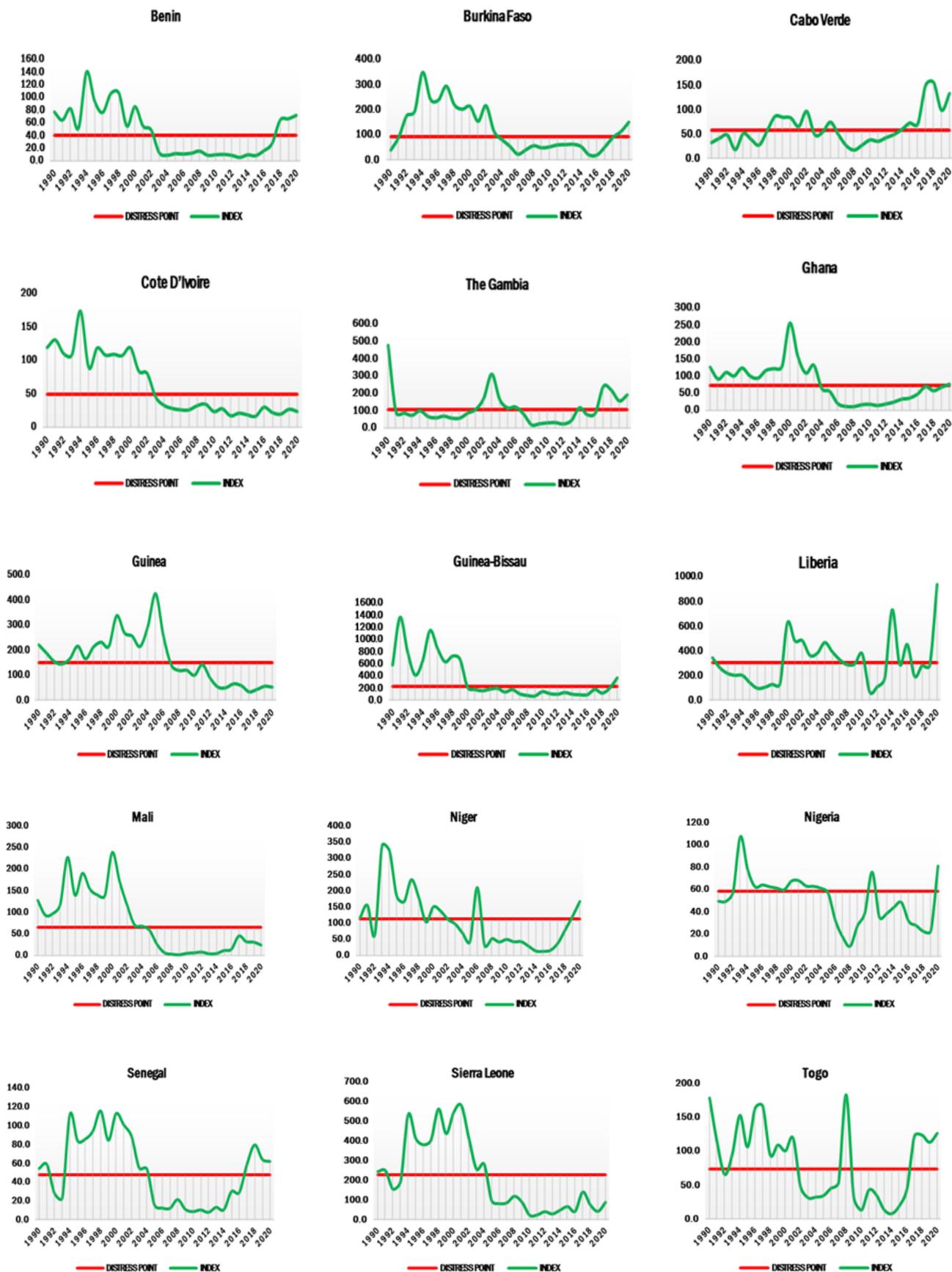
Appendix 9. Non-Linear Growth Impact of Debt Accumulation in ECOWAS (1990-2020)*



*External debt (% of GDP) was used as the proxy for the debt indicator

Source: NESG Research estimates from Eviews 9.0

Appendix 10. Time-varying Debt Index (1990-2020) and Country-specific Debt Threshold for ECOWAS



Source: NESG Research

Appendix 11: Nigeria's Financial Linkages with Countries in ECOWAS Region

Country	2020 Debt Index	Debt Distress Point	Remark	IMF's latest Assessment
Benin	72.2	39.6	In debt distress	Moderate risk (May 2020)
Burkina Faso	149.7	91.1	In debt distress	Moderate risk (Nov. 2020)
Cabo Verde	133.2	57.9	In debt distress	High risk (Sept. 2020)
Côte d'Ivoire	23.1	49.2	Low risk	Moderate risk (Apr. 2020)
The Gambia	192.9	103.8	In debt distress	High risk (Apr. 2020)
Ghana	77.0	71.9	In debt distress	High risk (Dec. 2019)
Guinea	52.4	148.6	Low risk	Moderate risk (Dec. 2020)
Guinea-Bissau	370.1	299.8	In debt distress	High risk (Jan. 2021)
Liberia	938.4	306.9	In debt distress	High risk (Jun. 2020)
Mali	24.9	65.5	Low risk	Moderate risk (Apr. 2021)
Niger	167.7	112.8	In debt distress	Moderate risk (Apr. 2020)
Nigeria	81.2	58.1	In debt distress	High risk (Oct. 2020)
Senegal	62.2	47.8	In debt distress	Moderate risk (Apr. 2020)
Sierra Leone	89.8	227.6	Low risk	High risk (May 2020)
Togo	126.2	74.0	In debt distress	High risk (Mar. 2020)

Source: NESG Research; IMF/World Bank's Joint Sustainability Analysis

Note: Decision Rule using Quantile Measures is as follows: (1) Index ≤ 50% of Distress point = Low risk of debt default; (2) 51% ≤ Index ≤ 100% of Distress point = High risk of debt default, and (3) Index > Distress point = In Debt Distress

Appendix 12: Nigeria's Financial Linkages with Countries in ECOWAS Region

	Indicators of Financial Integration			Degree of Financial Integration		
	Bank Penetration (% of Banking Assets)	Foreign Direct Investment (FDI)	Remittance	Bank Penetration	FDI	Remittance
Benin	7.7%	0.5%	55.1%	Low	Low	High
Burkina Faso	8.3%	0.2%	0.5%	Low	Low	Low
Cabo Verde	0.0%	0.0%	1.7%	N/A	N/A	Low
Côte d'Ivoire	7.1%	0.0%	0.4%	Low	N/A	Low
Gambia	60.0%	0.0%	5.8%	High	N/A	Medium
Ghana	6.0%	0.0%	26.5%	Low	N/A	High
Guinea	4.5%	0.0%	1.3%	Low	N/A	Low
Guinea-Bissau	0.0%	0.0%	4.3%	N/A	N/A	Low
Liberia	58.0%	0.0%	5.2%	High	N/A	Medium
Mali	4.5%	0.0%	14.5%	Low	N/A	High
Niger	0.0%	0.0%	30.2%	N/A	N/A	High
Senegal	7.4%	1.5%	0.7%	Low	Medium	Low
Sierra Leone	25.0%	0.0%	1.1%	High	N/A	Low
Togo	0.0%	0.1%	29.0%	N/A	Low	High

Source: NESG Research

Statistical Appendix 1. Nominal GDP of ECOWAS Countries (US\$' Billion)																
	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	3.52	2.96	0.61	14.85	1.01	11.47	4.04	0.39	0.86	2.96	2.24	67.82	6.02	0.94	2.01	121.70
2001	3.67	3.19	0.62	15.49	1.00	12.23	3.81	0.41	0.91	3.47	2.44	73.13	6.51	1.08	2.00	129.96
2002	4.19	3.62	0.68	17.15	0.89	14.20	4.02	0.47	0.95	3.91	2.77	93.98	7.00	1.25	2.30	157.38
2003	5.35	4.74	0.89	21.21	0.84	17.49	4.76	0.55	0.71	4.71	3.38	102.94	8.77	1.38	2.85	180.57
2004	6.19	5.45	1.02	22.92	0.96	20.24	5.05	0.58	0.90	5.45	3.75	130.35	10.07	1.44	3.05	217.42
2005	6.57	6.15	1.09	23.63	1.03	24.52	4.51	0.64	0.95	6.25	4.37	169.65	11.02	1.61	3.08	265.07
2006	7.03	6.55	1.24	24.63	1.05	28.79	4.18	0.64	1.11	6.91	4.74	222.79	11.70	1.88	3.17	326.41
2007	8.17	7.63	1.51	28.16	1.28	33.94	6.32	0.75	1.35	8.16	5.72	262.22	14.00	2.16	3.59	384.96
2008	9.79	9.45	1.79	33.62	1.56	38.41	6.97	0.95	1.68	9.84	7.28	330.26	16.85	2.51	4.48	475.44
2009	9.73	9.44	1.70	33.69	1.45	34.25	6.75	0.89	1.77	10.22	7.32	297.46	16.13	2.45	4.55	437.80
2010	9.54	10.12	1.66	34.43	1.54	43.04	6.86	0.94	1.97	10.70	7.84	369.06	16.13	2.58	4.63	521.04
2011	10.69	12.08	1.87	35.53	1.41	53.65	6.03	1.16	2.34	12.99	8.75	414.10	17.81	2.94	5.22	586.57
2012	11.15	12.57	1.74	37.03	1.42	56.51	7.30	1.05	2.67	12.45	9.41	460.95	17.67	3.80	5.23	640.95
2013	12.52	13.44	1.85	43.23	1.38	63.28	8.37	1.11	3.05	13.24	10.21	514.97	18.92	4.92	5.83	716.32
2014	13.29	13.95	1.86	48.88	1.23	53.17	8.79	1.14	3.09	14.37	10.83	568.50	19.80	5.01	6.17	770.08
2015	11.39	11.83	1.60	45.82	1.36	48.60	8.79	1.15	3.09	13.11	9.68	492.44	17.78	4.25	5.64	676.53
2016	11.82	12.82	1.66	47.96	1.47	54.99	8.60	1.25	3.26	14.02	10.35	404.65	19.04	3.86	6.03	601.78
2017	12.70	14.17	1.77	51.59	1.50	58.98	10.34	1.47	3.34	15.36	11.19	375.75	20.99	3.71	6.39	589.25
2018	14.26	16.21	1.97	58.01	1.66	65.52	12.18	1.51	3.26	17.08	12.85	421.74	23.13	4.09	7.12	660.59
2019	14.39	15.75	1.98	58.54	1.82	67.00	13.80	1.44	3.06	17.31	12.91	448.12	23.31	4.12	7.22	690.77
2020	15.19	16.54	1.75	61.40	1.91	68.42	15.46	1.43	3.03	17.64	13.70	429.42	24.45	4.20	7.50	682.04

