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SELECTED ISSUES

April 2024

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WEST AFRICAN ECONOMIC AND MONETARY UNION

SELECTED ISSUES

March 1, 2024

Approved By
African Department

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SECURING FISCAL DISCIPLINE AND CREDIBILITY IN WAEMU[1]

Fiscal consolidation and the reintroduction of the WAEMU fiscal framework—ideally revamping the fiscal rule under a new Convergence Pact—is crucial for maintaining debt sustainability, external viability, and financial stability, while promoting access to lower-cost financing and rebuilding fiscal buffers. The 3 percent GDP deficit ceiling and the 70 percent of GDP debt ceiling envisaged by the expired rule remain appropriate, while better understanding and addressing the stock-flow adjustments (SFAs) will help avoid the swelling of public debt and rebuild fiscal buffers. Increasing the deficit and debt ceilings (for example, to 4 percent GDP and 80 percent GDP, respectively) would significantly raise debt servicing costs, thus fully offsetting the fiscal space they are meant to create. Convergence to a fiscal deficit of 3 percent of GDP should be ensured by 2025—barring exceptional circumstances—as envisaged by the authorities in the context of several IMF programs. Members' adjustment plans should emphasize domestic revenue mobilization, while controlling expenditure, notably the wage bill. It is also essential to implement a consistent definition of fiscal indicators across the region, avoiding carve-outs for particular spending items. To secure fiscal discipline and credibility, it is critical to establish effective mechanisms for assessment, accountability, and enforcement, including by defining a credible debt correction mechanism (for cases where debt is close to or exceeds the ceiling) and exogenous escape clauses, as well as building an effective communication strategy.

A. Overview

1. The WAEMU's economy exhibited strong resilience in the face of consecutive shocks associated with the Covid-19 pandemic, the war in Ukraine, and escalating security threats. Regional economic growth averaged 5.9 percent in 2021-2023, largely owing to the service sector. This growth was supported by the resilience of the strong economic performance prior to the pandemic, but also by swift national and regional policies implemented in response to the shocks.

2. However, the fiscal policy response led to a surge in fiscal deficits, which—along with persistent stock flow-adjustments (SFAs)—resulted in large increase in public debt (Panel 1). The WAEMU fiscal deficit rose from 2.3 percent of GDP in 2019 to 5.5 percent in 2020, peaking at 6.9 percent of GDP in 2022. SFAs continued to be significant, averaging 1.5 percent of GDP over the past decade (WAEMU Selected Issues 2023). As a result, public debt increased rapidly from about 45 percent of GDP in 2019 to about 59 percent of GDP in 2022 and further to about 61 percent in 2023.

3. External imbalances have also built up, given the successive external and regional shocks. As discussed in the main report, the current account deficit rose significantly in recent years, due to higher food and energy prices and to large fiscal deficits. Jointly with a more difficult access

[1] Prepared by Ljubica Dordevic and Olivia Ibrahim, with helpful comments and inputs from Annalisa Fedelino, Luca Antonio Ricci, Alain Feler, Lawrence Norton, Francisco Roldan (SPR) and the staff of the BCEAO and the WAEMU Commission.

to international capital markets, this led to a continued decline in reserves, which reached $15.8 billion by end 2023 (3.3 months of prospective imports), below the IMF estimated reserve adequacy.

4. While supporting the economy by avoiding excessive fiscal tightening, growing public borrowing increases risks to debt sustainability, external viability, and financial stability. Although extensive borrowing allowed the authorities to support economic activity, while financing development, social, and security needs, a significant increase in debt entails several risks. First, fiscal deficits tend to increase external imbalances and reserve loss, especially in the environment of diminishing foreign financing. Second, given the relatively shallow regional financial market and diminishing willingness of banks to absorb sovereign issuances, excessive public financing on the regional market weakens financial sector stability by increasing the sovereign bank nexus (sovereign exposures are at 38 percent of total banks' assets at end-2022) and constraining the central bank's ability to tighten liquidity to stem reserves loss, while also potentially crowding out credit available to the private sector. These effects have been exacerbated by the consequences of international monetary tightening, with governments confronting tighter financing constraints on the international market, and being forced to rely more intensively on financing on the regional market. Third, larger debt ratios tend to be associated with higher countries' risk premia and spreads on sovereign bonds, an effect that is also generally stronger in periods of global risk aversion.

5. The next section will discuss fiscal policies that would help address these concerns. It will focus on strengthening fiscal discipline, including by ensuring a desired fiscal consolidation, establishing an appropriate and effective fiscal rule propped up by adequate supporting arrangements (including for debt correction and escape clauses), while also addressing stock-flow adjustments. The last section concludes.

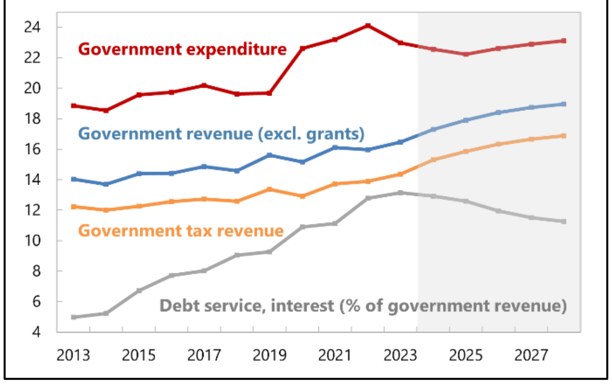
B. Policy Recommendations on Strengthening Fiscal Discipline

Ensuring Desired Fiscal Consolidation

6. Fiscal convergence towards a deficit of 3 percent of GDP should be achieved by 2025—barring exceptional circumstances—as envisaged by the authorities in the context of several IMF programs. The favorable growth environment in most WAEMU countries, the large increase in debt, and tight financing conditions support the fiscal consolidation envisaged by the national authorities, with a return of the deficit to 3 percent of GDP (the ceiling envisaged by the expired fiscal rule) by 2025, in line with several IMF programs—with a few exceptions (Burkina Faso is projected to converge in 2027 and Mali—not in an active IMF-supported program—by 2026). In recent years, previous plans for fiscal consolidation have experienced several delays, following the fiscal response to repeated shocks. Going forward, delays to fiscal convergence should be based on strong justifications (such as new escape clauses, more below) and be contingent on financing being available at terms consistent with debt sustainability, while also considering the expected impact on spreads and ratings. Further delays in fiscal consolidation could pose significant debt sustainability risks and would further restrain the fiscal space available to cope with future adverse shocks.

7. Members' consolidation plans should be strongly based on domestic revenue mobilization (DRM), while controlling expenditure, notably the wage bill. Debt sustainability rests to a large extent on the ability to raise revenues. With an increase in debt, macroeconomic uncertainty and borrowing costs, DRM is crucial to ensure the expected reversal of the persistent increase of debt service to revenue ratio. DRM will also be essential to finance the persistent increase in government expenditure visible since the Covid pandemic (owing to interest spending, wage bill, and capital expenditure—see Text Table 1) and which is projected to remain high, in light also of the need to support security and enhance social and infrastructure spending in underserved regions.[2] However, revenue collection has traditionally constituted a challenge in the WAEMU region, with limited progress in recent years towards the regional goal of 20 percent of GDP. At the same time, wage bill growth needs to be contained, so as to ensure meeting the target of 35 percent of tax revenue, in line with the expired fiscal rule. In this context, it would be important not to water down the constraint offered by the suspended Pact, and to maintain the definition of wage bill ceiling as a ratio to tax revenue (as opposed to total revenue, which would relax the constraint).[3]

Government Revenue and Expenditure
(percent of GDP, unless otherwise indicated)



Text Table 1. WAEMU: Fiscal Expenditures
(percent of GDP)

	2015-2019 Avg.	2023	change
Total Expenditure	19.8	23.0	3.2
Current Expenditure	12.9	15.1	2.2
o/w wages	5.2	5.7	0.6
o/w interest	1.2	2.2	0.9
o/w goods and services	2.8	2.8	0.1
Capital Expenditure	6.7	7.2	0.6

8. Tax policy reforms are needed to increase tax revenues. Efforts to increase revenue have mainly relied on strengthening the tax administration and digitalization in recent years. Tax revenues remain reliant on customs revenues, with many value-added tax (VAT) exemptions—in agribusiness, transportation, and construction—besides low direct and indirect tax rates. Efforts need to continue on broadening the tax base (including by reaching medium-sized firms), reducing VAT exemptions,

[2] Beyond mechanically increasing the denominator of the debt service-to-revenue ratio, DRM can also lower cost of debt servicing by raising investors' confidence, which would result in lower interest rates and improved market access.

[3] Pacte-de-convergence-UEMOA.pdf (umoatitres.org)

accelerating the removal of business tax exemptions, streamlining the personal income tax regime, strengthening controls on fiscal evasion, and rationalizing excise taxes. Simplifying the personal income tax system applied to wages, salaries, profits and capital income, besides dematerializing customs clearance procedures, and implementing a single taxpayer identification number, should also be kept high on the agenda.

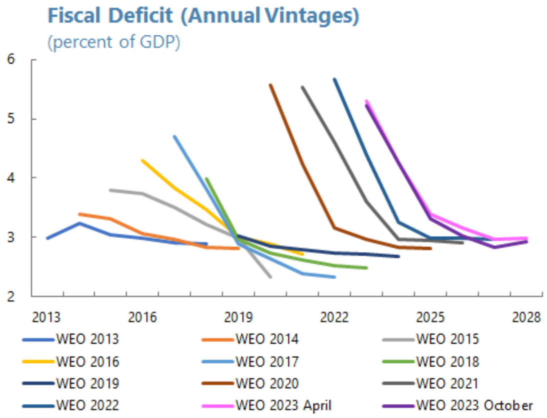
Establishing an Appropriate and Effective Fiscal Rule

9. The national and regional authorities should urgently reintroduce a regional fiscal rule via the Pact with the original ceilings to enhance the credibility of fiscal commitments, while significant efforts should be made to reduce SFAs to a minimum (Panel 1). The reintroduction of the fiscal rule would strongly complement the ongoing fiscal consolidation, by cementing the imbedded commitment to fiscal discipline. Within the context of re-establishing a fiscal rule, the deficit and debt ceilings should remain at 3 percent and 70 percent of GDP, respectively. Debt has surged in recent years due to persistently high fiscal deficits, which have consistently exceeded projections (Panel 1.A). Large increase in indebtedness not only affects debt sustainability, but also regional financing stability and foreign reserves, thus posing risks for external viability and domestic financial stability. SFAs also played an important role in raising indebtedness (Panel 1.B), adding about 13 percent of GDP to the regional debt to GDP ratio between 2013 and 2021 (WAEMU Selected Issues, 2023). Ongoing missions by the WAEMU Commission (completed in 5 member countries in late 2023, with 3 remaining in 2024) are welcome, with a view of providing a more comprehensive picture of the scope of SFAs, their sources, as well as remedies.

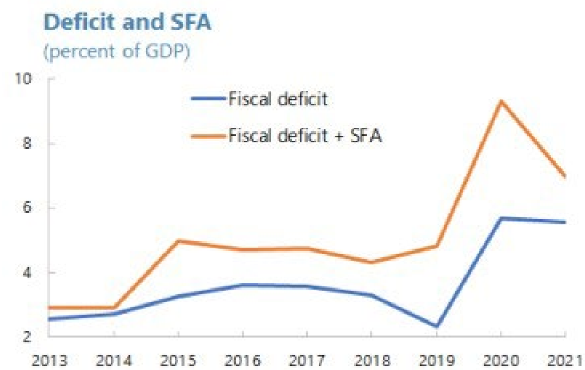
10. Simulations show that the only scenario consistent with both debt stabilization and the recovery of fiscal buffers to cope with future shocks is a deficit target of 3 percent of GDP in the absence of SFAs (Figure 1.C). A 4 percent of GDP ceiling could stabilize debt at a higher level if SFAs were eliminated, but this would allow for no restoration of buffers and leave the region exposed to debt sustainability risks in the event of further adverse shocks. Moreover, a deficit limit of 4 percent of GDP with SFAs at historical averages would lead to an explosive debt path even in absence of further shocks.

Figure 1. Debt Dynamics

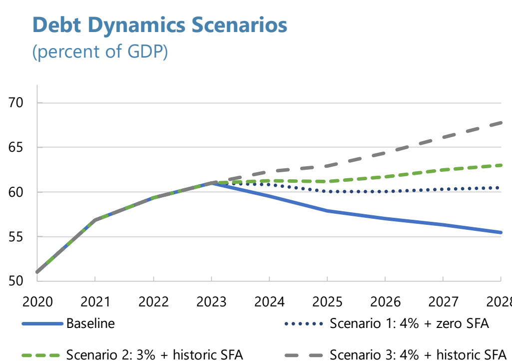
A. Past projections of deficit reduction have proven to be overoptimistic…



B. …while SFAs have contributed to indebtedness.

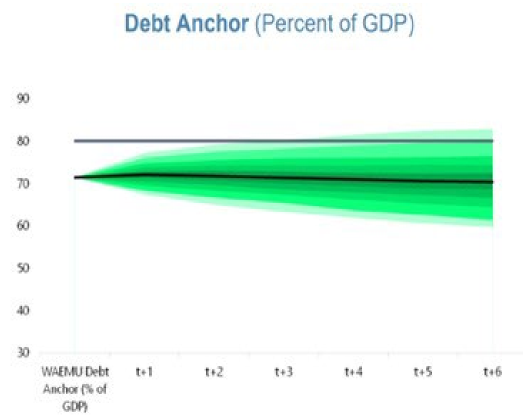


C. And controlling both will be crucial in containing debt at a sustainable level in the medium term…

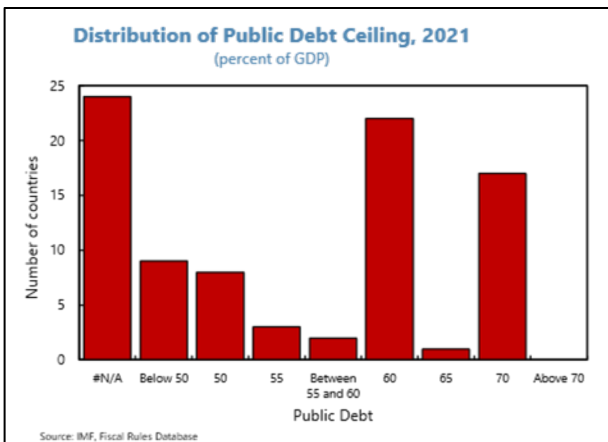


Source: IMF staff calculations and projections.
Note: Baseline consists of teams' projections which have zero SFA – converging to 3 percent of GDP deficit in 2025 for most countries (except BFA and MLI). (1) has a deficit target of 4 percent of GDP converged in 2025 with zero SFA. (2) and (3) have 3 and 4 percent of GDP deficit targets converged in 2025 with historical SFA (of 1.5 percent of GDP annually).