Source: Computed from IMF WEO

Statistical Appendix 2. Real GDP Growth of ECOWAS Countries (US\$' Billion)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo
2000	5.86	1.89	7.27	-2.07	5.53	3.62	2.5	1.1	-	-0.06	-1.21	5.52	3.89	3.81	-0.97
2001	5.33	6.61	6.14	0.12	5.75	3.81	3.66	4.79	2.76	15.38	7.27	6.67	4.31	18.17	0.82
2002	4.64	4.35	5.28	-1.67	-3.25	4.63	5.17	3.65	4.43	3.11	4.92	14.6	0.07	26.43	3.83
2003	3.44	7.8	7.5	-1.36	6.87	5.1	1.25	-0.29	-29	9.12	2.18	9.5	5.59	9.33	6.72
2004	4.43	4.48	4.93	1.23	7.05	5.36	2.34	1.17	3.97	1.56	0.36	10.44	4.64	6.6	-0.98
2005	1.71	8.66	5.81	1.72	-2.35	6.21	3	6.56	5.86	6.54	7.34	7.01	4.31	4.51	-4.67
2006	3.94	6.25	9.12	1.52	-0.56	5.84	2.5	2.67	8.48	4.66	5.93	6.73	2.33	4.22	2.65
2007	5.99	4.11	9.22	1.77	3.04	4.13	6.51	2.56	13.1	3.49	3.14	7.32	2.83	8.06	-1.18
2008	4.9	5.8	6.65	2.54	6.26	8.97	4.14	4.53	6.11	4.77	7.73	7.2	3.7	5.4	4.06
2009	2.32	2.96	-1.27	3.25	6.67	5.55	-1.54	2.45	5.19	4.68	1.96	8.35	2.75	3.19	5.54
2010	2.11	8.45	1.47	2.02	5.91	7.76	4.22	5.61	6.35	5.41	8.58	11.26	3.39	5.35	6.1
2011	2.96	6.62	3.97	-4.86	-8.13	14.2	5.61	8.09	7.7	3.24	2.36	4.89	1.33	6.31	6.4
2012	4.81	6.45	1.08	10.86	5.24	8.5	5.92	-1.71	8.42	-0.84	10.54	4.28	4	15.18	6.54
2013	7.19	5.79	0.8	9.27	2.87	7.19	3.93	3.26	8.84	2.3	5.31	5.39	2.41	20.72	6.11
2014	6.36	4.33	0.61	8.79	-1.41	2.9	3.71	0.97	0.7	7.09	6.64	6.31	6.22	4.56	5.92
2015	1.78	3.92	1.01	8.84	4.06	2.18	3.81	6.13	0.01	6.17	4.39	2.65	6.37	-20.49	5.74
2016	3.34	5.96	4.71	7.19	1.94	3.45	10.83	5.31	-1.63	5.85	5.74	-1.62	6.36	6.35	5.6
2017	5.67	6.16	3.7	7.36	4.82	8.14	10.34	4.79	2.47	5.31	5	0.81	7.41	3.77	4.35
2018	6.7	6.82	4.53	6.89	7.24	6.26	6.18	3.36	1.24	4.75	7.2	1.92	6.21	3.47	4.97
2019	6.87	5.69	5.67	6.23	6.06	6.48	5.65	4.5	-2.52	4.77	5.91	2.21	4.4	5.51	5.46
2020	2	0.79	-14	2.28	-	0.88	5.23	-2.4	-2.97	-1.98	1.2	-1.79	0.83	-2.25	0.7

Source: Computed from IMF WEO

Statistical Appendix 3. Exchange Rates of ECOWAS Countries (US\$' Billion)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo
2000	709.8	712.0	115.8	710.2	12.8	0.5	1,746.8	709.0	1.0	709.8	710.0	101.7	709.9	2,063.0	709.6
2001	732.4	732.5	123.1	732.4	15.7	0.7	1,950.6	731.7	1.0	732.5	732.3	111.2	732.4	1,998.3	732.3
2002	694.3	694.2	117.2	693.7	19.9	0.8	1,976.0	694.9	1.0	694.3	694.3	120.6	694.3	2,104.9	694.1
2003	580.0	580.0	97.7	579.9	28.5	0.9	1,985.0	580.5	1.0	580.0	580.1	129.2	580.0	2,358.2	579.9
2004	527.6	527.6	88.8	527.3	30.0	0.9	2,225.2	527.5	1.0	527.6	527.6	132.9	527.6	2,719.6	527.4
2005	527.0	527.0	88.6	527.3	28.6	0.9	3,644.6	527.1	1.0	527.0	527.0	131.3	527.0	2,962.6	526.8
2006	522.4	522.4	87.9	522.4	28.1	0.9	5,200.6	522.3	1.0	522.4	522.4	128.7	522.4	2,963.9	522.3
2007	478.6	478.6	80.6	478.6	24.9	0.9	4,174.3	478.7	1.0	478.6	478.6	125.8	478.6	2,984.7	478.6
2008	446.0	446.1	75.3	446.0	22.2	1.1	4,600.3	445.8	1.0	446.1	446.0	118.6	446.1	2,975.1	446.1
2009	470.8	470.8	80.0	470.3	26.7	1.4	4,775.4	470.9	1.0	470.8	470.8	148.9	470.8	3,385.6	470.8
2010	494.4	494.4	83.3	494.8	28.0	1.4	5,722.3	494.3	1.0	494.4	494.4	150.3	494.4	3,978.1	494.4
2011	471.4	471.3	79.3	471.3	29.5	1.5	7,486.9	471.3	1.0	471.3	471.3	153.9	471.3	4,349.8	471.4
2012	510.3	510.2	86.3	510.6	32.1	1.8	7,065.3	510.3	1.0	510.2	510.3	157.5	510.2	4,343.6	510.2
2013	493.9	493.9	83.1	493.9	36.0	2.0	6,910.1	493.8	1.0	493.9	493.9	157.3	493.9	4,336.3	493.9
2014	493.6	493.6	83.0	493.8	41.8	2.9	7,015.2	493.4	1.0	493.6	493.6	158.6	493.6	4,531.6	493.7
2015	591.2	591.2	99.4	591.2	43.2	3.7	7,489.1	590.9	1.0	591.2	591.2	193.3	591.1	5,076.0	591.2
2016	592.8	592.8	99.7	592.6	43.8	3.9	8,959.3	592.6	1.0	592.8	592.8	253.5	592.8	6,302.5	592.8
2017	580.9	580.9	97.8	580.7	46.8	4.4	9,088.0	581.0	1.0	580.9	580.9	305.8	580.9	7,397.1	580.9
2018	555.2	555.2	93.4	555.5	48.4	4.6	9,010.8	555.1	1.0	555.2	555.2	306.1	555.2	7,931.9	555.2
2019	585.9	585.9	98.5	585.9	50.3	5.2	9,183.7	585.8	1.0	585.9	585.9	325.0	585.9	9,016.2	585.9
2020	574.8	574.8	96.6	574.7	51.2	5.6	9,564.8	574.7	1.0	574.8	574.8	359.2	574.8	9,839.4	574.7