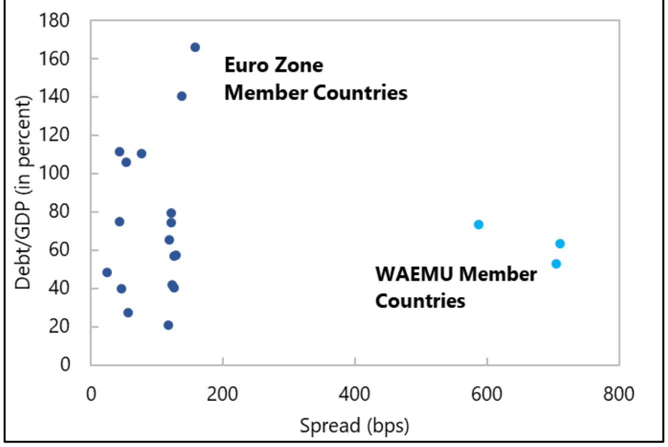
D. …while preserving a debt anchor of 70 percent of GDP is necessary to ensure that debt does not exceed 80 percent of GDP.



11. A debt ceiling of 70 percent of GDP remains appropriate, as a further increase in the debt ceiling would result in higher debt servicing costs, fully offsetting the increase in fiscal space of the associated increase in deficit ceiling (Figure 2). Fiscal flexibility to support the economy should be balanced against the sustainability risks of higher debt levels. International experience also shows that most countries with debt rule set debt limits at or below 70 percent of GDP. Moreover, a comparison of the level of indebtedness versus large, advanced economies—such as the European Union—would not be appropriate



Debt over GDP and Spreads on Sovereign Debt in WAEMU and the Euro Zone in 2023



based on institutional and economic factors.[4] And when considering possible changes to the WAEMU ceiling, it is essential to consider the implications for interest rate expenses and the associated reduction of fiscal space available for other spending. Higher debt is associated with higher borrowing costs, and there is empirical evidence that an increase in debt of 10 percentage points of GDP leads to an increase in sovereign spreads of 100–120 basis points for typical countries (Hadži-Vaskov and Ricci, 2022); the increase is even higher in countries with weaker institutions and in cases of financial distress.[5] Hence, if raising debt limit from 70 percent to 80 percent of GDP in WAEMU resulted in 10 percent of GDP higher *actual* debt level in the new steady state, it could raise interest rate by about 1.2 percentage points on non-concessional debt. Based on the current composition of debt, this would add more than 1 percent of GDP in higher interest payments (Panel 2.D). Such an increase in interest expenditure would thus reduce fiscal space by over 1 percent of GDP, which would fully offset the increase in fiscal space for non-interest expenditure sought for via a change in the deficit ceiling from 3 to 4 percent of GDP (which is sometime considered together with the increase in the debt ceiling).[6] Moreover, the recent tightening of global financing conditions, which have led to a surge in spreads and regional funding costs (Panel 2.A and B) and squeeze in funding for African countries, is likely to exacerbate these pressures on the spread. Overall, as discussed in WAEMU Selected Issues 2022, for WAEMU a debt level beyond 80 percent of GDP can lead to an unsustainable debt path, based on an assessment accounting for various factors including achievable primary surpluses, risks related to the market sentiment, and heightened interest rate pressures. In this context, the 70 percent of GDP debt ceiling remains appropriate and should not be increased, to ensure the debt does not exceed 80 percent of GDP (Panel 1.D), also given the need to allow for sufficient fiscal buffers to cope with the uncertainty surrounding the global and regional economic outlook, as well as high-for-longer borrowing costs.

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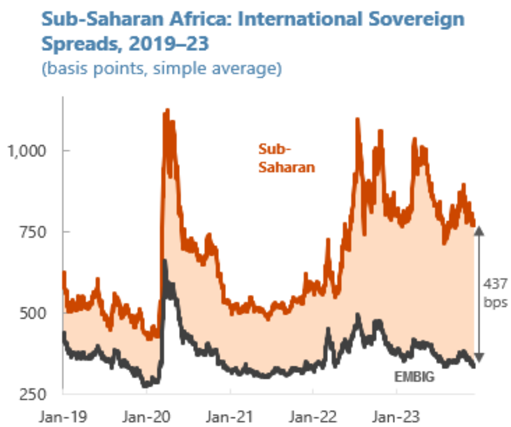
[4] With respect to the European Union, the WAEMU experiences a much more limited access to international markets, a much steeper demand for its assets with higher spreads, much more limited monetary policy independence, a more vulnerable exchange rate regime, and weaker credibility. These factors imply that they cannot afford the same debt carrying capacity.

[5] Based on WEF's Institutions Index 2019, covering 141 countries, Mali ranks 127th; Cote d'Ivoire 122nd; Guinea-Bissau 108th; Benin 100th; Burkina Faso 95th; and Senegal 72nd.

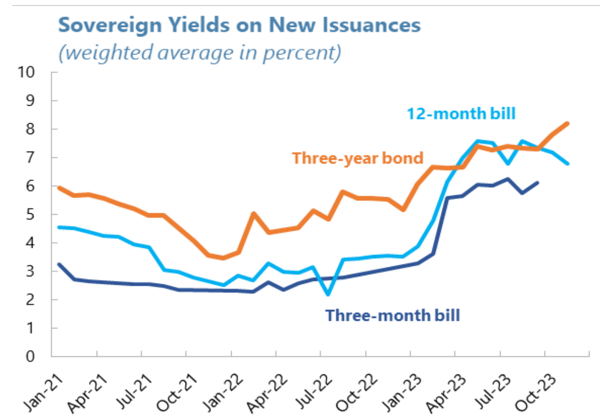
[6] The simulation is for illustration purposes and is based on simple assumptions, not a general equilibrium dynamic model. To the extent that larger financing is allocated to highly productive public investments, there would also a positive effect on growth and debt sustainability. Also, to the extent that part of borrowing comes from external sources, it would help replenish the union's reserves.

Figure 2. Fiscal Targets in Context

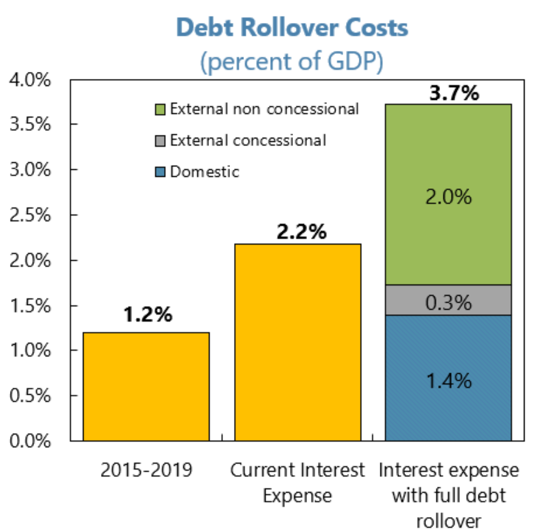
A. Sovereign spreads have surged across SSA…



B. while yields in the regional market have also increased.

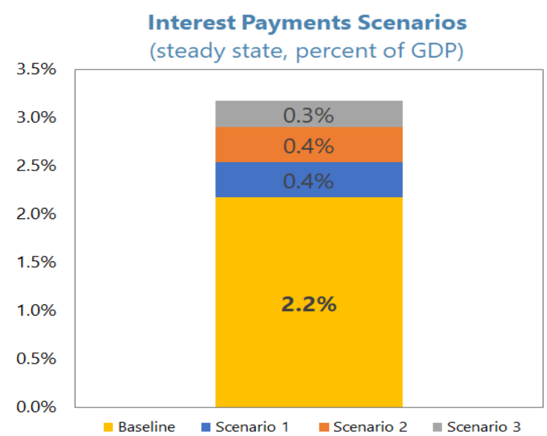


C. Rolling over debt thus becomes more expensive.



Notes: The left bar plots average annual interest expense 2015-2019. The middle bar plots the current interest expense based on 2023 debt data. The right bar simulates the interest expense if WAEMU debt were to be fsully rolled over today (i.e. preserving the current debt composition) at the interest rates currently prevailing for different types of debt.

D. Increasing debt limit to 80 percent would further inflate the debt servicing bill, while the associated 1 percent of GDP larger deficit would mostly be spent on higher debt service—with no material gain in fiscal space.



A static comparison based on 2023 fiscal data.
Baseline: current indebtedness and interest rate
Scenario 1: 10 percent of GDP more debt, no change in interest rate
Scenario 2: 10 percent of GDP more debt, 120bps higher interest rate on non-concessional external debt
Scenario 3: 10 percent of GDP more debt, 120bps higher interest rate on non-concessional external debt and domestic debt

Note: Scenarios 1, 2, and 3 assume 10pp GDP higher debt; the composition of debt is fixed (the additional debt maintains the same proportions of domestic, external concessional, and external non-concessional, as current debt); and baseline interest rate is proxied by current average interest rate on total debt.

Sources: IMF Staff Calculations, Regional Economic Outlook

12. Moreover, rolling over debt has become more expensive, which makes higher indebtedness even more costly and risky. While the share of WEAMU debt that is sensitive to market rates has benefited from a global environment of low rates, this environment has changed with the tightening of monetary policy in advanced economies. WAEMU is already spending 0.9 percent of GDP more on interest in 2023 compared to 2015-2019 (Text Table 1). Hence, an additional factor to consider when assessing the risk of increasing indebtedness is the fiscal cost of rolling over debt at the now prevailing higher rates. As an illustration, if WEAEMU debt at its current level and composition were to be fully rolled over at the interest rates currently prevailing, the higher interest rates would further increase debt servicing bill by about 1.5 percent GDP (Panel 2.C).

Supporting Arrangements

13. A credible debt correction mechanism (particularly if associated with a stronger oversight) could help prevent a repeat of past debt trends (persistently increasing, well in excess of forecasts), thus enhancing fiscal discipline and restoring the strength and credibility of the fiscal rule. Several reasons have made it urgent to include, in a revised fiscal rule, a credible and well-defined debt correction mechanism that can guide fiscal policy adjustment following breaches of a debt ceiling. Indeed, WAEMU debt has increased from 29 to 61 percent of GDP over the past 10 years, and debt is very close to or exceeds the 70 percent of GDP ceiling in three member states, while SFAs not captured by the deficit rule have been significantly and persistently contributing to debt creation. A debt correction mechanism would envisage that potential breaches are compensated by appropriate fiscal adjustments in the following years, except under exceptional circumstances. There are several examples of mechanism offered by other countries (for example, Colombia, Poland, Costa Rica): some countries envisage parliamentary hearings, or freeze in wages, or tightening of fiscal deficit ceilings, when debt gets too close to the ceiling. When designing the correction mechanism, one should consider:

- *Specifying a timeframe for correction.* In many fiscal rules, the corrective action must happen within one to two years (Belgium, Finland, and France), and sometimes within a longer period (Grenada). A careful study is needed to identify a suitable timeframe for the WAEMU context.

- *Indicating the adjustment measures.* Some fiscal rules are prescriptive about which corrective measures should be adopted. For example, freezing public wages if debt exceeds a certain threshold (Slovakia) or cutting spending. Other options prescribe *qualitative* measures, for example, presenting to the parliament an explanation of deviations and submitting a supplementary budget upon request. Other fiscal rules leave full discretion to the government about which measures to take (Germany and Switzerland).

- *Avoiding making fiscal policy procyclical, via careful design*. For example, tightening expenditure ceiling when debt exceeds a certain threshold may not be ideal, as it is likely to create strong procyclicality in the face of recession.

14. The introduction of well-defined escape clauses is also essential, to allow flexibility in managing large exceptional shocks without undermining the credibility of the fiscal rule. Cross-country experience with escape clauses is shown in the Text Table 2 below, and an IMF note (Medas and Gbohoui, 2020) provides details in light of COVID-19 experience. A well-defined escape clause could specify:

- *The nature and the size of the triggers.* The activation of escape clauses should be based on exceptional events that are exogenous and outside government control, which would otherwise provide the wrong incentives for policymakers to take an expansionary bias. The trigger events could include severe economic recessions, major natural disasters, and states of emergency such as epidemics. For events that are well-defined and measurable, escape clauses can specify a minimum change of a given indicator that is required to trigger the clause (such as GDP growth dropping by a certain amount—often 2 percentage points—below certain yearly moving average levels—e.g. the previous five-year average). There is a trade-off when defining the triggers. On the one hand, precision helps prevent arbitrariness; on the other hand, uncertainty on the nature, size, and severity of the shocks makes it difficult to pre-specify which events should warrant the activation of escape clause. When considering developments in terms of revenues and growth, they should be measured as percent of GDP or rates, as opposed to nominal values. Moreover, there should be no criteria based on a gap between budget or growth projections versus past benchmarks, to maintain adequate incentives for realistic budgeting. These considerations enhance the effectiveness of the escape clause by improving credibility and transparency.

- *Procedure of activation and monitoring.* Activating an escape clause typically requires parliamentary approval, often subject to endorsement by an independent fiscal agency (such as a fiscal council). In the case of WAEMU, one may look at the European experience, where the decision of the European Council to invoke the general escape clause of the Stability and Growth Pact is also based on a recommendation of the European Commission, which has the responsibility to confirm that conditions for triggering the clause have been fulfilled.

- *Procedures of returning to the fiscal rule.* Escape clauses often predefine the timeframe for: (i) re-instating rule compliance; and/or (ii) correcting for the cumulative deviation attained during the rule suspension. In Panama, for instance, the escape clause requires returning to rule compliance within 3 years, in equal annual adjustments without the need to compensate for the *accumulated* deviations. Germany, on other hand, requires a plan to reduce the extra borrowing "within a reasonable time frame". As for the debt correction timeline, deeper analysis would be needed to specify the suitable timeframe for returning to the fiscal rule in the WAEMU context.

Text Table 2. WAEMU: Cross Country Experiences with Escape Clauses

Country (rule; year)	Triggers	Authorization	Duration	Size	Correction	Use
Brazil (ER+DR; 2000)	- Economic slowdown [$g \leq 1\%$ last 4Q] - National catastrophe - State of siege	Congressional approval by supermajority	Congressional discretion [to delay required fiscal			Yes
Colombia (SBR; 2011)	- Extraordinary events threatening macro-stability	CONFIS opinion (internal fiscal council headed by MoF)				
Colombia (SBR; 2011)	- Growth 2 percentage points below long-run growth and negative output gap	CONFIS opinion on size of counter-cyclical spending and correction		20 percent of output gap	In two years, as far as in the first year growth exceeds long-run growth	
Germany (SBR; 2011)	- Natural disaster - Extraordinary situations beyond gov't control	Parliamentary supermajority			Amortization plan to reduce extra borrowing "within a reasonable time	
India (BBR; 2004)	- National security or calamity - Exceptional circumstances as the government specify	Central government				2009-2013
India (BBR; 2017)	- National security or calamity (e.g., collapse of agricultural output) - Far reaching structural reforms with unanticipated - $g <$ mean(g)-3% over past 4Q	Central government with advice from the fiscal council		0.5 percent of GDP	Return to original target in the ensuing year	
Mexico (BBR; 2006)	- Exceptional circumstances					2010-2012
Panama (BBR; 2012)	- State of emergency - $g \leq 2\%$ in 2Q	MoF and Parliament	Max 3 years		3 years; equal adjustment	
Switzerland (SBR; 2003)	- Exceptional circumstances	Parliamentary approval by qualified majority	Parliamentary discretion on "extraordinary expenditures" via supplementary budgets.		-Since 2010, deficits arising from extraordinary expenditures are accumulated in an account, and need to be redeemed over the next 6 years by running structural surplus through expenditure cuts, once the compensation account balance becomes nonnegative.	2017 "to accommodate migration-related spending"

Source: IMF staff compilation based on IMF Fiscal Rules Database (1985-2021).
Notes: Abbreviations of the types of fiscal rules: debt rule (DR); expenditure rule (ER); structural balance rule (SBR); budget balance rule (BBR).