Source: Computed from IMF WEO

Statistical Appendix 4. Government Revenue of ECOWAS Countries (US\$ Billion)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	0.42	0.50	0.15	1.79	0.10	0.99	0.41	0.08	0.12	0.50	0.24	19.54	0.89	0.12	0.17	26.01
2001	0.45	0.51	0.15	1.88	0.07	1.33	0.45	0.07	0.10	0.54	0.27	20.21	0.93	0.15	0.20	27.32
2002	0.50	0.54	0.19	2.14	0.08	1.21	0.44	0.05	0.11	0.66	0.34	19.47	1.10	0.19	0.19	27.21
2003	0.67	0.75	0.22	2.42	0.06	1.90	0.48	0.06	0.07	0.92	0.40	21.63	1.45	0.20	0.29	31.53
2004	0.78	0.88	0.29	2.86	0.10	2.55	0.46	0.10	0.10	1.06	0.50	31.06	1.85	0.23	0.34	43.16
2005	0.83	0.94	0.30	2.97	0.10	2.91	0.45	0.10	0.11	1.18	0.61	38.54	2.03	0.26	0.36	51.68
2006	0.90	2.37	0.35	3.31	0.11	3.48	0.46	0.10	0.16	3.44	2.19	46.96	2.06	0.28	0.41	66.61
2007	1.31	1.36	0.43	4.07	0.15	4.33	0.63	0.11	0.25	1.53	0.95	44.63	2.71	0.71	0.45	63.62
2008	1.42	1.41	0.51	4.83	0.17	4.55	0.73	0.20	0.32	1.66	1.31	66.32	2.93	0.32	0.54	87.24
2009	1.44	1.64	0.47	4.51	0.18	4.21	0.77	0.21	0.40	1.95	1.01	30.07	2.82	0.37	0.55	50.58
2010	1.32	1.78	0.48	4.52	0.18	5.38	0.74	0.17	0.52	1.89	1.04	45.84	2.86	0.39	0.64	67.75
2011	1.47	2.22	0.48	3.66	0.19	7.57	0.91	0.19	0.59	2.23	1.15	73.42	3.26	0.50	0.74	98.59
2012	1.56	2.50	0.42	5.14	0.23	7.76	1.28	0.11	0.74	1.82	1.49	67.81	3.32	0.58	0.78	95.54
2013	1.69	2.92	0.45	6.16	0.17	7.93	1.24	0.12	0.84	2.30	1.89	59.12	3.36	0.65	0.93	89.76
2014	1.67	2.68	0.43	6.67	0.19	7.14	1.49	0.23	0.92	2.46	1.90	62.19	3.80	0.70	0.95	93.41
2015	1.44	2.16	0.43	6.63	0.19	7.23	1.30	0.21	1.01	2.51	1.69	35.75	3.43	0.69	0.91	65.57
2016	1.32	2.38	0.44	7.07	0.19	7.38	1.38	0.19	1.04	2.57	1.54	20.72	3.94	0.57	0.96	51.69
2017	1.72	2.73	0.51	7.79	0.29	8.22	1.58	0.25	0.93	3.08	1.72	24.84	4.09	0.54	1.02	59.32
2018	1.94	3.14	0.56	8.58	0.25	9.49	1.77	0.23	0.87	2.66	2.33	35.89	4.37	0.64	1.28	74.00
2019	2.02	3.21	0.58	8.80	0.38	9.21	1.95	0.22	0.89	3.71	2.33	35.22	4.76	0.74	1.28	75.31
2020	2.25	3.59	0.45	8.85	0.41	8.42	2.26	0.25	0.91	3.52	2.41	26.92	5.16	0.81	1.28	67.49

Source: Computed from IMF WEO

Statistical Appendix 5. Government Revenue/GDP of ECOWAS Countries (%)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	11.95	16.80	24.30	12.05	9.45	8.62	10.20	20.71	14.44	16.75	10.68	28.81	14.76	13.27	8.46	21.38
2001	12.18	16.10	24.59	12.14	7.16	10.88	11.69	17.25	11.11	15.54	11.15	27.64	14.27	13.97	10.14	21.02
2002	11.95	15.03	28.59	12.46	8.65	8.50	11.03	10.35	11.15	16.85	12.24	20.72	15.71	15.20	8.14	17.29
2003	12.61	15.81	24.54	11.41	7.57	10.88	10.09	11.41	9.32	19.63	11.86	21.01	16.55	14.35	10.32	17.46
2004	12.66	16.06	28.75	12.47	10.61	12.60	9.14	17.05	11.55	19.40	13.31	23.83	18.33	15.75	11.17	19.85
2005	12.62	15.33	27.54	12.57	9.61	11.85	9.93	15.21	11.17	18.87	14.02	22.72	18.41	16.10	11.58	19.50
2006	12.86	36.22	28.28	13.43	10.83	12.10	11.04	15.23	14.86	49.85	46.24	21.08	17.62	15.08	12.79	20.41
2007	16.03	17.82	28.56	14.45	11.47	12.77	9.94	14.92	18.30	18.71	16.65	17.02	19.37	33.04	12.42	16.53
2008	14.51	14.96	28.70	14.38	11.10	11.85	10.46	21.02	19.05	16.90	17.99	20.08	17.41	12.70	12.05	18.35
2009	14.76	17.36	27.61	13.38	12.71	12.28	11.36	23.29	22.52	19.10	13.76	10.11	17.46	15.14	12.08	11.55
2010	13.80	17.60	28.64	13.13	11.63	12.49	10.85	18.32	26.19	17.69	13.31	12.42	17.76	15.22	13.78	13.00
2011	13.75	18.40	25.63	10.31	13.53	14.11	15.11	15.96	25.42	17.15	13.14	17.73	18.33	16.96	14.25	16.81
2012	14.02	19.91	24.40	13.87	16.30	13.73	17.53	10.85	27.86	14.58	15.81	14.71	18.79	15.18	14.98	14.91
2013	13.53	21.71	24.54	14.24	12.11	12.53	14.77	10.74	27.50	17.39	18.52	11.48	17.76	13.26	15.91	12.53
2014	12.57	19.19	22.88	13.65	15.05	13.43	16.97	20.52	29.65	17.13	17.51	10.94	19.20	14.04	15.32	12.13
2015	12.60	18.27	26.89	14.46	14.20	14.87	14.81	18.34	32.59	19.12	17.49	7.26	19.28	16.19	16.18	9.69
2016	11.14	18.57	26.61	14.74	13.15	13.42	15.99	15.18	31.93	18.31	14.90	5.12	20.69	14.88	15.98	8.59
2017	13.58	19.25	28.60	15.10	19.27	13.94	15.27	16.79	27.81	20.06	15.39	6.61	19.50	14.65	16.04	10.07
2018	13.59	19.40	28.23	14.79	15.09	14.48	14.55	15.19	26.81	15.57	18.10	8.51	18.89	15.77	17.99	11.20
2019	14.06	20.40	29.40	15.04	21.04	13.74	14.13	15.42	29.02	21.43	18.01	7.86	20.43	17.95	17.66	10.90
2020	14.82	21.68	25.84	14.42	21.72	12.30	14.59	17.16	29.92	19.97	17.61	6.27	21.11	19.29	17.07	9.90

Source: Computed from IMF WEO

Statistical Appendix 6. Government Expenditure of ECOWAS Countries (US\$' Billion)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	0.55	0.59	0.26	1.91	0.10	1.48	0.51	0.09	0.12	0.57	0.30	16.78	0.84	0.15	0.24	24.50
2001	0.57	0.63	0.19	1.77	0.10	1.81	0.57	0.08	0.11	0.64	0.34	22.57	1.02	0.21	0.22	30.81
2002	0.64	0.70	0.25	2.25	0.08	1.62	0.59	0.07	0.12	0.78	0.40	18.21	1.09	0.25	0.19	27.23
2003	0.73	0.83	0.26	2.69	0.08	2.28	0.70	0.09	0.06	0.98	0.47	23.89	1.50	0.26	0.25	35.09
2004	0.83	1.10	0.33	3.10	0.12	2.99	0.66	0.13	0.11	1.19	0.60	23.91	1.83	0.26	0.32	37.47
2005	0.93	1.24	0.37	3.21	0.13	3.40	0.50	0.13	0.11	1.35	0.68	30.21	2.06	0.29	0.41	45.02
2006	0.91	1.43	0.41	3.56	0.15	4.45	0.55	0.13	0.12	1.53	0.72	27.45	2.49	0.31	0.47	44.68
2007	1.29	1.74	0.45	4.18	0.14	6.12	0.55	0.18	0.22	1.75	1.00	47.57	3.10	0.28	0.51	69.08
2008	1.42	1.76	0.54	4.91	0.18	6.83	0.70	0.21	0.37	1.86	1.23	47.49	3.53	0.41	0.57	72.00
2009	1.65	2.03	0.57	4.85	0.21	6.05	1.10	0.18	0.42	2.33	1.29	45.90	3.41	0.43	0.67	71.09
2010	1.34	2.19	0.65	4.98	0.22	8.61	1.41	0.17	0.49	2.17	1.12	61.23	3.50	0.52	0.72	89.33
2011	1.57	2.47	0.62	4.69	0.23	10.52	0.97	0.20	0.70	2.67	1.34	71.64	4.14	0.63	0.99	103.38
2012	1.59	2.85	0.60	5.98	0.27	12.49	1.46	0.14	0.82	1.93	1.57	68.40	4.06	0.77	1.04	103.97
2013	1.86	3.39	0.63	6.86	0.24	13.74	1.56	0.14	1.02	2.62	2.09	72.87	4.18	0.77	1.15	113.12
2014	1.89	2.92	0.57	7.43	0.23	11.38	1.77	0.26	1.01	2.88	2.56	76.01	4.57	0.88	1.26	115.64
2015	2.07	2.41	0.50	7.56	0.27	9.21	1.91	0.25	1.15	2.75	2.35	54.41	4.08	0.88	1.28	91.07
2016	1.82	2.78	0.49	8.51	0.29	11.17	1.39	0.26	1.16	3.12	2.00	39.45	4.56	0.90	1.39	79.29
2017	2.26	3.70	0.56	9.51	0.36	10.62	1.79	0.27	1.09	3.52	2.18	45.13	4.71	0.87	1.04	87.61
2018	2.36	3.85	0.61	10.28	0.35	14.05	1.90	0.30	1.04	3.47	2.71	54.07	5.22	0.87	1.32	102.41
2019	2.10	3.76	0.62	10.14	0.43	14.12	2.01	0.28	1.03	4.00	2.78	56.55	5.66	0.87	1.16	105.52
2020	2.99	4.44	0.61	12.48	0.45	19.35	2.81	0.37	0.99	4.49	3.20	52.00	6.73	1.04	1.74	113.71

Source: Computed from IMF WEO

Statistical Appendix 7. Government Expenditure/GDP of ECOWAS Countries (%)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	15.64	19.83	42.14	12.88	9.54	12.91	12.66	23.51	14.52	19.39	13.50	24.74	13.98	16.36	11.90	20.13
2001	15.45	19.66	31.06	11.44	9.68	14.78	15.00	19.08	12.04	18.34	13.73	30.86	15.71	19.10	10.85	23.71
2002	15.28	19.47	36.43	13.10	8.60	11.43	14.56	14.06	12.72	19.94	14.45	19.38	15.52	20.02	8.42	17.31
2003	13.69	17.60	29.04	12.68	9.30	13.02	14.77	17.03	8.97	20.81	14.04	23.21	17.07	18.82	8.88	19.43
2004	13.36	20.26	32.43	13.51	12.38	14.77	13.02	22.97	12.11	21.76	16.07	18.34	18.15	18.12	10.56	17.23
2005	14.14	20.22	33.55	13.60	12.95	13.86	11.01	20.17	11.67	21.64	15.55	17.81	18.67	18.04	13.25	16.99
2006	13.01	21.88	33.34	14.46	14.02	15.44	13.22	19.81	10.63	22.07	15.20	12.32	21.28	16.63	14.73	13.69
2007	15.81	22.84	29.50	14.84	11.19	18.04	8.67	23.69	16.03	21.49	17.40	18.14	22.17	12.95	14.33	17.94
2008	14.55	18.59	30.25	14.59	11.55	17.79	10.09	21.76	21.75	18.88	16.88	14.38	20.94	16.16	12.65	15.14
2009	17.00	21.52	33.42	14.39	14.35	17.66	16.25	20.61	23.92	22.81	17.69	15.43	21.12	17.48	14.80	16.24
2010	14.08	21.66	39.16	14.47	14.56	20.01	20.51	18.55	25.03	20.26	14.30	16.59	21.70	20.22	15.48	17.15
2011	14.73	20.44	33.28	13.20	16.54	19.60	16.04	17.31	29.81	20.56	15.33	17.30	23.25	21.50	18.90	17.62
2012	14.24	22.67	34.69	16.14	19.12	22.11	20.04	12.97	30.71	15.53	16.64	14.84	22.97	20.33	19.79	16.22
2013	14.89	25.26	33.84	15.86	17.67	21.71	18.64	12.42	33.56	19.76	20.45	14.15	22.09	15.65	19.76	15.79
2014	14.23	20.93	30.49	15.21	18.98	21.41	20.18	22.96	32.82	20.02	23.64	13.37	23.10	17.65	20.39	15.02
2015	18.15	20.36	31.45	16.50	19.58	18.95	21.70	21.50	37.10	20.94	24.24	11.05	22.95	20.74	22.72	13.46
2016	15.43	21.65	29.64	17.74	19.55	20.31	16.14	20.52	35.70	22.26	19.36	9.75	23.96	23.34	23.05	13.18
2017	17.79	26.13	31.57	18.43	24.25	18.00	17.33	18.11	32.53	22.92	19.50	12.01	22.46	23.43	16.25	14.87
2018	16.57	23.76	30.88	17.72	21.14	21.45	15.61	20.11	31.92	20.31	21.10	12.82	22.55	21.36	18.57	15.50
2019	14.60	23.86	31.24	17.33	23.58	21.08	14.59	19.34	33.64	23.11	21.57	12.62	24.29	21.04	16.04	15.28
2020	19.68	26.86	34.71	20.33	23.63	28.28	18.16	26.15	32.69	25.47	23.39	12.11	27.54	24.78	23.18	16.67

Source: Computed from IMF WEO

Statistical Appendix 8. Fiscal Deficit of ECOWAS Countries (US\$' Billion)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	-0.13	-0.09	-0.11	-0.12	-0.00	-0.49	-0.10	-0.01	-0.00	-0.08	-0.06	2.76	0.05	-0.03	-0.07	1.51
2001	-0.12	-0.11	-0.04	0.11	-0.03	-0.48	-0.13	-0.01	-0.01	-0.10	-0.06	-2.35	-0.09	-0.06	-0.01	-3.49
2002	-0.14	-0.16	-0.05	-0.11	0.00	-0.42	-0.14	-0.02	-0.01	-0.12	-0.06	1.26	0.01	-0.06	-0.01	-0.03
2003	-0.06	-0.08	-0.04	-0.27	-0.01	-0.37	-0.22	-0.03	0.00	-0.06	-0.07	-2.26	-0.05	-0.06	0.04	-3.55
2004	-0.04	-0.23	-0.04	-0.24	-0.02	-0.44	-0.20	-0.03	-0.01	-0.13	-0.10	7.16	0.02	-0.03	0.02	5.69
2005	-0.10	-0.30	-0.07	-0.24	-0.03	-0.49	-0.05	-0.03	-0.00	-0.17	-0.07	8.33	-0.03	-0.03	-0.05	6.66
2006	-0.01	0.94	-0.06	-0.25	-0.03	-0.96	-0.09	-0.03	0.05	1.92	1.47	19.52	-0.43	-0.03	-0.06	21.93
2007	0.02	-0.38	-0.01	-0.11	0.00	-1.79	0.08	-0.07	0.03	-0.23	-0.04	-2.94	-0.39	0.43	-0.07	-5.46
2008	-0.00	-0.34	-0.03	-0.07	-0.01	-2.28	0.03	-0.01	-0.05	-0.19	0.08	18.82	-0.59	-0.09	-0.03	15.24
2009	-0.22	-0.39	-0.10	-0.34	-0.02	-1.84	-0.33	0.02	-0.02	-0.38	-0.29	-15.82	-0.59	-0.06	-0.12	-20.51
2010	-0.03	-0.41	-0.17	-0.46	-0.05	-3.24	-0.66	-0.00	0.02	-0.27	-0.08	-15.39	-0.64	-0.13	-0.08	-21.58
2011	-0.10	-0.25	-0.14	-1.03	-0.04	-2.95	-0.06	-0.02	-0.10	-0.44	-0.19	1.78	-0.88	-0.13	-0.24	-4.79
2012	-0.02	-0.35	-0.18	-0.84	-0.04	-4.74	-0.18	-0.02	-0.08	-0.12	-0.08	-0.60	-0.74	-0.20	-0.25	-8.43
2013	-0.17	-0.48	-0.17	-0.70	-0.08	-5.81	-0.32	-0.02	-0.18	-0.31	-0.20	-13.75	-0.82	-0.12	-0.22	-23.35
2014	-0.22	-0.24	-0.14	-0.76	-0.05	-4.24	-0.28	-0.03	-0.10	-0.42	-0.66	-13.81	-0.77	-0.18	-0.31	-22.23
2015	-0.63	-0.25	-0.07	-0.93	-0.07	-1.98	-0.61	-0.04	-0.14	-0.24	-0.65	-18.66	-0.65	-0.19	-0.37	-25.49
2016	-0.51	-0.39	-0.05	-1.44	-0.09	-3.79	-0.01	-0.07	-0.12	-0.55	-0.46	-18.74	-0.62	-0.33	-0.43	-27.60
2017	-0.53	-0.97	-0.05	-1.72	-0.07	-2.39	-0.21	-0.02	-0.16	-0.44	-0.46	-20.29	-0.62	-0.33	-0.01	-28.29
2018	-0.42	-0.71	-0.05	-1.70	-0.10	-4.57	-0.13	-0.07	-0.17	-0.81	-0.39	-18.18	-0.85	-0.23	-0.04	-28.41
2019	-0.08	-0.54	-0.04	-1.34	-0.05	-4.92	-0.06	-0.06	-0.14	-0.29	-0.46	-21.33	-0.90	-0.13	0.12	-30.22
2020	-0.74	-0.86	-0.16	-3.63	-0.04	-10.93	-0.55	-0.13	-0.08	-0.97	-0.79	-25.08	-1.57	-0.23	-0.46	-46.21