15. Enhancing communication, monitoring, and accountability is also essential, including by strengthening the role of the WAEMU Commission. An effective communication strategy would also help the WAEMU ensure credibility and transparency of the reintroduced fiscal rule. It is also important to revisit and enhance the institutional accountability and enforcement framework, for example, by broadening the role of the WAEMU Commission in preparing forecasts on fiscal performance, offering related guidance on appropriate policy actions, assessing fiscal outcomes, and effectively enforcing rules.

Ensure Adequate Perimeter for Fiscal Indicator Definitions

16. A final, yet still crucial, point is the importance of establishing and implementing a consistent definition of fiscal indicators across the region. A consistent definition of the deficit and debt perimeter would support equal treatment across countries and facilitate the framework's ability to capture all potential risks to debt creation and sustainability. Annexes to the main legislation could elaborate the parameters of the deficit and debt criteria and set a deadline for each member state to adopt a harmonized definition of the public sector deficit and debt. Compliance with the reporting standard could be a secondary focus of surveillance (potentially similar to the second-tier convergence criteria in the original Pact, alongside the deficit and debt ratios which would remain first-tier criteria). There should be no carve-out for spending on items like investments or security, as this would undermine the credibility of the targets.

C. Conclusions

17. Fiscal consolidation to a deficit of 3 percent of GDP should be ensured by 2025 (unless otherwise agreed in the context of an IMF program), and efforts need to emphasize domestic revenue mobilization while controlling expenditure (notably the wage bill). While debt has helped WAEMU countries finance development projects and cope with global shocks, domestic revenue mobilization is crucial to ensure debt sustainability while providing fiscal space to service debt and to preserve development, security, and social spending needs. At the same time, containing government expenditure, notably by bringing the wage bill to the suspended Pact target of 35 percent of tax revenues, is also important.

18. To enhance fiscal credibility, and maximize prospects for debt sustainability, financial stability and external viability, it is essential and urgent to reintroduce regional fiscal rules at the original ceilings—3 percent GDP for deficit and 70 percent GDP for debt. The target for fiscal deficit of 3 percent GDP remains appropriate for preserving debt sustainability, providing credibility to the fiscal policy, and anchoring expectations, particularly in case of difficulties in containing SFAs. It is also essential to preserve the debt ceiling at 70 percent of GDP, to contain further increases in interest spending which would further erode fiscal space. Indeed, interest payment as percent of GDP have already increased in recent years (owing to both higher debt and higher interest rates) and would continue to increase if—with the heightened global and regional volatility—market rates may not go back to their historical low levels in the near to medium term. Conversely, it is essential to build fiscal buffers to cope with future shocks, while—as recognized in the original Convergence Pact—large increases in indebtedness not only affect debt sustainability, but also regional financing stability and foreign reserves, thus posing risks for external viability.

19. Going forward, more emphasis should be put on understanding and addressing the drivers of debt accumulation, notably SFAs. SFAs have contributed to rising public debt in the last decade, averaging 1.5 percent of GDP. Regional and national authorities should make every effort to contain and address these extra-budgetary and below the line operations that increase the debt. Not accounting for these operations would accelerate the rise in debt and may put it on an unsustainable path, especially with the possible occurrence of future shocks. The initial steps by the WAEMU Commission in this area are welcome, and the efforts should intensify.

20. Furthermore, it is critical to introduce broader mechanisms for deviations from the target and correction, as well as for assessment, accountability, and enforcement. The enhanced support arrangements—including a credible debt correction mechanism, well-designed escape clauses and an effective communication strategy—would ensure appropriate near-term fiscal adjustments following any breach of the fiscal or debt ceilings and avoid the uncertainty about when the rule will resume. It is also important to enhance communication, as we as the institutional accountability and enforcement framework.

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RECENT CHALLENGES TO THE CONDUCT OF MONETARY POLICY IN THE WAEMU [1]

Monetary policy by the BCEAO experienced conflicting challenges in recent years, in the face of a relatively short-lived but significant inflation spike (owing to exogenous factors), a persistent erosion of external reserves, and strains in the regional financial market (the last two mainly fueled by large fiscal deficits and low sovereign access to external financing). In response to these shocks, the BCEAO operated via both policy rates and liquidity management. While gradually increasing its policy rates from mid-2022 onward, the BCEAO first reduced the volume of refinancing supplied to banks—shifting from fixed to variable rates—in early 2023, before re-injecting liquidity through secondary-market sovereign security purchases and its emergency bank lending facility in the second half of the year to address financial stability concerns. These various changes indicate how the conduct of monetary policy in the WAEMU became progressively more constrained by financial stability and external viability challenges, with the latter arguing for enhanced monetary-fiscal policy coordination to help the BCEAO meet its medium-term reserves objectives.

A. Introduction

1. **In response to shifting circumstances, monetary policy in the WAEMU became challenging and had to operate via multiple instruments in 2022 and 2023.** Mainly to curb inflation, policy rates were hiked by 75bp from June 2022 to end-2022. With a view to limiting the erosion of FX reserves, financial conditions were further tightened in February-March 2023 by some rationing of bank liquidity through a change in the BCEAO's operating procedure for bank refinancing—from the fixed rate full allotment (FRFA) system to a fixed quantity variable rate (FQVR) auction system—and another 25 bp hike in policy rates. This pushed the effective rate of BCEAO refinancing toward the top of the monetary policy corridor, while sovereign security yields on the regional market rose substantially, as banks became increasingly reluctant to increase or even maintain their large sovereign exposure. This eventually led the BCEAO to initiate secondary market purchases of sovereign debt in June and September 2023. Against the background of a normalization of the inflation outlook but a further fall of FX reserves below adequate levels, WAEMU monetary authorities proceeded to roll back most of the accommodation stemming from these debt purchases, through two 25bp policy rate hikes in September and December 2023 and a gradual reduction in the BCEAO's bank refinancing. However, bank liquidity tensions reemerged around end-2023 forcing the BCEAO to resort to the injection of substantial amounts of liquidity through its marginal lending facility.

2. **These various changes reveal how the conduct of monetary policy in the WAEMU has become more constrained by financial stability and external viability challenges.** With a view to documenting these challenges and policy responses, the present paper starts by summarizing the

[1] Prepared by Alain Feler and Lawrence Norton, with helpful comments and inputs from Luca Antonio Ricci, Knarik Ayvazyan, Ljubica Dordevic, and the staff of the BCEAO.

main features of the WAEMU's monetary policy framework (Section B) before recalling the circumstances and rationale of the recent evolution of the BCEAO's bank refinancing allotment method (Section C). Against this background, Section D highlights how banks' reluctance to increase or even maintain their large sovereign exposure has led the BCEAO to initiate secondary market purchases of sovereign securities, while Section E highlights how closer monetary-fiscal policy coordination helps the BCEAO's meet its medium-term reserves objectives.

B. The WAEMU's Monetary Policy Framework

3. **Monetary policy in the WAEMU primarily aims at maintaining price stability.** Article 8 of the BCEAO's Statutes sets price stability as the primary objective of monetary policy, defined as a year-on-year CPI inflation rate of 2 percent with a margin of +/- 1 percentage point over a 24-month horizon. The Statutes also identify the support of sound and sustainable economic growth as a secondary objective subject to the primary price stability objective.

4. **Financial stability and external viability are also key responsibilities for the monetary authorities.** Per Article 9 of its Statutes, the "fundamental missions" of the BCEAO include, in addition to the conduct of monetary policy, the preservation of the stability of the WAEMU's banking and financial systems and the management of member States pooled FX reserves, with a view to ensuring the viability of the WAEMU's exchange rate regime anchored on a hard peg of the West African CFAF to the Euro with a convertibility guarantee from France. The fulfillment of these two other mandates must also be duly taken into consideration in the conduct of monetary policy.

5. **The WAEMU's main monetary policy authorities are the Monetary Policy Committee (MPC) and the BCEAO's Governor**. Article 66 of the BCEAO's Statutes entrusts the MPC with the definition of the stance and instruments of monetary policy.[2] The MPC decides on the monetary policy stance by setting policy interest rates (the minimum bid rate and the marginal lending facility rate that form the policy corridor) as well as the rates and base for banks' reserve requirements.[3] Per Article 62 of the BCEAO's Statutes, the Governor is responsible for monetary policy implementation, notably through the regulation of bank liquidity. In that context, the Governor decides on the minimum amount of refinancing provided and whether it is at variable or fixed rates and satisfies or rejects banks' demand for liquidity on its marginal lending window. Per Article 18 of its Statutes, the BCEAO may also manage bank liquidity through open market operations.

[2] The MPC currently includes: the BCEAO's Governor (Chair) and Vice-Governors, and 13 members appointed by the WAEMU Council of Ministers, of which one proposed by each of the eight WAEMU member-States, four nationals from WAEMU member-States as well as another expert appointed *intuitu personae* in concertation with France. The presence of this latter member (in lieu of a France's appointee) resulted from the 2019 reform of the monetary cooperation agreement with France and it is not yet reflected in the BCEAO's current Statutes, whose revision would require the pending ratification of this reformed agreement by all WAEMU member states.

[3] See : *Décision N° 397/12/2010 portant règles, instruments et procédures de mise en œuvre de la politique de la monnaie et du crédit de la BCEAO.*

Text Table 1. WAEMU: Monetary Policy Institutional Framework

Monetary Policy Committee ***General orientation of monetary policy***	**BCEAO Governor** ***Bank Liquidity Regulation***
Setting : • Minimum bidding rate for open market operations • Rate on Marginal Lending Facility • Required Reserves Rates (and base) • General operating rules (e.g., Decision No 397/12/210)	Setting : • Refinancing Allotment procedures (FQVR vs. FRFA) • Maximum refinancing volume (under FQVR) • Access to Marginal Lending Facility • Open Market Operations

6. **The fixed exchange rate regime may call for monetary policy adjustments with a view to maintaining or restoring FX reserve adequacy even in the absence of inflationary pressures.** Consistent with the monetary cooperation agreement between France and the WAEMU's eight member countries, Article 76 of the BCEAO's Statutes requires the WAEMU's MPC to reassess its policies when FX reserve coverage of the BCEAO's sight liabilities (essentially, base money and government deposits) falls below 20 percent for three months. In practice, the BCEAO also assesses the adequacy of its FX reserves in terms of their coverage of the WAEMU's prospective imports of goods and services.[4]

C. The Shift of Refinancing Allotment Method from FRFA to FQVR

7. **Prior to the Covid crisis, the BCEAO traditionally provided banks with fixed quantities of refinancing through weekly and monthly auctions at variable rates.** Before March 2020, the BCEAO provided banks with pre-set amounts of refinancing against appropriate collateral[5] through American weekly and monthly auctions (*appels d'offre*) at variable rates (FQVR).[6] In such tenders, the BCEAO serves the banks' bids with the highest rates first until the overall auctioned amount is exhausted. The money market or marginal rate (*taux marginal*) is the rate of the last bid served in the auction, with bids at this rate being prorated. The weighted average interest rate (*taux moyen pondéré*) is the weighted average rate across bids served during an auction. Variable interest rate auctions were regarded as the usual bank refinancing operating procedure by the MPC's 2010 decision spelling out monetary policy rules, instruments, and procedures for the WAEMU.[7]

8. **In response to the Covid crisis, monetary policy started to be conducted only through changes in a fixed central bank refinancing rate.** The first measure introduced by the BCEAO with

[4] Fund staff estimated a FX reserves adequacy range between 4 and 6 months of imports, based on 2022 and partial 2023 data and using the Fund's ARA-CC model. (See Annex I of IMF Staff Report on 2024 Discussions on WAEMU Member-Countries Common Policies).

[5] Mainly banks' claims on WAEMU sovereigns or other public sector entities but also selected banks' claims on private sector entities.

[6] An American auction is a multiple rate tender whereby each individual successful bid pays its own interest rate.

[7] See Decision 397/12/210 referenced in footnote 7 above, in particular its Article 7 reading as follows: "*Auctions are conducted, in general, at variable interest rates. The Central bank may also undertake fixed-rate auctions*".

a view to supporting banks and the economy during the pandemic was a shift from a FQVR to a FRFA bank refinancing procedure. Thus, in March 2020 the BCEAO started to satisfy banks' demand for liquidity in full at the minimum (policy) rate, conditional on adequate collateral and counterparties' financial soundness. The FRFA system aimed at mitigating liquidity risk in the WAEMU's financial markets by ensuring that commercial banks had continued and sufficient access to central bank liquidity at a fixed rate. In addition, the FRFA (policy) rate was lowered in June 2020 by 50 basis points to 2 percent in the context of a low inflation environment.[8]

9. Fund staff welcomed the shift to FRFA by the BCEAO in 2020 and recommended making FRFA the permanent bank refinancing procedure. This recommendation was reflected in the latest three Fund Staff reports on common policies for WAEMU member-countries and in the context of the 2022 FSAP for the WAEMU.[9] In support of this position, Fund staff has argued that the FRFA procedure:

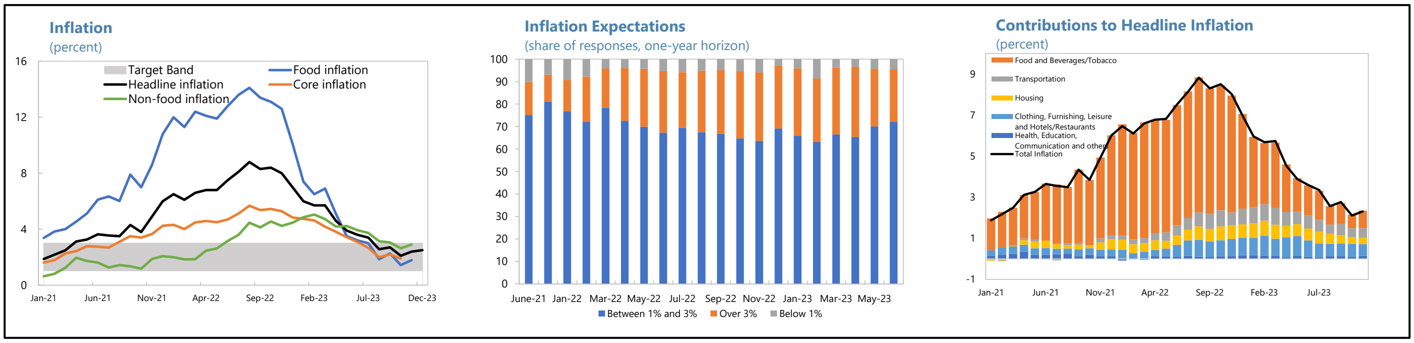
a) can improve the effectiveness of monetary policy, by providing a clear signal to the market regarding the monetary policy stance and also by enhancing the ability of the policy rate to steer financial conditions through the elimination of the discrepancy between the minimum bid rate and the average rate across bids;
b) is useful in an environment where the interbank market is segmented and illiquid, including by preventing freezes on funding markets (since banks may be more reluctant to sell their liquid assets if they fear liquidity shortfalls) and associated disruptions in bank credit;
c) does not require the central bank to make exact projections of bank liquidity, which is more difficult under a fixed exchange rate regime because of the unpredictability of external assets;
d) can contribute to reducing the liquidity premium on sovereign bond purchased by banks, given the greater certainty provided by the fixed rate to banks about their funding costs.