Source: Computed from IMF WEO

Statistical Appendix 9. Fiscal Deficit/GDP of ECOWAS Countries (%)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	-3.69	-3.03	-17.84	-0.83	-0.09	-4.29	-2.46	-2.80	-0.08	-2.64	-2.82	4.07	0.78	-3.09	-3.44	1.24
2001	-3.27	-3.56	-6.47	0.70	-2.52	-3.90	-3.31	-1.83	-0.93	-2.80	-2.58	-3.22	-1.44	-5.13	-0.71	-2.68
2002	-3.33	-4.44	-7.84	-0.64	0.05	-2.93	-3.53	-3.71	-1.57	-3.09	-2.21	1.34	0.19	-4.82	-0.28	-0.02
2003	-1.08	-1.79	-4.50	-1.27	-1.73	-2.14	-4.68	-5.62	0.35	-1.18	-2.18	-2.20	-0.52	-4.47	1.44	-1.97
2004	-0.70	-4.20	-3.68	-1.04	-1.77	-2.17	-3.88	-5.92	-0.56	-2.36	-2.76	5.49	0.18	-2.37	0.61	2.62
2005	-1.52	-4.89	-6.01	-1.03	-3.34	-2.01	-1.08	-4.96	-0.50	-2.77	-1.53	4.91	-0.26	-1.94	-1.67	2.51
2006	-0.15	14.34	-5.06	-1.03	-3.19	-3.34	-2.18	-4.58	4.23	27.78	31.04	8.76	-3.66	-1.55	-1.94	6.72
2007	0.22	-5.02	-0.94	-0.39	0.28	-5.27	1.27	-8.77	2.27	-2.78	-0.75	-1.12	-2.80	20.09	-1.91	-1.42
2008	-0.04	-3.63	-1.55	-0.21	-0.45	-5.94	0.37	-0.74	-2.70	-1.98	1.11	5.70	-3.53	-3.46	-0.60	3.21
2009	-2.24	-4.16	-5.81	-1.01	-1.64	-5.38	-4.89	2.68	-1.40	-3.71	-3.93	-5.32	-3.66	-2.34	-2.72	-4.68
2010	-0.28	-4.06	-10.52	-1.34	-2.93	-7.52	-9.66	-0.23	1.16	-2.57	-0.99	-4.17	-3.94	-5.00	-1.70	-4.14
2011	-0.98	-2.04	-7.65	-2.89	-3.01	-5.49	-0.93	-1.35	-4.39	-3.41	-2.19	0.43	-4.92	-4.54	-4.65	-0.82
2012	-0.22	-2.76	-10.29	-2.27	-2.82	-8.38	-2.51	-2.12	-2.85	-0.95	-0.83	-0.13	-4.18	-5.15	-4.81	-1.32
2013	-1.36	-3.55	-9.30	-1.62	-5.56	-9.18	-3.87	-1.68	-6.06	-2.37	-1.93	-2.67	-4.33	-2.39	-3.85	-3.26
2014	-1.66	-1.74	-7.61	-1.56	-3.93	-7.98	-3.21	-2.44	-3.17	-2.89	-6.13	-2.43	-3.90	-3.61	-5.07	-2.89
2015	-5.55	-2.09	-4.56	-2.04	-5.38	-4.08	-6.89	-3.16	-4.51	-1.82	-6.75	-3.79	-3.67	-4.55	-6.54	-3.77
2016	-4.29	-3.08	-3.03	-3.00	-6.40	-6.89	-0.15	-5.34	-3.77	-3.95	-4.46	-4.63	-3.27	-8.46	-7.07	-4.59
2017	-4.21	-6.88	-2.97	-3.33	-4.98	-4.06	-2.06	-1.32	-4.72	-2.86	-4.11	-5.40	-2.96	-8.78	-0.21	-4.80
2018	-2.98	-4.36	-2.65	-2.93	-6.05	-6.97	-1.06	-4.92	-5.11	-4.74	-3.00	-4.31	-3.66	-5.59	-0.58	-4.30
2019	-0.54	-3.46	-1.84	-2.29	-2.54	-7.34	-0.46	-3.92	-4.62	-1.68	-3.56	-4.76	-3.86	-3.09	1.62	-4.37
2020	-4.86	-5.18	-8.87	-5.91	-1.91	-15.98	-3.57	-8.99	-2.77	-5.50	-5.78	-5.84	-6.43	-5.49	-6.11	-6.78

Source: Computed from IMF WEO

Statistical Appendix 10. Total Public Debt of ECOWAS Countries (US\$' Billion)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	1.39	-	0.50	10.99	0.74	9.20	3.70	0.85	3.82	2.68	1.84	39.07	3.46	-	-	-
2001	1.39	-	0.49	11.02	0.75	7.58	3.44	0.84	3.99	2.69	1.81	38.83	3.46	1.96	-	-
2002	1.29	1.57	0.56	10.80	0.83	8.23	3.32	0.92	4.14	1.67	1.91	40.66	3.64	1.99	-	-
2003	1.25	1.88	0.72	11.96	0.77	9.26	3.88	1.01	4.05	2.08	2.05	43.32	3.76	2.21	-	-
2004	1.33	2.22	0.86	13.00	0.78	8.36	4.39	1.18	4.59	2.31	2.06	46.26	3.83	2.18	-	-
2005	1.77	2.41	0.93	13.74	0.85	8.38	4.41	1.30	4.37	2.91	2.16	32.13	3.98	2.11	1.94	83.39
2006	0.59	1.32	0.96	14.15	0.92	5.35	3.98	1.21	4.73	1.25	0.87	20.95	2.05	1.94	2.15	62.42
2007	1.17	1.74	0.98	15.07	0.49	7.69	3.84	1.23	4.66	1.51	1.02	21.28	2.65	0.91	2.72	66.96
2008	1.79	2.18	1.03	17.23	0.62	9.58	4.07	1.42	3.73	1.98	1.03	24.03	3.21	1.06	3.08	76.04
2009	1.82	2.44	1.09	15.66	0.56	9.23	4.14	1.32	2.21	2.24	1.17	25.63	4.38	1.18	2.72	75.79
2010	2.00	2.81	1.21	15.70	0.66	14.88	4.72	0.58	0.47	2.71	1.18	34.67	4.60	1.21	1.59	88.99
2011	2.34	2.96	1.46	17.77	0.69	16.86	3.50	0.53	0.50	3.11	1.29	72.18	5.86	1.24	1.83	132.12
2012	2.18	3.17	1.59	12.07	0.70	20.11	1.99	0.50	0.52	3.16	1.71	81.02	6.09	1.38	1.86	138.05
2013	2.32	3.48	1.90	13.56	0.80	27.35	2.84	0.56	0.60	3.49	2.00	94.18	6.97	1.50	2.47	164.02
2014	2.96	3.70	2.16	15.84	0.87	27.20	3.08	0.65	0.74	3.91	2.39	99.72	8.39	1.76	2.87	176.24
2015	3.52	3.71	2.02	15.67	0.94	26.63	3.69	0.62	0.81	4.02	2.89	100.10	7.91	1.94	3.01	177.48
2016	4.25	4.27	2.13	17.09	1.19	31.40	3.65	0.71	0.93	5.04	3.40	94.73	9.05	2.34	3.64	183.82
2017	5.03	4.74	2.25	19.01	1.30	34.40	4.18	0.73	1.12	5.45	4.08	95.21	12.83	2.57	3.65	196.55
2018	5.86	6.10	2.47	23.26	1.41	41.43	4.66	0.89	1.30	6.17	4.74	116.76	14.69	2.82	4.08	236.64
2019	5.93	6.72	2.48	24.13	1.46	42.81	5.08	0.96	1.70	7.01	5.14	130.70	15.10	2.95	3.87	256.04
2020	6.90	7.33	2.44	28.07	1.45	53.37	6.40	1.12	1.87	7.79	6.06	150.53	16.09	3.02	4.32	296.76

Source: Computed from IMF WEO

Statistical Appendix 11. External Public Debt of ECOWAS Countries (US\$' Billion)																
	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	1.24	1.23	0.31	9.06	0.44	5.58	3.08	0.82	1.10	2.67	1.49	30.04	3.21	1.01	1.23	62.52
2001	1.30	1.32	0.34	8.59	0.44	5.78	2.71	0.78	1.08	2.59	1.44	29.24	3.17	1.06	1.20	61.05
2002	1.45	1.40	0.38	9.10	0.51	6.30	2.58	0.84	1.13	2.46	1.64	28.08	3.51	1.20	1.34	61.93
2003	1.36	1.59	0.43	9.70	0.57	7.00	2.50	0.92	1.19	2.85	1.92	31.30	3.92	1.36	1.50	68.10
2004	1.52	1.78	0.45	11.09	0.62	6.12	2.67	0.98	1.24	3.07	1.78	32.55	3.52	1.44	1.60	70.42
2005	1.45	1.86	0.46	9.97	0.62	6.06	2.89	0.89	1.18	3.04	1.75	20.25	3.50	1.57	1.44	56.92
2006	0.60	0.99	0.51	10.83	0.67	2.26	3.14	0.91	1.20	1.54	0.65	3.83	1.64	1.46	1.54	31.80
2007	0.77	1.26	0.56	11.66	0.66	2.81	3.06	0.94	1.03	1.81	0.75	3.61	1.99	0.48	1.64	33.04
2008	0.87	1.51	0.61	10.64	0.37	3.33	3.21	0.95	0.87	1.98	0.78	3.90	2.37	0.54	1.47	33.40
2009	0.98	1.72	0.70	12.73	0.41	4.27	3.38	0.98	0.67	2.00	0.96	4.22	2.95	0.60	1.48	38.06
2010	1.11	1.93	0.86	9.41	0.43	5.34	3.24	0.99	0.18	2.27	1.21	4.69	3.15	0.66	1.00	36.48
2011	1.19	2.06	1.02	9.90	0.42	6.62	3.24	0.24	0.19	2.50	1.91	5.94	3.61	0.74	0.37	39.95
2012	1.31	2.22	1.23	5.05	0.43	8.13	3.13	0.23	0.21	2.79	1.54	6.68	4.18	0.84	0.45	38.42
2013	1.61	2.26	1.48	6.37	0.44	11.24	3.16	0.23	0.23	3.10	1.75	8.29	4.51	0.90	0.59	46.17
2014	1.77	2.26	1.54	6.62	0.42	13.39	1.15	0.24	0.30	3.14	1.74	9.67	4.96	0.91	0.72	48.83
2015	1.91	2.34	1.54	8.51	0.43	15.32	1.40	0.26	0.44	3.35	1.97	10.68	5.33	0.95	0.84	55.28
2016	2.03	2.53	1.54	8.37	0.43	16.74	1.49	0.26	0.53	3.42	2.24	11.32	6.15	0.97	1.17	59.19
2017	2.52	2.84	1.78	10.45	0.56	17.29	1.59	0.35	0.66	3.87	2.69	18.82	8.37	1.03	1.35	74.14
2018	3.31	3.01	1.75	12.69	0.59	17.94	1.62	0.42	0.78	4.12	2.81	25.23	11.21	1.05	1.37	87.91
2019	3.61	3.34	1.81	15.10	0.62	20.49	1.68	0.51	0.91	4.64	3.17	27.53	12.84	1.12	1.56	98.92
2020																

Source: Computed from World Bank Database

Statistical Appendix 12. Domestic Public Debt of ECOWAS Countries (US\$' Billion)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	0.15	-	0.19	1.93	0.30	3.62	0.62	0.03	2.72	0.01	0.35	9.03	0.25	-	-	-
2001	0.09	-	0.15	2.43	0.31	1.80	0.73	0.06	2.91	0.10	0.37	9.59	0.29	0.90	-	-
2002	-	0.17	0.18	1.70	0.32	1.93	0.74	0.08	3.01	-	0.27	12.58	0.13	0.79	-	-
2003	-	0.29	0.29	2.26	0.20	2.26	1.38	0.09	2.86	-	0.13	12.02	-0.16	0.85	-	-
2004	-	0.44	0.41	1.91	0.16	2.24	1.72	0.20	3.35	-	0.28	13.71	0.31	0.74	-	-
2005	0.32	0.55	0.47	3.77	0.23	2.32	1.52	0.41	3.19	-	0.41	11.88	0.48	0.54	0.50	26.47
2006	-	0.33	0.45	3.32	0.25	3.09	0.84	0.30	3.53	-	0.22	17.12	0.41	0.48	0.61	30.62
2007	0.40	0.48	0.42	3.41	-	4.88	0.78	0.29	3.63	-	0.27	17.67	0.66	0.43	1.08	33.92
2008	0.92	0.67	0.42	6.59	0.25	6.25	0.86	0.47	2.86	-	0.25	20.13	0.84	0.52	1.61	42.64
2009	0.84	0.72	0.39	2.93	0.15	4.96	0.76	0.34	1.54	0.24	0.21	21.41	1.43	0.58	1.24	37.73
2010	0.89	0.88	0.35	6.29	0.23	9.54	1.48	-	0.29	0.44	-	29.98	1.45	0.55	0.59	52.51
2011	1.15	0.90	0.44	7.87	0.27	10.24	0.26	0.29	0.31	0.61	-	66.24	2.25	0.50	1.46	92.17
2012	0.87	0.95	0.36	7.02	0.27	11.98	-	0.27	0.31	0.37	0.17	74.34	1.91	0.54	1.41	99.63
2013	0.71	1.22	0.42	7.19	0.36	16.11	-	0.33	0.37	0.39	0.25	85.89	2.46	0.60	1.88	117.85
2014	1.19	1.44	0.62	9.22	0.45	13.81	1.93	0.41	0.44	0.77	0.65	90.05	3.43	0.85	2.15	127.41
2015	1.61	1.37	0.48	7.16	0.51	11.31	2.29	0.36	0.37	0.67	0.92	89.42	2.58	0.99	2.17	122.20
2016	2.22	1.74	0.59	8.72	0.76	14.66	2.16	0.45	0.40	1.62	1.16	83.41	2.90	1.37	2.47	124.63
2017	2.51	1.90	0.47	8.56	0.74	17.11	2.59	0.38	0.46	1.58	1.39	76.39	4.46	1.54	2.30	122.41
2018	2.55	3.09	0.72	10.57	0.82	23.49	3.04	0.47	0.52	2.05	1.93	91.53	3.48	1.77	2.71	148.73
2019	2.32	3.38	0.67	9.03	0.84	22.32	3.40	0.45	0.79	2.37	1.97	103.17	2.26	1.83	2.31	157.12
2020																

Source: Computed from IMF WEO and World Bank Database

Statistical Appendix 13. Total Public Debt to GDP Ratio of ECOWAS Countries (%)																
	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	39.59	41.23	82.64	73.99	73.25	80.19	91.49	217.14	441.96	90.52	82.10	57.60	57.51	92.10	68.89	-
2001	37.99	39.88	79.91	71.17	75.23	61.96	90.44	204.44	439.21	77.50	73.98	53.10	53.21	180.66	70.78	-
2002	30.77	43.29	82.55	62.98	93.88	57.98	82.61	197.47	437.74	42.64	69.04	43.27	51.99	158.82	68.10	-
2003	23.38	39.67	81.36	56.38	91.69	52.95	81.57	183.38	566.62	44.15	60.60	42.09	42.88	160.35	54.26	-
2004	21.51	40.74	83.75	56.72	81.30	41.29	86.87	201.96	513.07	42.43	55.05	35.49	38.00	151.60	43.04	-
2005	26.98	39.21	85.34	58.16	82.60	34.19	97.92	203.65	461.20	46.63	49.46	18.94	36.13	130.90	63.08	26.47
2006	8.37	20.09	77.73	57.47	87.34	18.59	95.22	190.41	425.79	18.07	18.28	9.40	17.49	103.23	67.74	30.62
2007	14.29	22.82	64.98	53.53	38.02	22.64	60.80	163.97	346.33	18.54	17.83	8.12	18.96	42.17	75.86	33.92
2008	18.31	23.03	57.60	51.24	39.53	24.95	58.46	148.82	222.15	20.17	14.17	7.28	19.07	42.37	68.74	42.64
2009	18.70	25.90	64.10	46.50	38.90	27.00	61.30	148.30	124.80	21.90	15.90	8.60	27.10	48.10	59.70	37.73
2010	21.00	27.80	72.50	45.60	42.90	34.60	68.90	61.70	24.00	25.30	15.10	9.40	28.50	46.80	34.30	52.51
2011	21.90	24.50	78.50	50.00	49.20	31.40	58.10	46.10	21.30	24.00	14.70	17.40	32.90	42.10	35.10	92.17
2012	19.50	25.20	91.10	32.60	49.50	35.60	27.20	47.30	19.40	25.40	18.10	17.60	34.50	36.40	35.60	99.63
2013	18.50	25.90	102.50	31.40	58.20	43.20	34.00	50.80	19.70	26.40	19.60	18.30	36.90	30.60	42.40	117.85
2014	22.30	26.60	115.90	32.40	71.10	51.20	35.10	57.50	23.90	27.20	22.10	17.50	42.40	35.10	46.50	127.41
2015	30.90	31.40	126.60	34.20	69.40	54.80	41.90	54.10	26.40	30.70	29.90	20.30	44.50	45.70	53.40	122.20
2016	35.90	33.30	128.40	35.60	80.90	57.10	42.50	57.00	28.50	35.90	32.80	23.40	47.50	60.70	60.30	124.63
2017	39.60	33.50	127.20	36.90	87.00	58.30	40.50	50.00	33.70	35.50	36.50	25.30	61.10	69.20	57.00	122.41
2018	41.10	37.70	125.60	40.10	84.60	63.20	38.30	59.20	39.70	36.10	36.90	27.70	63.50	69.10	57.30	148.73
2019	41.20	42.70	125.00	41.20	80.10	63.90	36.80	66.90	55.40	40.50	39.80	29.20	64.80	71.70	53.60	157.12
2020	45.40	44.30	139.00	45.70	75.80	78.00	41.40	78.10	61.80	44.10	44.20	35.10	65.80	71.90	57.60	

Source: Computed from IMF WEO and World Bank Database

Statistical Appendix 14. External Public Debt to GDP Ratio of ECOWAS Countries (%)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	39.86	48.63	59.29	112.53	62.60	135.33	100.97	256.32	324.52	100.92	76.97	48.26	61.67	196.32	97.16	-
2001	40.14	47.26	61.39	103.73	71.93	129.09	101.17	230.02	335.10	83.05	66.70	45.59	59.94	115.25	96.07	-
2002	38.53	42.92	62.47	94.39	100.95	123.90	105.61	234.07	355.32	71.78	66.42	37.73	61.00	112.37	94.30	-
2003	27.84	36.83	54.23	76.14	132.10	108.76	90.88	223.15	485.67	65.40	63.34	39.19	50.65	113.71	82.04	-
2004	26.22	35.43	50.22	79.47	70.80	81.52	92.79	209.52	430.60	60.42	52.55	32.67	38.75	116.21	81.49	-
2005	23.76	32.55	49.12	70.27	64.91	68.26	113.92	174.21	416.29	51.15	44.75	16.52	35.03	109.34	73.97	26.47
2006	9.42	17.28	47.31	76.58	68.09	18.10	81.64	176.81	374.60	23.22	15.95	5.49	16.34	81.09	76.38	30.62
2007	11.09	19.22	38.35	70.62	54.71	17.31	57.58	156.73	275.16	22.71	19.01	5.62	18.10	25.53	73.98	33.92
2008	10.25	16.76	34.99	53.31	25.73	16.45	49.88	127.20	183.13	20.98	13.08	4.89	16.82	25.30	49.51	42.64
2009	13.69	20.30	42.33	61.11	36.42	25.38	52.06	140.22	104.65	21.69	17.07	6.61	22.90	34.92	51.32	37.73
2010	16.76	21.28	53.15	46.99	35.51	25.99	50.57	132.44	20.96	23.03	19.62	5.21	24.09	36.12	37.42	52.51
2011	17.45	18.99	55.80	50.33	35.91	26.47	50.47	27.34	18.70	22.53	25.31	5.19	24.16	35.70	16.24	92.17
2012	15.24	20.09	71.68	35.62	38.29	29.06	19.34	30.04	17.90	24.63	19.10	4.71	27.43	35.09	19.46	99.63
2013	16.17	19.12	80.66	31.51	40.09	25.82	21.07	28.54	17.31	26.02	19.54	4.81	27.53	28.39	21.57	117.85
2014	15.47	18.29	83.37	27.73	42.64	33.26	21.61	29.26	21.68	24.07	18.52	5.24	28.45	28.49	22.56	127.41
2015	19.24	22.24	97.08	24.86	38.80	41.42	23.29	33.93	26.41	28.17	23.01	6.66	33.22	36.82	26.53	122.20
2016	19.27	22.02	93.31	23.89	35.50	38.45	24.38	28.52	29.06	27.01	24.35	8.50	35.13	43.88	31.21	124.63
2017	22.18	22.18	101.14	26.07	44.41	37.84	21.59	32.36	34.16	27.95	27.21	11.50	42.38	46.38	38.26	122.41
2018	25.31	20.46	89.86	26.98	41.68	35.59	21.97	37.23	37.64	27.39	24.81	12.70	51.18	42.48	35.68	148.73
2019	27.09	22.90	91.90	32.77	39.32	40.25	23.31	47.40	44.21	30.05	27.92	12.24	57.60	43.87	40.16	157.12
2020	27.00	25.50	116.80	34.90	42.50	35.70	24.60	28.70	40.50	28.10	30.30	8.40	49.10	44.40	23.10	