10. The BCEAO maintained FRFA when initiating a tightening cycle in mid-2022 in response to rising inflation. After picking up in 2021 on a difficult harvest and security concerns in some countries, consumer prices accelerated in 2022 to a peak of 8.8 percent in August on a pass-through from global food and energy prices, including a NEER depreciation. In response, the MPC decided to raise the FRFA rate (and the marginal facility rate, hence the policy corridor) by 25bps three times in June, September, and December 2022, with a view to preventing a de-anchoring of inflation expectations. As a result, the average interbank market rate rose while financing conditions

[8] The rate of the marginal lending facility was also lowered by the same magnitude. In addition, to help sovereigns meet a temporary surge in their short-term financing needs, the BCEAO implemented a special program of 3-months "Covid T-Bills" that banks could refinance for up to this maturity at the FRFA rate. See WAEMU 2020 SIP, Chapter 1.

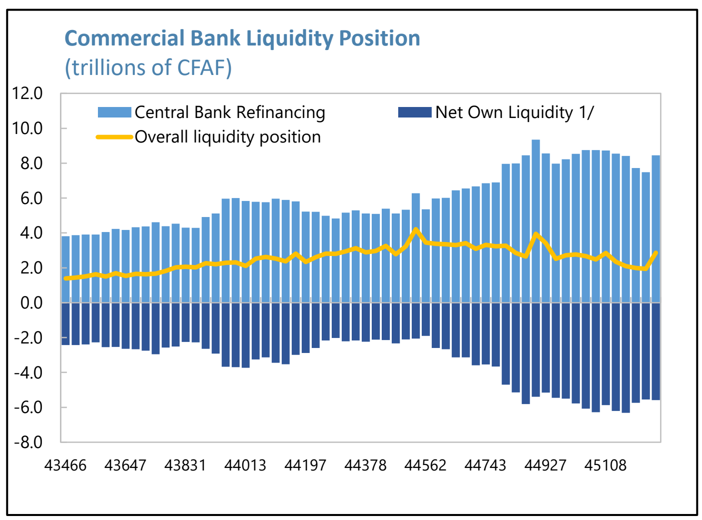
[9] See: Fund Staff Reports on Common Policies of WAEMU Member Countries for 2020 (¶ 30), 2021 (Box 3) and 2022 (¶ 29); and Technical Note on Analysis of Systemic Liquidity for the 2022 WAEMU FSAP (¶ 43).

on the auction segment of sovereign securities market tightened somewhat on fewer bids and moderately higher yields.



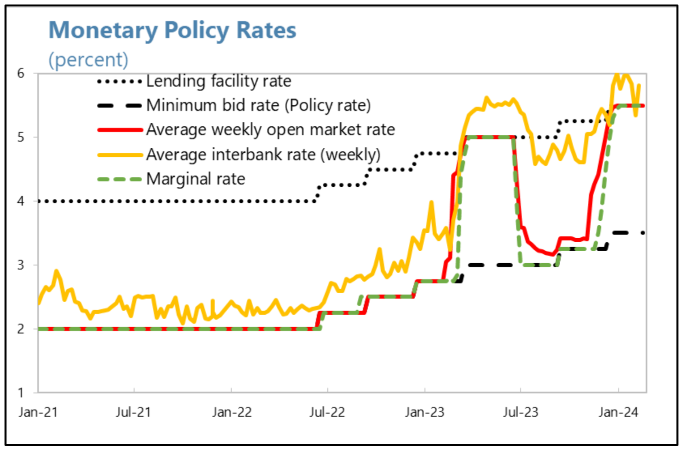
11. Against this background, headline inflation started to decline to reach 7 percent at end-2022, before returning within the BCEAO's 1-3 percent target range since August 2023. This favorable outcome was mainly due to receding food prices on the back of a rebound in domestic cereal production and easing import prices. The disinflation process has been comforted by a gradual decline of non-food inflation from a peak of 5 percent (y/y) in February 2023 to 2.9 percent in November, while inflation expectations have remained well anchored.

12. However, bank refinancing by the BCEAO surged, and FX reserves eroded substantially in the second half of 2022 and early 2023. The BCEAO's FX reserves fell from US$24.2 billion at end-2021 to US$18.5 billion at end-2022 and US$17.6 in February 2023, driven by persistently large fiscal deficits, a wide external current account deficit, and lower net portfolio inflows reflecting tight global financial markets given monetary policy normalization in advanced economies. These balance of payment developments contributed to a deterioration of banks' structural liquidity position which was largely compensated by a higher recourse to BCEAO refinancing. At end-2022, the outstanding amount of BCEAO refinancing was 49 percent higher than one year earlier, with the bulk (89 percent) of this increase occurring in the second half of the year, against the background of a gradual tightening of the FRFA rate by a total of 75 bps. Thus, the BCEAO was providing more liquidity to the system while it was also raising interest rates.



13. The BCEAO shifted back in mid-February 2023 to a fixed quantity bank refinancing procedure (FQVR) which it viewed as potentially more effective to curb the erosion of its FX reserves. Reserves fell further in early 2023, to reach US$17.4 billion by end-February 2023, covering only two-thirds of the BCEAO's sight liabilities (from about four-fifths at end-2021) and less than 4 months of prospective imports (from more than 5 months at end-2021). Given the WAEMU's relatively closed external capital account, policy rate hikes could only contribute to reducing FX pressures through a curbing of aggregate demand. This intermediate objective would be unlikely to be achieved in a timely manner to address a rapid erosion of external buffers, including because of usually long monetary policy lags and the relatively weak transmission of monetary policy in the WAEMU.[10] The BCEAO also considered the fixed quantity variable rate allotment system as "*the normal functioning of its refinancing windows*", consistent the 2010 MPC decision spelling out monetary policy rules, instruments, and procedures for the WAEMU.[11]

14. The BCEAO's decision to cap the volume of its refinancing may also have reflected its concern to avoid acting in conflict with its monetary policy objectives. Due to excess demand for BCEAO refinancing following the return to the FQVR procedure, the average bank refinancing rate quickly rose above the minimum bid rate to reach the ceiling of the monetary policy corridor at end-March (5 percent), thereby implying an effective monetary policy tightening of 300 bp from June 2022 and March 2023. If the FRFA procedure had been maintained, it is possible that the FRFA rate would have needed to be raised significantly above 5 percent to limit bank refinancing at the levels controlled by the BCEAO since the shift to a FQVR procedure. Such a rate hike may have been considered excessive by the BCEAO at a time when headline inflation in the WAEMU was receding and projected to fall back into its target range within a 24-month period. In addition, the BCEAO may have been concerned that a large FRFA hike could also have undermined its secondary objective of supporting sound and sustainable economic growth. Against this background, the MPC decided to raise the BCEAO's benchmark rates only by an additional 25bp in March 2023 before keeping them unchanged in its June 2023 meeting, while banks' demand for BCEAO refinancing continued to significantly exceed the volumes supplied by the BCEAO.



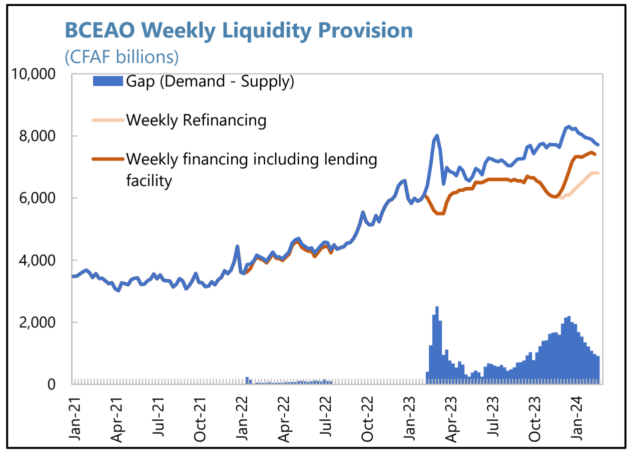
Monetary Policy Rates
(percent)

15. However, such a liquidity tightening undermined the BCEAO's ability to steer its operational targets within the monetary policy rate corridor. The amount of liquidity supplied by the BCEAO under the quantitative allotment method fell significantly short of banks' demand for refinancing at available rates. As a result, the average interest rates in weekly or monthly BCEAO refinancing auctions remained stuck at the ceiling of the monetary policy corridor between late

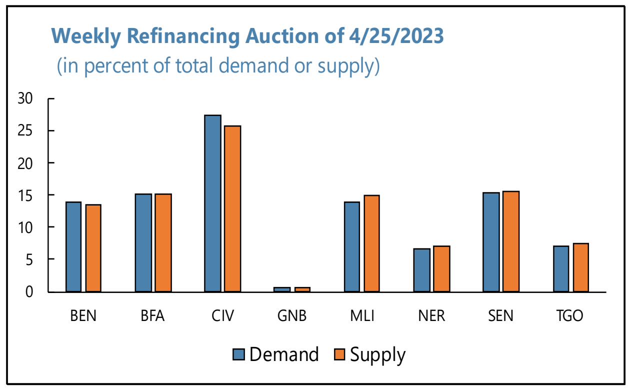
[10] The transmission of monetary policy in the WAEMU is impaired by the shallow and segmented interbank market. In addition, illiquid secondary markets for sovereign debt and small equity markets limit the BCEAO's decisions to affect asset prices. See: Chapter 3 of 2020 WAEMU SIP.

[11] See page 48 of the BCEAO's Quarterly Monetary Policy Report for June 2023.

March 2023 and end-June, while the average interbank rate exceeded the same ceiling. In other words, the BCEAO found it challenging to steer its operational interest rate targets within the monetary policy corridor, as intended under its monetary policy framework.[12]



16. Moreover, financial stability concerns constrained the BCEAO to allocate the fixed amounts of liquidity it provided to banks in some discretionary manner. As indicated earlier (¶16), the amount served to each bid at the marginal rate of a particular FQVR auction shall be prorated, based on the share of the bidder's demand in total bank refinancing demand for that auction. In practice, following the reinstatement of the FQVR allotment procedure in February 2023, the BCEAO departed from a strict application of the prorating method when it considered that this method would imply that some banks would be receiving less refinancing than desirable to ensure their financial stability. Such a practice, which aggravates the uncertainty of banks' access to central bank refinancing, thereby increasing the liquidity premium, becomes evident for example in the differences (even if small) between demand and supply of liquidity at the country level, for BCEAO refinancing auctions when the average and marginal rates are both equal to the maximum rate, as illustrated for the weekly auction of April 25, 2023.

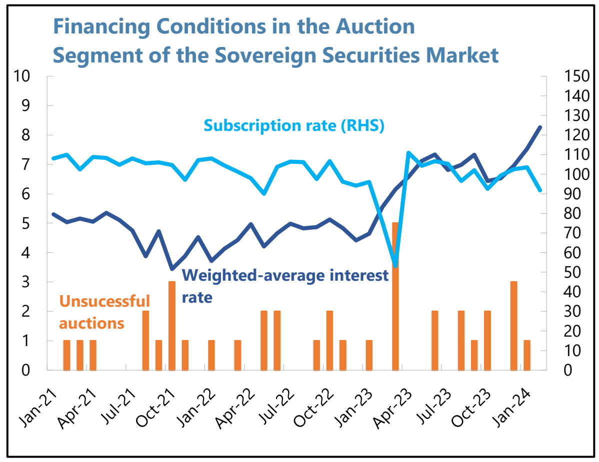


D. Secondary Market Sovereign Debt Purchases by the BCEAO

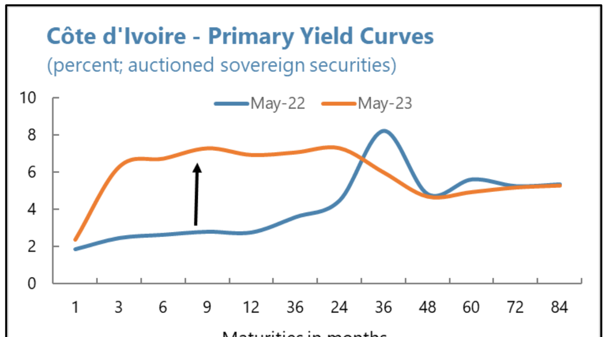
17. The rollover risk and additional interest rate risk on BCEAO refinancing under the FQVR allotment method significantly disrupted the regional sovereign security market. Banks generally buy about 90 percent of WAEMU sovereign securities, which constitute the main assets they use as collateral for BCEAO refinancing. The FQVR allotment method was reintroduced in a relatively sudden fashion in early 2023 and was not therefore well anticipated by banks. In addition, this policy shift initially resulted in a contraction of banks' access to BCEAO refinancing while they experienced higher liquidity needs mainly due to unfavorable balance of payment developments. In such circumstances, the subscription rate (defined as the amount raised as a share of the financing sought by WAEMU sovereign issuers) on the auction segment of the

[12] A similar situation occurred several times (over the periods February-March 2017, November 2017-May 2018, and November 2018-February 2019) when the BCEAO operated FQVR before the shift to FRFA in March 2020.

market initially plunged from near 100 percent to about 50 percent in March 2023 and five auctions were postponed or cancelled. The overall amount of financing raised through sovereign security auctions thus fell significantly, while the average yield rose by 150 bp in February-March 2023 to reach 6.2 percent and the average maturity was more than halved to 13.1 months.