Source: Computed from IMF WEO and World Bank Database

Statistical Appendix 15. External Public Debt to Export Ratio of ECOWAS Countries (%)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	193.46	549.85	219.53	275.94	242.64	277.30	411.71	1178.17	1034.27	448.94	536.74	133.96	220.84	1082.57	344.34	-
2001	202.02	522.56	205.94	254.87	329.65	285.39	354.01	1085.28	986.36	315.65	495.71	161.37	208.64	1470.02	331.76	-
2002	195.33	484.12	191.94	198.86	371.71	290.74	398.85	1312.53	838.87	255.56	557.28	162.33	213.65	1314.39	311.50	-
2003	149.33	399.43	172.90	181.75	424.85	267.36	350.13	1194.60	1346.92	253.80	477.20	146.50	190.24	816.79	250.10	-
2004	141.64	325.62	156.91	171.25	343.79	207.40	376.78	1135.01	636.78	255.18	368.52	161.31	142.80	705.56	244.80	-
2005	128.53	330.72	130.04	140.83	326.12	187.29	327.49	1078.73	704.49	222.50	310.54	78.54	129.67	622.19	208.02	26.47
2006	52.18	157.75	104.83	146.24	323.72	71.85	342.66	1376.11	454.36	81.69	115.01	18.60	63.78	480.81	215.93	30.62
2007	50.32	185.73	106.47	149.53	303.36	70.59	244.49	776.26	367.06	94.05	145.49	26.46	90.05	163.62	216.28	33.92
2008	46.31	165.16	94.84	113.15	177.76	65.73	230.48	640.78	532.47	83.42	99.25	19.04	81.51	187.12	144.30	42.64
2009	68.68	147.22	136.20	120.17	231.32	86.63	231.24	743.92	685.59	99.89	113.98	35.47	119.38	258.66	144.34	37.73
2010	72.66	103.71	162.69	92.80	242.09	88.15	166.68	888.51	109.53	100.84	121.22	20.29	121.46	215.05	98.89	52.51
2011	83.71	72.49	157.11	93.51	213.00	71.67	154.80	106.51	85.75	99.13	165.51	16.40	114.05	219.45	37.23	92.17
2012	63.76	75.55	177.29	72.81	192.98	72.01	58.36	194.12	54.40	88.43	118.61	14.94	123.25	106.65	43.04	99.63
2013	58.65	70.62	199.21	75.88	211.22	99.98	79.61	156.34	50.05	104.33	115.07	26.66	124.03	99.16	46.41	117.85
2014	49.23	67.92	206.57	70.59	195.25	115.39	80.96	144.79	76.24	106.73	116.14	28.41	130.62	92.63	56.79	127.41
2015	77.84	85.20	216.18	90.86	198.00	129.61	108.35	123.19	135.67	117.17	168.87	62.42	146.49	190.19	74.02	122.20
2016	69.80	84.95	210.97	97.12	223.14	120.61	83.01	107.61	135.70	115.23	204.97	92.21	162.95	176.13	88.71	124.63
2017	81.52	83.85	220.24	104.61	264.50	107.33	48.33	116.51	140.66	125.81	212.29	87.27	193.27	178.05	115.55	122.41
2018	92.74	72.73	182.52	119.18	191.82	100.92	58.43	146.93	144.70	111.68	219.79	81.97	222.38	243.21	111.88	148.73
2019	91.44	90.28	180.67	137.82	190.50	111.87	76.19	201.71	153.90	128.83	253.50	86.04	252.71	274.35	133.60	157.12
2020	145.95	92.39	391.95	164.62	351.24	110.87	77.60	199.31	177.63	103.69	325.81	89.36	236.06	277.50	118.46	

Source: Computed from IMF WEO and World Bank Database

Statistical Appendix 16. Debt Services to Export Ratio of ECOWAS Countries (%)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	35.74	65.66	26.78	82.42	34.27	133.38	77.74	22.69	2.20	59.19	32.62	29.93	42.62	206.22	23.09	-
2001	22.92	48.47	19.68	46.84	38.09	89.21	50.00	19.82	1.52	37.31	34.57	49.56	38.39	312.27	26.75	-
2002	22.43	47.42	26.50	43.90	44.15	53.29	49.20	16.14	1.27	29.83	29.59	24.85	34.29	45.81	8.84	-
2003	10.56	30.88	14.11	22.41	81.19	88.09	39.88	25.85	0.74	22.96	26.49	21.52	26.72	30.67	7.50	-
2004	9.06	23.81	15.32	12.37	63.70	40.47	65.97	27.72	0.60	25.10	21.78	19.80	29.07	30.65	7.49	-
2005	9.98	20.13	19.25	8.89	44.15	39.67	78.43	18.06	0.88	21.79	17.81	64.49	16.08	19.72	6.48	26.47
2006	8.28	17.04	12.21	7.17	42.96	14.72	56.14	36.08	0.58	13.32	72.00	21.41	14.17	22.77	8.19	30.62
2007	4.80	13.41	9.03	10.15	40.19	8.93	28.34	18.94	0.81	8.98	10.08	3.59	13.67	8.97	3.86	33.92
2008	2.93	9.53	7.29	18.14	18.40	7.17	23.74	12.13	0.72	6.85	6.39	1.47	9.57	4.56	33.33	42.64
2009	5.36	7.59	9.87	18.85	24.05	8.77	22.62	17.21	0.72	7.66	7.37	3.24	12.54	6.66	9.16	37.73
2010	4.54	5.53	10.85	12.39	30.15	7.68	12.55	42.25	3.20	6.36	4.50	2.79	19.70	7.59	6.04	52.51
2011	4.81	4.53	9.09	10.63	33.52	5.28	24.27	4.98	1.13	5.04	5.12	0.81	18.61	10.50	1.85	92.17
2012	4.81	4.59	8.52	11.60	27.79	7.21	17.54	10.46	0.92	3.94	5.95	1.70	16.95	4.11	2.85	99.63
2013	5.20	4.68	8.37	16.20	34.37	9.87	9.62	2.28	1.13	7.17	8.71	0.95	18.94	4.74	5.42	117.85
2014	4.20	5.32	9.25	14.60	61.71	14.26	8.38	6.43	3.76	6.91	13.32	8.01	16.95	5.71	7.03	127.41
2015	7.44	9.67	11.50	15.23	47.76	19.12	13.66	5.99	2.03	9.15	15.78	6.22	22.85	17.15	9.98	122.20
2016	8.36	10.12	12.01	31.18	53.82	22.28	8.98	6.48	3.32	10.19	20.86	16.06	23.52	12.94	14.46	124.63
2017	8.06	10.15	12.58	40.05	53.56	23.46	5.78	8.29	4.11	111.50	20.78	18.80	33.66	19.65	16.80	122.41
2018	15.50	8.51	11.24	28.05	39.36	27.81	7.40	9.93	9.45	15.40	18.37	22.72	35.60	26.23	17.21	148.73
2019	33.95	11.19	12.67	51.60	37.67	20.25	6.75	16.00	4.53	13.00	25.13	19.37	43.12	33.33	17.58	157.12
2020	14.66	3.14	6.69	12.46	21.03	3.39	9.52	4.44	4.69	16.40	9.84	1.44	8.31	7.54	7.75	

Source: Computed from IMF WEO and World Bank Database

Statistical Appendix 17. Debt Services to Revenue Ratio of ECOWAS Countries (%)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo	ECOWAS
2000	56.65	36.40	24.37	198.15	45.47	417.43	140.00	38.00	5.05	120.68	41.29	73.01	60.50	60.50	32.42	-
2001	35.03	27.82	19.64	127.99	42.74	222.87	104.87	32.34	3.79	88.88	41.06	72.99	56.07	56.07	39.42	-
2002	34.03	40.42	30.59	136.32	61.66	126.10	95.54	22.16	3.93	68.53	31.13	72.68	49.77	49.77	13.65	-
2003	15.15	25.92	15.89	67.19	129.83	181.29	75.97	37.17	1.95	38.84	31.04	72.83	36.17	36.17	12.65	-
2004	12.90	21.23	18.15	37.91	67.47	67.09	119.21	39.39	2.97	37.71	27.41	72.88	40.11	40.11	18.32	-
2005	14.19	17.51	26.34	29.50	45.20	61.04	200.18	22.45	3.81	32.82	22.66	72.84	22.09	22.09	16.97	26.47
2006	11.50	16.06	18.54	23.64	46.47	27.27	98.14	35.69	3.50	26.64	88.15	65.37	18.46	18.46	19.41	30.62
2007	8.13	11.35	11.86	27.82	37.28	13.99	48.96	29.43	3.23	14.42	11.63	59.78	13.97	13.97	8.28	33.92
2008	4.99	8.42	9.20	50.77	13.70	11.44	37.70	18.53	3.09	12.44	7.43	56.73	10.04	10.04	76.85	42.64
2009	8.22	8.63	11.82	59.52	19.48	16.67	37.37	24.98	3.32	11.04	9.75	63.83	12.23	12.23	20.44	37.73
2010	8.06	8.33	13.44	39.72	22.75	13.57	27.95	48.47	4.48	9.52	6.42	68.60	19.87	19.87	13.05	52.51
2011	7.71	8.50	12.14	45.75	29.06	10.07	58.06	9.84	1.80	8.73	6.91	82.90	20.04	20.04	4.65	92.17
2012	8.85	7.85	12.45	34.58	28.36	15.05	42.65	12.45	2.21	7.96	8.46	66.37	19.18	19.18	7.13	99.63
2013	11.04	7.53	12.75	42.01	33.54	17.80	18.69	3.21	2.85	12.15	13.06	67.69	21.37	21.37	13.24	117.85
2014	10.15	9.26	15.18	38.99	69.31	25.09	16.42	9.99	7.83	11.82	18.75	69.88	18.77	18.77	13.99	127.41
2015	14.14	16.86	17.73	34.25	48.14	22.47	21.55	12.71	3.84	14.80	18.98	71.09	26.99	26.99	17.50	122.20
2016	17.75	16.21	17.07	64.77	44.04	49.14	19.35	13.22	5.21	14.89	21.88	63.43	24.36	24.36	25.58	124.63
2017	25.50	22.60	48.70	39.10	151.10	100.80	6.10	59.00	2.60	14.60	29.90	61.60	34.20	34.59	61.40	122.41
2018	52.50	27.80	53.50	32.50	154.70	68.40	12.20	44.40	2.60	25.94	46.20	54.30	42.90	27.30	62.10	148.73
2019	47.80	31.60	29.70	38.10	111.30	91.70	20.50	69.60	3.30	23.37	60.10	54.30	29.00	23.40	57.30	157.12
2020	54.40	37.30	35.60	37.00	120.10	106.80	15.40	117.80	9.60	4.58	76.70	82.90	35.00	29.40	65.00	

Source: Computed from IMF WEO and World Bank Database

Statistical Appendix 18. Debt Sustainability Index of ECOWAS Countries (Index Points)

	Benin	Burkina Faso	Cabo Verde	Côte d'Ivoire	The Gambia	Ghana	Guinea	Guinea-Bissau	Liberia	Mali	Niger	Nigeria	Senegal	Sierra Leone	Togo
1990	77.44	38.99	32.33	119.03	478.27	127.01	220.32	580.56	346.64	128.02	118.33	49.43	54.76	245.99	178.22
1991	64.50	90.24	41.25	130.50	91.14	92.18	187.22	1360.86	265.21	94.01	155.82	49.32	59.05	250.63	112.63
1992	82.83	175.53	47.88	109.84	88.40	111.61	153.63	795.63	220.83	97.35	64.85	57.64	28.23	156.29	65.57
1993	51.72	192.51	17.79	108.68	74.80	101.20	144.62	418.32	205.33	118.01	340.26	107.55	23.40	196.65	95.53
1994	140.89	348.19	50.97	174.03	101.37	124.63	165.60	641.18	204.59	227.52	324.73	77.92	112.08	535.39	152.69
1995	94.67	240.42	38.80	89.12	68.33	101.23	215.44	1144.75	144.68	140.05	184.22	62.53	84.19	413.49	106.06
1996	76.70	237.91	27.28	118.48	60.25	94.86	164.73	852.31	99.98	190.70	167.11	64.17	86.08	382.41	162.92
1997	106.62	293.66	56.10	107.72	70.46	117.63	211.21	633.52	108.95	154.01	235.23	62.49	94.73	405.75	166.21
1998	107.47	219.35	86.05	109.01	58.57	122.89	231.05	727.45	132.90	140.81	180.72	61.25	115.88	564.06	94.13
1999	55.07	201.80	84.34	107.02	59.15	128.37	214.89	675.14	132.56	138.57	104.55	59.86	84.72	438.60	108.98
2000	85.84	212.84	83.15	118.90	88.30	256.63	335.89	221.06	627.58	238.99	151.18	67.72	113.13	547.11	100.28
2001	54.95	153.22	65.59	83.77	109.79	158.63	267.62	179.46	483.73	170.86	137.98	67.93	101.03	581.50	119.05
2002	49.03	215.38	96.69	80.28	173.34	109.48	254.83	160.56	484.74	116.99	112.17	63.09	89.08	413.69	46.86
2003	12.99	113.34	48.94	45.28	312.25	132.69	213.60	185.85	366.97	71.31	97.99	62.90	55.34	258.04	30.99
2004	8.82	80.41	53.75	32.61	166.22	64.27	293.13	201.34	383.66	68.43	69.66	61.15	54.13	283.40	32.09
2005	11.36	54.21	74.51	27.73	117.93	55.56	423.51	138.41	470.20	59.15	44.14	56.63	15.76	98.40	34.08
2006	10.65	22.56	48.78	25.64	122.99	20.03	256.16	180.36	395.22	26.79	210.80	31.82	12.68	83.17	45.19
2007	11.98	39.45	25.76	25.50	82.12	11.66	141.29	107.80	330.15	7.22	32.10	17.00	12.40	87.37	53.71
2008	15.46	56.31	16.97	31.84	20.26	11.11	118.38	83.64	291.11	3.69	53.09	9.00	21.74	120.73	182.79
2009	8.79	47.72	27.41	34.11	26.73	16.65	119.45	73.92	297.31	2.24	42.54	27.37	11.31	90.00	31.73
2010	9.56	51.50	37.94	22.99	31.77	18.19	99.57	146.22	377.55	5.75	50.71	38.87	8.94	24.08	12.74
2011	10.19	59.53	34.88	27.33	33.01	14.37	142.33	113.50	69.61	6.70	43.13	75.70	10.75	25.91	42.59
2012	8.61	60.26	42.54	16.69	25.25	18.84	88.38	102.31	112.03	8.62	43.63	34.90	8.09	42.46	34.74
2013	5.41	61.83	48.98	20.52	45.86	24.14	52.69	131.66	182.18	4.70	29.98	38.49	13.48	30.69	13.43
2014	9.56	52.44	59.35	18.16	118.49	33.00	49.63	103.95	734.64	5.15	14.82	44.16	10.87	49.71	7.58
2015	8.38	19.52	72.75	15.99	78.57	36.06	65.26	95.53	293.14	12.24	13.83	48.42	30.43	68.28	19.03
2016	16.18	19.65	70.69	29.65	88.23	47.94	58.66	94.13	454.19	14.96	17.28	31.39	29.18	44.27	43.54
2017	27.52	52.21	150.59	21.59	241.74	70.10	33.79	182.13	197.16	45.72	39.01	27.63	58.87	142.41	122.19
2018	64.54	89.54	155.95	19.17	219.57	57.85	43.11	121.77	284.35	32.54	80.10	22.36	79.88	76.42	123.44
2019	66.64	112.45	98.78	26.53	158.21	68.45	55.69	204.41	282.89	31.55	121.71	22.54	64.45	44.15	112.83
2020	72.18	149.67	133.22	23.12	192.94	76.98	52.41	370.08	938.43	24.87	167.72	81.17	62.22	89.81	126.15

Source: NESG Research

Meet the Team



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Chairman, DMR



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Mr. Yinka Iyinolakan
Communications Specialist, DMR



Mr. Sodik Olofin
Researcher, DMR

Benin

Republic of Benin is one of the most debt-distressed countries in ECOWAS, with a debt index higher than 50% of its solvency threshold.

Burkina Faso

The World Bank projects Burkina Faso is at moderate risk of debt distress, with a total public debt portfolio of US\$6.4 billion in 2019.

Cape Verde

Cape Verde's public debt to GDP ratio is projected to hit 137.6% this year, almost double the IMF's 70% benchmark.

Côte d'Ivoire

Côte d'Ivoire is the only West African country that did not join ECOWAS as a founding member in 1975. Its fiscal balance stands at -4.6%.

The Gambia

Gambia is the smallest country in ECOWAS, with a fiscal deficit currently pegged at -3.9%.

Ghana

The current ECOWAS Chairman, President Nana Addo Akufo-Addo, hails from Ghana. Its fiscal balance is pegged at -12.6%.

Guinea

Guinea practised a system of government called 'communocracy' for 20 years. Its public debt to GDP ratio for 2020 was 41.4%.

Guinea-Bissau

Guinea-Bissau's debt to GDP ratio is projected to hit 78.1% in 2021, exceeding the IMF's 70% benchmark.

Liberia

Liberia is regarded as Africa's oldest republic. Its public debt service to revenue ratio for 2020 was 9.6%.

Mali

Mali used to be one of the world's richest nations and was home to great emperors. Its public debt portfolio for 2019 was US\$7.7 billion.

Niger

Niger is one of the world's hottest countries, tagged 'the frying pan of the world'. Its public debt portfolio for 2019 was US\$5.4 billion.

Nigeria

Nigeria's fiscal deficit is currently pegged at -4.2%, exceeding the ECOWAS 3% fiscal benchmark by 1.2%.

Senegal

Senegal once played host to the Paris-Dakar Rally, regarded as the toughest car race on the planet. Its public debt portfolio for 2019 was US\$18.2 billion.

Sierra Leone

Sierra Leone is regarded as the 8th least developed country in the world. Its fiscal balance exceeds the ECOWAS benchmark at -3.3%.

Togo

Togo's capital Lome was once considered the most beautiful city in West Africa. The country's fiscal balance exceeds the ECOWAS benchmark at -3.3%.



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