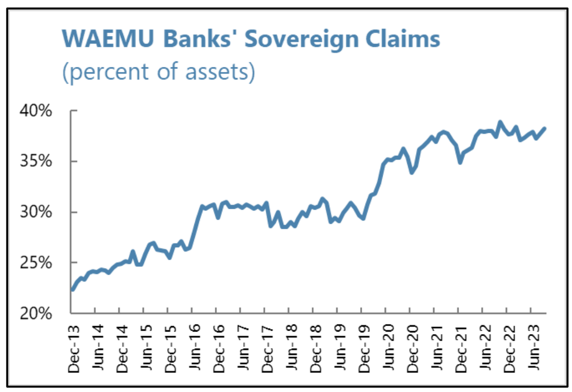


17. Financial conditions on the regional sovereign security market further tightened in the second quarter of 2023 at the shorter end of the yield curve. The average yields for issuances on the auction segment of the market reached 7.3 percent by June. This increase in yields was particularly pronounced for maturities between 3 months and 3 years, causing an inversion of the primary yield curve, in particular for Côte d'Ivoire which accounts for more than 40 percent of the stock of sovereign securities issued in the WAEMU.



Source: UMOA-Titres

18. Banks became reluctant to raise their sovereign exposure which had increased substantially since the Covid shock. In the context of accommodative macroeconomic policies initiated in response to the Covid pandemic, WAEMU banks' sovereign claims as a share of their total assets rose from 29 percent at end-2019 to 38 percent at end-2022. More than four fifths of WAEMU banks' sovereign exposures take the form of securities, of which about two-thirds were issued at relatively low yields and increasing tenors when banks could use them as collateral for unlimited central bank refinancing at a fixed rate under FRFA. While sovereign assets were quite lucrative in the pandemic period of low refinancing costs, banks' sovereign security portfolio became increasingly burdensome in the context of rising refinancing costs and lower deposit growth, on the back of a deteriorating structural liquidity position. This impacted the banking sector's willingness to continue increase or even maintain its sovereign exposure, which—for some banks—was already approaching internal limits.[13] The lower bank appetite for sovereign



[13] There is no binding prudential limit on banks' sovereign exposures, but banks have internal limits as maximum shares of their capital, deposits, or assets. These limits, in some cases, may be negotiated with their parent company operating in other jurisdictions where WAEMU sovereign exposures do not carry a zero-risk weight.

risk raised concerns about some member-States' ability to cover their funding needs, including for debt rollover.

19. The appetite of banks for additional sovereign risks was not significantly affected by potential valuation losses stemming from widening security yields. Consistent with Basle principles, WAEMU's accounting rules require banks to record securities held for trading purposes ("*titres de transaction*") at their current market value at the end of each accounting period.[14] The market value of sovereign securities initially issued at relatively low yields under FRFA, and held for trading purposes, declined substantially as market conditions tightened significantly in 2023, implying potential losses for banks holding such securities. The adverse impact on such losses on the willingness of the banking sector to increase its sovereign exposure was however marginal as banks mostly follow a buy and hold strategy when investing in sovereign securities, with less than 1 percent of their security portfolio recorded as for trading purposes.

20. The BCEAO undertook an unprecedented program to purchase sovereign securities from the regional banking system to address this funding bottleneck. On June 27, 2023, the BCEAO announced its intention to purchase from banks CFAF 1 trillion of sovereign securities previously issued on the auction segment of the regional financial market and with residual maturities ranging between 3 months and 3 years.[15] A similar set of secondary market security purchases was announced on September 21, for an amount of CFAF 933 billion. These series of secondary debt purchases took place through competitive tenders that closed on June 30 and September 26 respectively, with the maturity of securities thus bought by the BCEAO averaging around 2 years (21 and 25 months respectively).[16]

21. The June and September 2023 secondary debt purchases by the BCEAO from banks were accompanied by primary issuances of similar amounts. Concurrently to the BCEAO debt purchases, *UMOA-Titres*, the regional agency managing the auction segment of the regional sovereign security market,[17] organized simultaneous primary issuances for 12-month T-bills and sovereign bonds with maturities of 3 and 5 years, with the amounts of financing sought by WAEMU sovereigns adding up to the overall volumes of aforementioned secondary debt purchases by the BCEAO.[18] These primary issuances were well received by banks, whose bids were twice the amounts

[14] BCEAO – *Instruction No 029-11-2016 relative à la comptabilisation et l'évaluation des titres appartenant à des établissements de crédit*.

[15] WAEMU sovereign bonds issued through syndication were not eligible to this secondary market operation.

[16] There is no information on prices or yields at which these secondary market debt purchases took place, but presumably conditions were attractive to banks, as transactions were voluntary.

[17] UMOA-Titres is a regional WAEMU institution that was created by the Governor of the BCEAO in 2013. The BCEAO acts as the central depositor for sovereign securities issued on the auction segment of the WAEMU's financial market managed by UMOA-Titres, and the BCEAO Governor presides the Board of UMOA-Titres.

[18] The amount of financing sought by each sovereign was the same for the June and September primary issues, except for Niger, which was not allowed to participate in the latter, because of the financial sanctions imposed by ECOWAS and the WAEMU following the military takeover of July 26, 2023, in that country. The share of each WAEMU

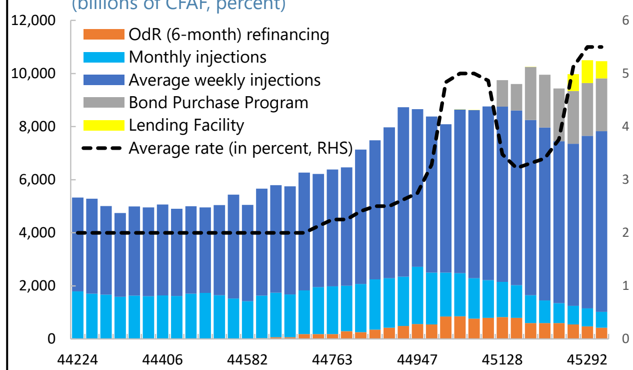
(continued)

sought. Accepted bids exceeded amounts sought by 10 percent for all sovereign issuers [19] for a total of CFAF 2.1 trillion, with an average maturity slightly above 3 years (38.7 months) and an average yield of 7.3 percent. Thus, the BCEAO's government debt purchases did not translate in a significant narrowing of sovereign yields.[20] However, including those connected to the BCEAO's government debt purchases, monthly primary issuances of sovereign securities on the auction segment of the regional financial market reached record levels of CFAF 1.7 trillion in June 2023 and CFAF 1.4 trillion in September 2023.

22. The BCEAO's sovereign security purchases initially amounted to a significant monetary loosening. The BCEAO's CFAF 1.9 trillion public debt purchases injected 22 percent of additional bank liquidity, relative to the outstanding amount of CFAF 8.8 trillion provided by the BCEAO through its refinancing windows at end-June 2023. Moreover, the average residual maturity of sovereign securities purchased by the BCEAO (about 2 years) was much longer than the average maturity of the refinancing provided through its refinancing windows (about 2 weeks).

23. The additional liquidity injected through the BCEAO's debt purchases was exclusively used for banks' sovereign financing. The additional lending capacity thus provided to banks was all used up to invest back into the primary sovereign security issuances organized concomitantly by *UMOA-Titres*.[21] Such events highlight the pressure of large fiscal deficits (and the associated sovereign financing needs) on the regional financial system and the challenge to preserve its well-functioning operations and stability via liquidity injections that run contrary to the monetary policy tightening cycle that was otherwise initiated by the BCEAO to contain FX reserve losses. As such, they can put additional pressures on external reserves, if not sterilized in a timely fashion by the BCEAO.

BCEAO Liquidity Injections
(billions of CFAF, percent)



sovereign in the overall amounts to be issued was broadly in line with the country's share in the stock outstanding of auctioned securities with residual maturities up to 3 years. The overall amount auctioned was calibrated broadly in line with WAEMU sovereigns' gross financing needs for the remainder of 2023.

[19] The maximum allowed under the auction segment of the WAEMU regional market.

[20] When controlled for issuers and tenors, the components of this average yield were only slightly lower than yields observed in the weeks prior and after the BCEAO's debt purchase operations (except for Malian securities, for which the yield compression was more significant).

[21] The amounts of securities from each sovereign purchased by the BCEAO turned out very close to those sought through the concomitant primary issuances on the auction segment of the regional market.

Table 1. WAEMU: Auctioned Sovereign Securities—BCEAO Purchases and Concomitant Primary Issuances
(end-June and end-September 2023)

	Sovereign Security Auctions					BCEAO Purchases	
	Amounts in CFAF bln			Avg. Maturity	Avg. Yield	Amounts	Res. Maturity
	Sought	Offered	Raised	(months)	(percent)	CFAF bln	Avg (months)
BEN	160	434	173	39.5	6.7	161	n.a.
BFA	260	346	277	34.4	7.6	253	n.a.
CIV	590	1129	649	39.6	7	594	n.a.
GNB	24	99	26	42.9	8.1	24	n.a.
MLI	222	412	244	43	7.7	222	n.a.
NER	70	121	77.4	25.4	7.3	71	n.a.
SEN	410	955	451	38.8	7.4	415	n.a.
TGO	200	384	220.4	39.7	7.5	200	n.a.
WAEMU	1,936	3,880	2,118	38.7	7.3	1,939	22.9

Source: BCEAO and UMOA-Titres

24. **The additional bank liquidity injected through the BCEAO's sovereign debt purchases helped bring temporarily back its operational targets within the monetary policy corridor.** The weighted average rate on the BCEAO's weekly refinancing window had remained stuck at the top of the policy corridor (5 percent) since end-March 2023. This rate first declined to 4.3 percent on June 27, upon the announcement by the BCEAO of its first set of secondary market purchases of sovereign securities. The average weekly BCEAO refinancing rate trended further down in July and remained around 20 bp above the minimum bid rate, while the average weekly interbank rate remained below the BCEAO's marginal lending rate, from early August to early November 2023.

25. **A substantial part of the additional liquidity injections was gradually mopped up through a gradual reduction of BCEAO refinancing in the second half of 2023.** The BCEAO started to reduce the amount of liquidity provided on its regular refinancing windows from July 2023 onwards, thereby gradually sterilizing part of the liquidity injections related to its sovereign debt purchases. From end-June to end-October 2023, the BCEAO had lowered the amount of bank liquidity provided to banks through its refinancing windows by CFAF 1.4 trillion, thus offsetting more than ¾ of the liquidity injected through its June and September secondary market purchases of sovereign securities.[22] An additional CFAF 85 billion of liquidity was withdrawn in the second half of 2023 as some of the sovereign securities purchased by the BCEAO in June and September matured.

26. **The lowering of BCEAO's refinancing while banks' structural liquidity position further worsened in the last quarter led to the renewed money market tensions and another reversal of the BCEAO's liquidity management stance toward year-end.** The BCEAO's gradual reduction

[22] The BCEAO's sovereign security purchases in 2023 differed from an also unprecedented T-Bill purchase operation by Morocco's Bank Al-Maghrib (BAM) in January 2023 which was almost immediately offset by a broadly equivalent reduction of other forms of liquidity injections, including repos and other refinancing facilities under a FRFA allotment procedure. See: BAM's Press Release (*Communiqué*) of January 12, 2023, and IMF Country Report No. 23/142 on Morocco's Request for an Arrangement under the Flexible Credit Line (April 2023).

of its refinancing volumes to help maintain its tighter monetary stance necessary to limit the erosion of its external reserves was accompanied by a further deterioration of banks' structural liquidity position in the last quarter to reach CFAF 6.8 billion at end-2023, up from CFAF 5.5 billion at end-2022. As a result, the average weekly refinancing rate started to rise again away from the minimum bid rate in November to reach 4.7 percent on December 5, only 30 bp lower than the top of the policy corridor. Although the MPC decided, on December 6, 2023, to raise the floor and the ceiling of the monetary policy corridor by another 25 bp to 3.50 percent and 5.50 percent respectively, such a rake hike proved insufficient to prevent the average BCEAO refinancing rate from being again stuck at the top of the new policy corridor. Against this background, the interbank rate also rose sharply to finish the year about 50 bps above the ceiling of the monetary policy corridor, notwithstanding an unprecedented liquidity injection of CFAF 1 trillion by the BCEAO through its emergency lending facility in the face of renewed banks' reluctance to rollover sovereign debt.

27. If financial stability concerns make them unavoidable in the future, further debt purchases by the BCEAO should not undermine its monetary policy stance. Such secondary market purchases should be undertaken as plain open market operations and therefore not be so closely linked to new sovereign bank financing, as was the case in June and September 2023. It would also be important that their impact on overall liquidity be reasonably soon offset by lower bank refinancing on the BCEAO's regular windows, including through higher policy rates, so as to ensure consistency with monetary policy operations and the need to restore external reserve adequacy.

E. Addressing the Need to Restore External Reserve Adequacy

28. External reserves rebounded in December 2023 and January 2024 but could remain below adequate levels in coming months. Gross reserves rose by almost US$1.7 billion in December 2023, to US$15.6 billion, or 3.3 months of prospective imports, on seasonal factors and IMF program disbursements to Benin, Côte d'Ivoire, and Senegal. The issuance of Eurobonds by Côte d'Ivoire contributed to a further rebound of the BCEAO's reserves to US$17.5 billion, or 3.5 months of imports at end January 2024.[23] A successful placement by Benin in early February should likewise help support reserves. In addition, a narrowing of the external current account deficit on the back of fiscal consolidation and the coming on stream of new hydrocarbon exports from Niger and Senegal is projected to further support external reserves in 2024. This baseline projection is however subject to downside risks.

29. The BCEAO should raise policy rates to rebuild external buffers, while ensuring alignment between liquidity management and policy rates. Reserve adequacy is crucial for the stability of the monetary system (as is the inflation objective). The need to tighten liquidity to contain reserve losses while interbank and marginal rates are at the ceiling of the policy corridor

[23] In January 2024 Côte d'Ivoire placed a US$1.1 billion 9-year sustainable bond, at 7.875%, and a US$1.5 billion 13-year conventional bond at 8.50%. In February Benin issued a US$750 million 14-year bond at 8.375%.

suggests a need to raise policy rates, which would better align policy rates and liquidity levels towards monetary policy goals.

30. Enhanced monetary-fiscal policy coordination would help the BCEAO meet its medium-term reserves objectives. In this period of heightened risks and uncertainty it will be essential more than ever to intensify the coordination of national and regional authorities. Careful consideration should be given of the extent to which individual countries financing needs are compatible with the aggregate absorptive capacity of the regional banking system, while, aggregating at the regional level, ensuring that net domestic assets (NDA) are compatible with net foreign assets (NFA) to bring back reserves to an adequate level (see below). This framework is consistent with the BCEAO's current Statutes, which call for maintaining reserves adequacy in addition to price stability and sound and sustainable economic growth.

31. A possible tool to monitor the consistency of national policies with reserve adequacy could be to assess the likely impact of government financing plans on central bank NDA. To the extent the authorities continue to rely on the quantity of liquidity as a policy tool, a baseline path for NDA could be a useful tool for assessing the likely evolution of NFA. It is impossible for the BCEAO to rebuild NFA without ensuring that NDA grows by less than base money. Therefore, establishing a baseline path for NDA over the medium-term and maintaining interest rates consistent with that baseline would be a useful intermediate policy instrument. While more sophisticated calculations can be envisaged, as a first approximation, the baseline path for NDA could be anchored to a projection for underlying base money (currency in circulation and required reserves). This could be assumed to grow in line with historical trends (somewhat faster than nominal GDP, see Annex I). The policy rate would need to be consistent with the NDA path so as to keep the effective rate for refinancing within the policy corridor.

32. A key goal of the NDA baseline would be to inform fiscal authorities about the level of liquidity injection consistent with reserve adequacy, facilitating policy coherence between the BCEAO and member states, and coordination among the national authorities about financing. With many WAEMU banks dependent on BCEAO refinancing, the volume of the BCEAO's liquidity injections is a key determinant of bank lending capacity, including banks' ability to extend government financing. Thus, if the BCEAO regularly presents to national fiscal authorities a baseline path for NDA consistent with its reserve objectives, this could help governments formulates realistic projections on the availability of domestic financing. Internalizing the likely constraints on domestic bank financing, could also help incentivize governments to look for alternative sources of financing, including access to international debt markets in the medium term, as sovereigns would compete less with the private sector for bank financing. It would also help ease fiscal pressure on the regional banking sector if non-bank participation in the regional market were increased. Absent alternative financing sources, limits on NDA growth could impose constraints on bank financing to either the public or private sector, or both, as banks would have to rely more on domestic deposit growth to increase domestic credit. Information on available financing compatible with financial stability and reserve adequacy would also help national authorities to coordinate among themselves of their ability to tap the regional market without placing undue pressure.

33. The feasibility of limiting NDA growth to a pace consistent with central bank reserve objectives depends also on successful fiscal consolidation in the member states and an avoidance of debt creating SFAs. Returning reserves to adequate levels will require a slowdown in the increases in refinancing afforded to commercial banks (and avoidance of new debt purchases), which limits a key traditional avenue for governments to secure domestic financing. Fiscal discipline on the part of the WAEMU member states is thus an essential element to a successful rebuilding of BCEAO reserves.

Annex I. Potential Operationalization of a Baseline Path for Net Domestic Assets

1. **The BCEAO medium-term reserves objectives can anchor a realistic assessment of the BCEAO's ability to support domestic financing (given its reserve constraint) in a broader WAEMU macroeconomic framework.** The fixed exchange imposes constraints on the BCEAO that may require monetary tightening even in the absence of excess inflation if there are pressures on reserves. As discussed in the main text, however, reserve adequacy cannot be ensured by monetary policy alone, but it requires monetary-fiscal coordination. This Annex describes how establishing a baseline path for central bank NDA that is consistent with central bank reserves objectives could promote this coordination by informing national policymakers on the constraints to their domestic financing.

2. **Given the BCEAO's policy choice to set fixed quantities of refinancing, NDA growth is a key policy variable to achieve a desired medium-term path for NFA.** As discussed in the main text, NFA can only increase if NDA grows more slowly than base money. While the relationship between the three balance sheet items is dynamic, NDA growth represents the net quantity of liquidity the BCEAO injects into the economy via the banking system. Given projections for underlying base money, aiming for an objective in terms of NDA growth is essential to achieve the desired path for reserves. Influencing NDA growth relies on all the tools the BCEAO is authorized by statute to manage liquidity: refinancing, outright bond purchases, or direct loans. As discussed in the main text, the BCEAO would need to keep interest rates consistent with the growth in NDA, with slower growth in central bank liquidity implying higher rates.

3. **Projecting the liability side of the BCEAO balance sheet relies on assumptions about the growth of underlying base money.** The BCEAO's underlying liabilities, currency in circulation and required reserves, key components of base money[1], have grown at a relatively consistent pace in recent decades. Currency in circulation should be expected to grow somewhat faster than nominal GDP in a region like WAEMU, as with economic development more people will be in a condition to hold cash. Banks' required reserves should also grow faster than nominal GDP as they are essentially a fixed fraction of their clients' deposits, which under financial deepening also grow faster than GDP. Over the period from 2013-2022, nominal GDP grew by 90 percent and currency in circulation and required reserves grew by 136 percent and 245 percent, respectively. The concept of "underlying base money" excludes excess reserves, as the latter are more directly influenced by central bank policy (see discussion below).

4. **A simple example can help illustrate the potential impact of an increase of the BCEAO's net domestic assets on its external reserves.** The sum of net foreign assets and net domestic assets of the central bank must equal base money (T0 in the table below). If the central

[1] Base money is defined as currency in circulation (cash held by the public and in banks' vaults) and non-government deposits at the BCEAO, including banks' required and excess reserves as well as deposits of non-bank financial institutions.

bank injects liquidity through bank refinancing or purchases government debt, its net domestic assets increase (through higher net claims to the banking system or net credit to the government, respectively). There need be no immediate impact on FX reserves, as the central bank would credit the accounts of the banks receiving the funds, increasing excess reserves and thus base money (T1). Over time however, these excess reserves would likely be drawn down and some portion exchanged for FX, depleting reserves (T2, if for example banks demand FX to meet client import needs, or if banks use the excess reserves to purchase new government debt, and the government uses this financing to pay for imports). This relationship is likely to be particularly close under conditions of external deficit when a liquidity injection (increase in NDA) would briefly increase the monetary base but would fall again as excess reserves finance imports and thus drain NFA.

Table 1. WAEMU: Impact of Increased Financing to the Banking System on the Balance Sheet of the Central Bank 1/

T_0	NFA	+	NDA	=	MB
T_1	NFA ↔	+	NDA ↑	=	MB ↑
T_2	NFA ↓	+	NDA ↔	=	MB ↓

1/ Assumes an increase in refinancing to banks (NDA ↑), which at first generates an increase in excess reserves (MB ↑); the portion of the drawdown of this excess that is spent on imports leads to a decline on NFA and MB.

5. **The baseline path for NDA would inform fiscal policymakers about the external constraints of the monetary authorities and would incentivize cooperation between authorities.** The projected growth of total NDA, combined with assumptions about deposit growth and private sector credit, can be used to estimate the sustainable capacity of the WAEMU banking system to finance governments. Aggregating the eight WAEMU members budgetary projections could give a sense of the realism of this path for NDA given member state domestic financing assumptions, as well as possible risks if external financing or consolidation underperforms. The exercise would also be an occasion to project the medium-term path of extra-WAEMU imports as a key denominator in reserve adequacy. Because regional financing is pooled to a large extent, this would also promote policy coherence among the member states. Member states would receive greater clarity on the potential impact of policy slippages, by themselves and by others, and be incentivized to pursue alternative sources of financing. Overall, this simple framework will make it more explicit that securing external stability is a joint responsibility of the monetary and fiscal authorities.

KEY BANKING SYSTEM RISKS IN THE WAEMU[1]

The WAEMU's financial system is dominated by banks. The gradual alignment of prudential regulations on Basel II/III standards since 2018, as well as improvements in banking supervision and macroprudential surveillance, have contributed to the WAEMU's banking system's resilience to recent global and regional shocks. However, while cyclical vulnerabilities have been contained, bank credit portfolios remain highly concentrated, and their exposure to sovereign risks has grown substantially in recent years, together with liquidity risks. Further reforms building on those recently implemented in line with recommendations from the 2022 Financial Sector Assessment Program (FSAP), including to enhance macroprudential policy's effectiveness and banking supervision frameworks, will help address such vulnerabilities.

A. Introduction

1. The WAEMU's financial system is dominated by banks, which had total assets of CFAF 64 trillion—or 58 percent of regional GDP—at end-2022. The banking sector accounts for around 72 percent of the financial system (based on 2020 data), while other financial institutions (microfinance, insurance, and pension funds, as well as securities custodians) account for around 28 percent of the financial system's assets. Of the 155 credit institutions operating in the WAEMU at end-2022, 132 were banks. Their assets' geographic concentration is broadly in line with that of economic activity, with over half held by credit institutions in the WAEMU two largest economies, Côte d'Ivoire and Senegal (34 percent and 19 percent, respectively). Regional banking groups (34) have emerged as key players, holding nearly 85 percent of banking sector assets. The other players are smaller unaffiliated domestic private and public banks, accounting for four-fifths and one-fifth of banks' capital respectively. The 13 banks which are majority publicly owned (with public ownership over 50 percent of total capital), hold 10 percent of banking assets and 13 percent of banking capital in the WAEMU.

2. Banks follow a traditional business model. At end-2022, about 58 percent of banking assets consisted of mostly short to medium-term loans to non-financial corporations, 35 percent of securities (mostly issued by the WAEMU sovereigns and held to maturity), and 7 percent of other assets. These assets are funded mainly by short-term deposits exhibiting a high degree of concentration, as well as recourse to refinancing from the regional central bank (BCEAO) (Figure 5). The banking system is segmented between banks with excess liquidity and no need for BCEAO refinancing on the one hand, and banks with a structural liquidity deficit implying a significant reliance on BCEAO's refinancing. The interbank market remains shallow and concentrated on transactions among members of banking groups.

3. Substantial efforts have been made to deepen the macroprudential surveillance framework and strengthen prudential supervision including through a new regional banking

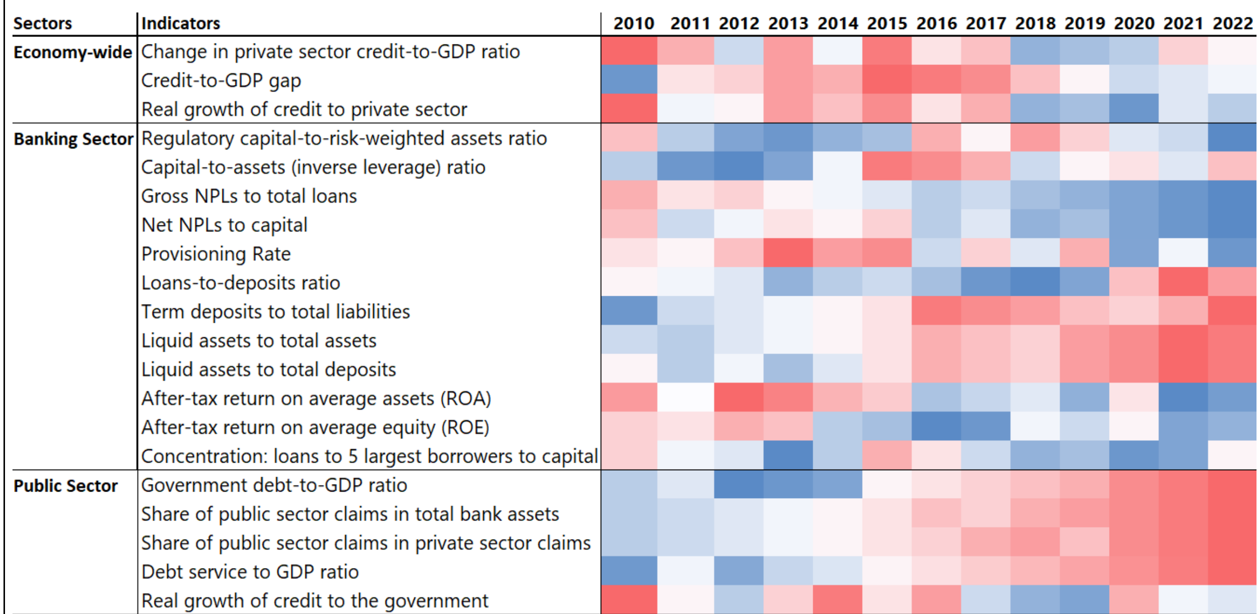
[1] Prepared by Knarik Ayvazyan, with helpful comments and inputs from Luca Antonio Ricci, Alain Feler, Annalisa Fedelino, Ljubica Dordevic, Lawrence Norton, and the staff of the BCEAO.

law. These include closely monitoring a wide range of macroprudential indicators, developing of frameworks for identifying systemically important banking institutions (SIBs), and banking sector stress testing. The new prudential framework applicable to banks, in force since 2018, introduced important macroprudential instruments related to capital surcharges—countercyclical capital buffer (CCyB), capital conservation buffer, and systemic capital buffer—and borrower-based measures for real estate lending (see Annex 1, Table 1). The transition to Basel II/III was completed in 2023, except for introducing liquidity requirements and Pillar II capital and liquidity surcharges. The BCEAO's recent decision to double the minimum share capital of banks to CFAF 20 billion will help promote the banking system's resilience and contribute to financing economic development.

4. Regional laws were adopted by the WAEMU Council of Ministers in 2023 to strengthen bank regulation and supervision and amend the legal basis for the Basel II/III reforms, mainly in line with FSAP recommendations. The new 2023 banking law extended the scope of an overall framework for the practice and supervision of banking activities, including payment institutions and electronic money institutions, bank holding companies and financial companies, while strengthening approval procedures and conditions for banking activity. The new banking law designates the responsible macroprudential authority, outlining its status and power. Additionally, the law now incorporates Islamic finance and macroprudential supervision, along with supervision of banking groups on a consolidated basis. It has also outlined arrangements for addressing financial institutions in difficulty, focusing on early intervention, resolution, and liquidation measures. Progress was made in supporting the banking supervisor’s independence and resources through amendments to the Annex to the Convention governing the Banking Commission.

5. Overall, the banking system remained resilient in the face of economic growth and inflation shocks. The heatmap of the financial system confirms that systemic vulnerability indicators are generally low (Figure 1). However, pockets of weakness persist, and the banking sector remains subject to credit, concentration, liquidity, and sovereign risks, especially in light of the rising sovereign bank-nexus. The effective implementation of recent reforms in line with recommendations from the 2022 FSAP, including to enhance macroprudential policy’s effectiveness and banking supervision frameworks, should help address such vulnerabilities.

Figure 1. Systemic Vulnerability Heatmap, 2010–22



Sources: BCEAO; and IMF staff calculations.
Note: Darker red indicates higher vulnerability, while darker blue signifies lower vulnerability compared to each indicator's historical performance starting from 2005. The calculation is based on the relative rank of a value within each indicator's performance over time, expressed as a percentile.

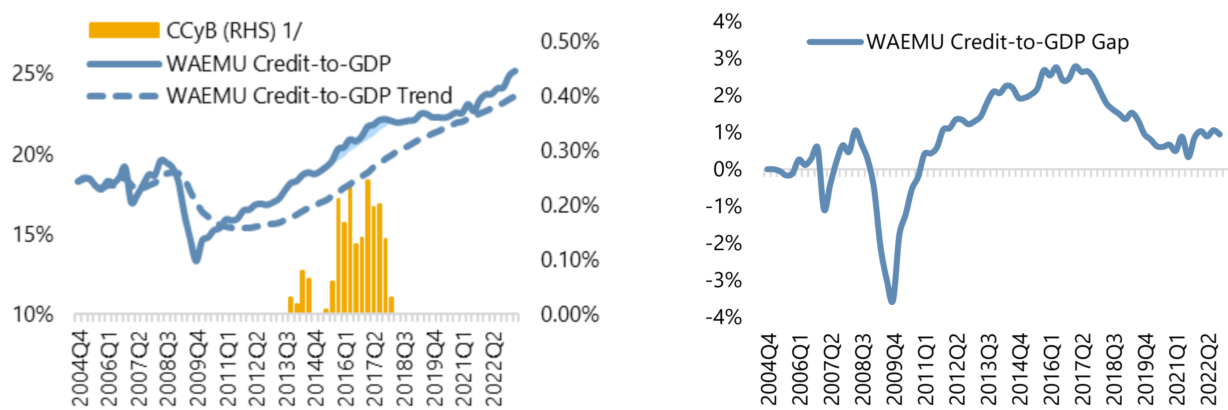
B. Credit Risks

6. Bank credit growth to the private sector remained high in recent years and slowed down in 2023. It grew by 14.2 and 10.3 percent in 2022 and 2023, respectively. The credit gap (the deviation of the credit-to-GDP ratio from its estimated long-term trend) for the union stabilized at around a modest 1 percent in 2022 (Figure 2, reporting the credit gap based on the Bank for International Settlements standard (BIS) credit-to-GDP gap estimates, which employes a Hodrick-Prescott filter technique, with one-sided filter with λ=400,000). The credit gap was negative in Benin, Niger, and Togo, though not particularly large.[2] Overall, bank lending to the private sector grew faster than the economy, in line with the need for financial deepening. However, rapid expansion of lending can be a source of credit risk accumulation, notably due to weak economic diversification, asymmetries of information on debtors, and structural constraints on the business environment.

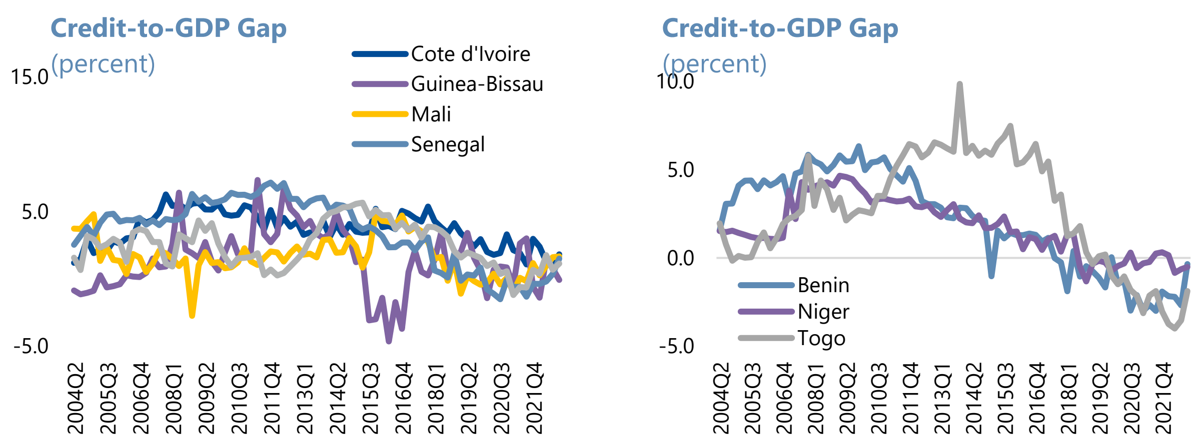
[2] While a widely employed standard, the Bank for International Settlements (BIS) credit-to-GDP gap methodology has some shortcomings and should be used cautiously. The shortcomings are associated with the length of available variables and existing structural breaks (BIS Quarterly Review, March 2014), the "starting point problem" (Drehmann and Tsatsaronis 2014), inefficiency in real-time (BIS Quarterly Review, March 2014; Edge and Meisenzahl 2011; Orphanides and van Norden 2002), strong dependence on the choice of certain parameters, and the weak link of the statistical filters to economic theory. The BCEAO also uses the methodology offered by Castro, Estrada and Martinez (2016).

Figure 2. Credit-to-GDP Gap Estimates

The WAEMU's credit-to-GDP ratio remains slightly above its trend level



Credit cycles are heterogeneous across the region and still negative in Benin, Niger, and Togo.



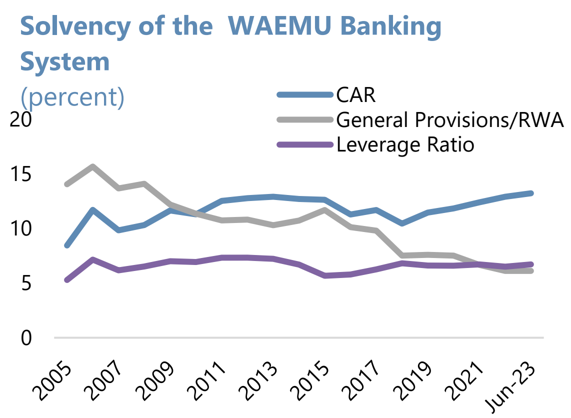
Sources: BCEAO; IMF Systemic Risk Tracker and IMF staff calculations.
Note: Credit-to-GDP trend is determined using a Hodrick-Prescott one-sided filter with λ=400,000. The shaded area represents the part of the credit-to-GDP ratio that exceeds its trend level by more than 2 percentage points.
1/ CCyB: Countercyclical capital buffer rate, as percentage of risk weighted assets.

7. **Bank's asset quality in the WAEMU has improved significantly in recent years but remains below that in comparator Sub-Saharan African (SSA) countries.** The aggregate non-performing loans (NPLs) ratio has been declining slowly, in line with robust economic growth (except in 2020 due to the pandemic), and the ratio remains relatively high, both in absolute terms and in comparison to peers (Figure 3 and 4). With an average real GDP growth of 5.3 percent and private sector credit growth of 12.7 percent per year during 2010-2022, the gross NPL ratio for WAEMU banks more than halved since 2010 to 8.4 percent in 2022. The ratio slightly increased by June 2023 to 8.7 percent, and it was notably elevated in Niger (16.1 percent) and also above the

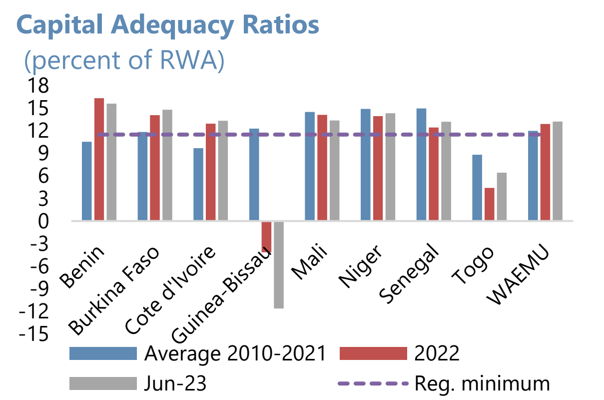
WAEMU average in Guinea-Bissau, Mali, and Senegal. Bank loan loss provisioning rates have improved over the past decade (from 63.7 percent in 2010 to 68 percent in 2022), but the cross-country dispersion is significant (ranging from 39.6 percent in Niger to 80.2 percent in Burkina Faso).

Figure 3. Banks' Solvency Ratios

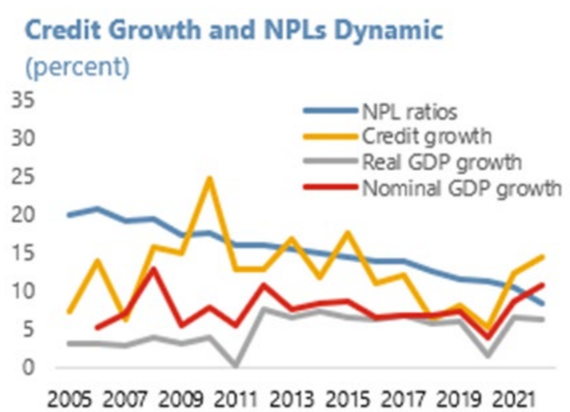
Under Basel II/III, the banking system has strengthened its capital buffers…

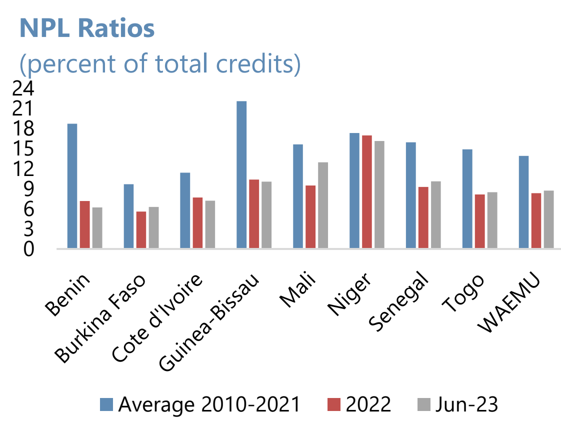


… but a few banks with negative capital continue to weigh on the average capital adequacy.



The NPL ratio has declined slowly, despite the robust economic growth in the years prior to the pandemic.





Sources: BCEAO; and IMF staff calculations.

8. **While national banking systems' capital adequacy ratios have increased in recent years, some banks (mainly state-owned) still need to be recapitalized.** The average bank capital adequacy ratio (CAR) for the WAEMU is among the lowest in Sub-Saharan Africa (SSA), standing at around 13 percent at the end of 2022 (Figure 4). However, it exceeds the regulatory minimum of 11.25 percent and has trended upward since 2018 (Figure 3), driven by the transition to Basel II/III standards, improvements in banks' profitability, and the pandemic-linked suspension of dividend payouts. This overall trend masks significant disparities across countries, with Guinea-Bissau having negative capital (CAR at -11.6 percent in June 2023) and Togo having solvency ratios below the regulatory minimum (CAR at 6.4 percent in June 2023). Profitability also lags that of peers (Figure 4),

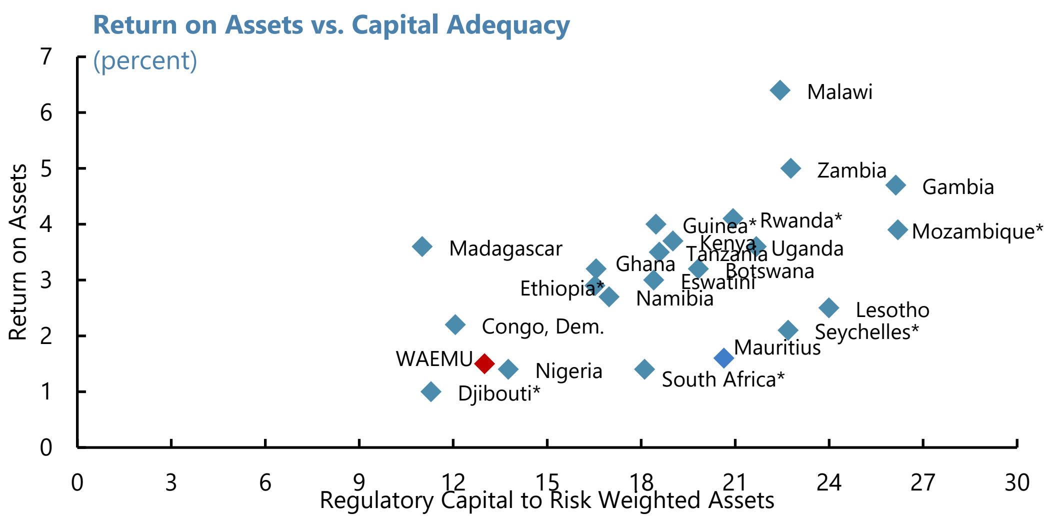
with a return on equity (ROA) persistently around 1.2–1.5 percent in recent years, albeit increasing. The COVID-19 pandemic has had no significant effect on the system's profitability.

C. Concentration Risks

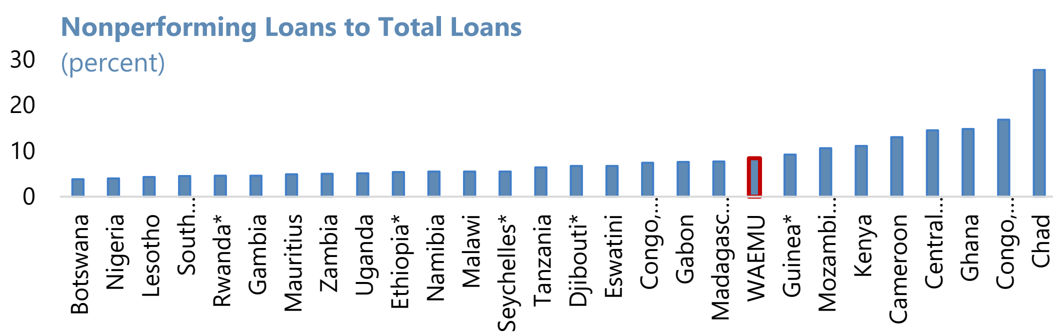
9. **Banking assets have a strong sectoral concentration in the WAEMU (Figure 5).** Banks' credit portfolios mostly consist of exposures to retail, wholesale trade, restaurants and hotels; manufacturing; and other services sectors (63.5 percent of the total). Despite the importance of agricultural production in some member countries (notably Burkina Faso and Côte d'Ivoire), agricultural lending is limited, at 3 percent of bank loans to the private sector.

Figure 4. Financial Soundness Indicators, 2022

WAEMU banks' capital ratios and profitability compare unfavorably within the SSA region.



Credit risk remains relatively high in WAEMU banks.



Sources: BCEAO; and IMF Financial Soundness Indicator (FSI) Database.

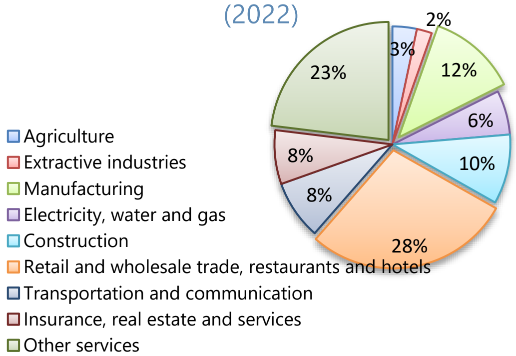
Note: * the data is available for 2021.

The database is based on IMF FSIs methodology, which ensures cross-country comparability and reflects advances in the regulatory framework, most prominently embodied in the Basel III reform and revised International Financial Reporting Standards (IFRS) and consistent with current Basel Committee guidance.

Figure 5. Concentration of Bank Assets and Liabilities

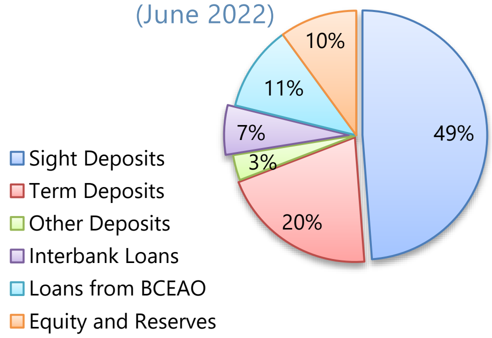
The banks' loan portfolio exhibits a high degree of sectoral concentration.

Structure of Loan Portfolio
(2022)



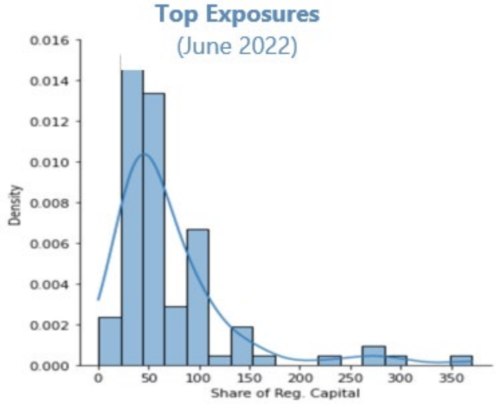
Banks' financing stems mostly from customer deposits and BCEAO refinancing.

Structure of Bank Liabilities
(June 2022)



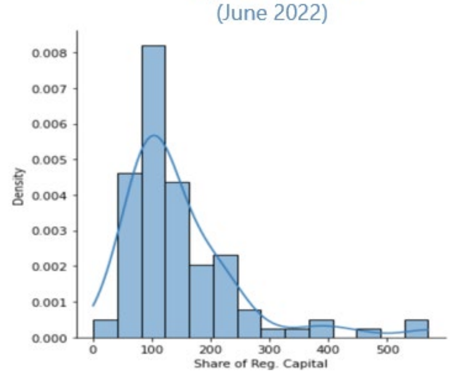
Despite strong heterogeneity across banks, their largest exposures to private borrowers account for a substantial share of regulatory capital…

Top Exposures
(June 2022)



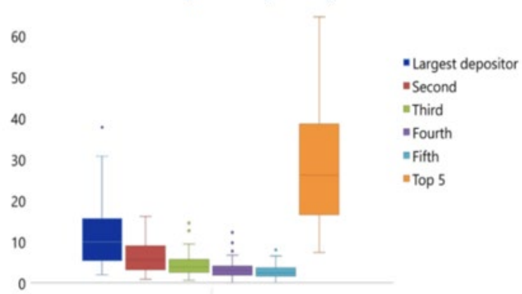
…and their top 3 exposures often exceeding their total regulatory capital.

Top 3 Exposures
(June 2022)



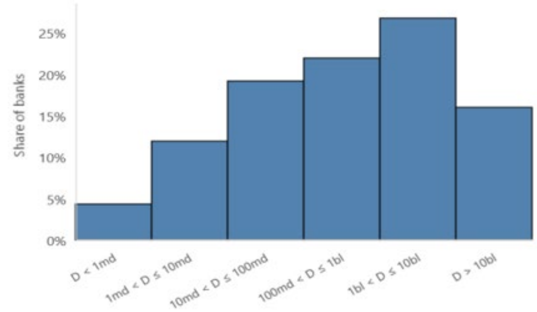
The deposit base is concentrated…

Share of Top 5 Depositors in Total Deposits
(percent, 2021)



…with a distribution skewed towards large amounts.

Range of Deposits by Size
(CFAF millions and billions, 2021)



Sources: BCEAO; and IMF staff calculations.
Note: Due to data availability, the sample sizes vary. Specifically, middle left and right = 96 banks, bottom left = 57 banks, bottom right = 87 banks.

10. Banks' exposures to private borrowers have been traditionally large in the WAEMU. The heatmap of systemic vulnerability indicators (Figure 1) shows that the credit concentration of the five largest borrowers to capital has risen since the pandemic. Figure 5 presents the distribution of the largest exposure (middle left panel) and the three largest exposures (middle right panel) as a share of regulatory capital. The median concentration of the largest exposures represents about 49 percent of capital, while nearly 65 percent of banks (62 out of 96) have their three largest exposures exceeding all their capital. Thus, banks do not comply with the regulatory large exposure limit of 35 percent of Tier 1 capital, which may pose a risk to the stability of the banking system.

11. Bank funding comes mainly from customers' deposits, also presenting significant concentration (Figure 5). The majority of bank funding consists of sight deposits. Large corporations hold a substantial 40 percent share of the deposit base, followed by households (37 percent), and the public sector (12 percent). The deposit base exhibits limited diversification: based on 2021 data, the five largest depositors account for 25 percent of deposits and the largest depositor accounts for an average of 10 percent of total deposits. A high concentration in the depositor base poses a risk of withdrawal by major depositors.

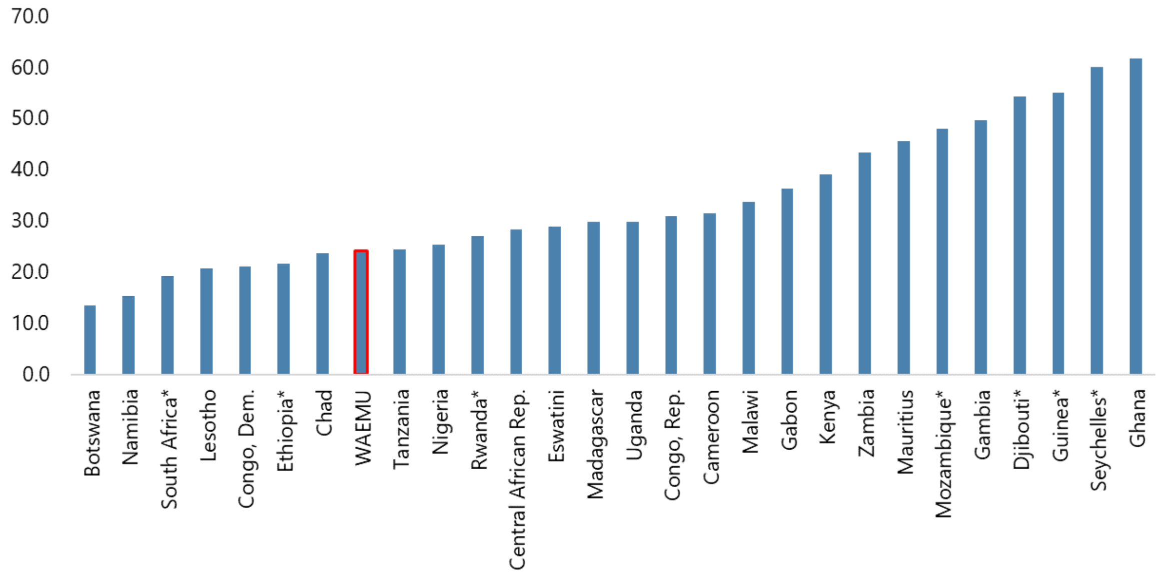
D. Liquidity Risks

12. The declining liquidity buffers in the banking sector in the context of an underdeveloped interbank market are exacerbating liquidity risks (Figure 6). Banks' liquid assets have been declining in recent years. At end-2022, the sum of liquid assets accounted for about 24 percent of total assets, though with heterogeneity across the region (ranging from 12.3 percent in Benin to 31.6 percent in Mali). The ratio appears relatively modest compared to SSA peers. Apart from bank reserves at the BCEAO, other bank assets have either zero market liquidity (e.g., non-marketable debt) or limited liquidity (e.g., government securities). Banks have been increasingly relying on BCEAO refinancing and several banks persistently depend on this form of funding. The illiquidity of the secondary markets for government securities and the high concentration of deposits hampers banks' ability to mitigate liquidity shocks and could exacerbate liquidity risks.

Figure 6. Banks' Liquidity Buffers

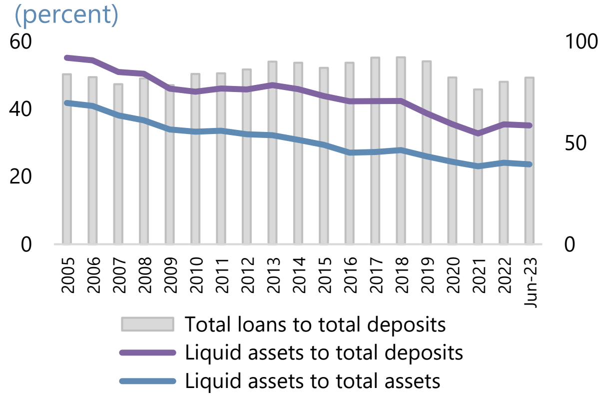
Banks' liquid assets constitute a relatively small portion of the total assets.

Liquid Assets to Total Assets in WAEMU and Selected Sub-Saharan African Countries
(percent)



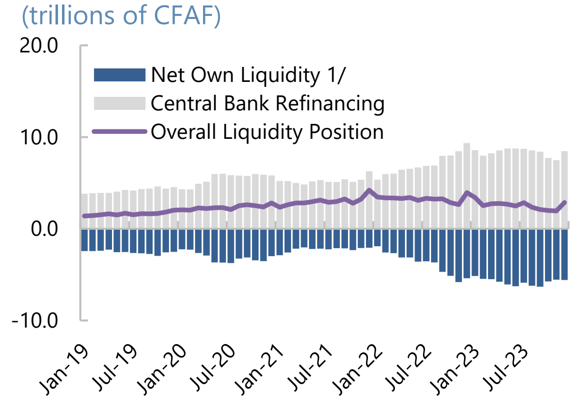
The liquid asset positions of banks have been decreasing in recent years.

Banks' Liquid Assets
(percent)



Banks are increasingly dependent on central bank refinancing.

Commercial Bank Liquidity Position
(trillions of CFAF)



Sources: BCEAO; and IMF Financial Soundness Indicator (IFS) Database.
Note: * the data is available for 2021.
The database is based on IMF FSIs methodology, which ensures cross-country comparability and reflects advances in the regulatory framework, most prominently embodied in the Basel III reform and revised International Financial Reporting Standards (IFRS) and consistent with current Basel Committee guidance.
1/ Net own liquidity refers to banks' own financing sources (deposits and reserves) minus uses (domestic credit).

E. Interest Rate Risks

13. In general, due to the structure of their business models, banks' net income and asset valuation could be adversely impacted by a high-interest rate environment. Increasing interest rates represent a challenge for banks. When policy rates rise, higher short-term rates pass through rapidly to funding costs in wholesale-funded banks, and banks whose expenses are more sensitive than their income to increasing short-term rates stand to lose net interest income. At the same time, the pass-through to higher income could be slow because of fixed-rate loans that take time to reprice or replace. However, some banks may benefit from earning higher interest from borrowers while keeping deposit rates low. On the balance sheet side, loan losses may also increase, as consumers and businesses face extended periods of higher borrowing costs—especially if they lose jobs or business revenues. Banks, in addition to loans, invest in bonds and other debt securities, whose value decreases with rising interest rates. In the event of sudden deposit withdrawals or other funding pressures, banks may be compelled to sell these assets at a loss.

14. With respect to WAEMU, banks' balance sheet exposure to interest rate risk has increased due to the rise of the share of government securities on their balance sheets, whose maturities tend to be longer than banks' funding. The higher refinancing costs will impact net interest margins as the yield on assets is expected to rise gradually, given the relatively long duration of government securities—typically held to maturity. Additionally, due to decreased access to low-cost funding, banks must intensify competition for customer deposits, pushing deposit costs higher. The tightening of financial conditions and the deepening of the bank-sovereign nexus could adversely affect banks, if high inflation expectations and declining foreign reserves require BCEAO to hike interest rates or maintain them at a high level for an extended period.

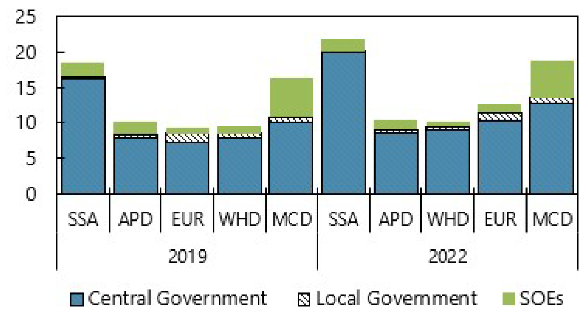
15. However, potential valuation losses on sovereign securities due to rising yields are limited, as WAEMU banks tend to hold securities to maturity. The outstanding stock of sovereign bond securities issued during FRFA through the auction segment of the market and held by banks in mid-June 2023 amounted to CFAF 8 trillion or around one-third of WAEMU banks' sovereign exposures. Its average residual maturity of 3.5 years implies an estimated average yield of about 7.5 percent under current market conditions, or 1.8 percentage points higher when compared to an average yield of 5.7 percent at issuance. However, the share of securities held for trading purposes accounts for less than 1 percent of the securities portfolio, implying limited potential valuation losses for banks holding such securities.

16. The WAEMU FSAP 2022 interest rate stress tests suggest that inflation and, indirectly, higher interest rates have an impact on banks' solvency. The interest rate risk is modeled by the impact of inflation on bank's profitability under different scenarios, with a base scenario at 2 percent over the period and an adverse scenario rising to 7 percent before decreasing. Under the adverse scenario and considered the highest risk, the ROA could contract by up to 2.5 percentage points, and capital ratios could decline by as much as 8 percentage points, requiring capital needs equivalent to approximately 1.5 percent of regional GDP.

F. Sovereign Bank Nexus Risks

17. The surge in public debt in the aftermath of the COVID-19 pandemic has reinforced the sovereign-bank nexus. The public debt-to-GDP ratio rose from 44.8 percent in 2019 to 59.1 percent in 2022, driven by a slowdown in economic activity and governments' increased fiscal support to mitigate the impact of the crisis. A significant share of public debt has been bought by regional banks.

Figure 7. Banks' Exposure to the Public Sector
(percent of assets)



Sources: IMF Monetary and Financial Statistic; Dehmej (2024).

18. Bank exposures to public debt instruments, including securities and direct loans, have significantly increased since the pandemic. They reached 38 percent of total banks' assets at end-2022 (from 30 percent at end-2019), well above the average for the SSA region (Figure 7). In the absence of stable demand for securities from institutional investors that would have long-term liabilities to cover, banks buy securities with relatively long maturities and generally hold them to maturity. Several factors have contributed to the banking sector's increased sovereign exposure: rapid expansion of the regional market for government securities mainly purchased by WAEMU banks, increasing financing needs during the pandemic, preferential (zero) regulatory risk weight treatment of sovereign debt (the current regulatory treatment of sovereign exposures in the WAEMU is summarized in Annex 2), relatively lower risk perceived for public versus private assets, and limited availability of alternative safe collateral.[1]

19. Higher sovereign debt exposure in the banking sector increases risks to financial stability. The interconnectedness between banks and governments has intensified rapidly since the pandemic, increasing the risks of cross-sector contagion, and posing a significant vulnerability (Figure 8). Stress in the sovereign sector could spill over quickly and hurt banks' balance sheets through multiple channels.

10. The interconnectedness of the sovereign and banking sectors through exposure, safety net, and macroeconomic channels (Figure 9), can amplify vulnerabilities in sectors by interacting and generating adverse feedback loops. Such sovereign distress could erode banks' capital rapidly, as banks hold no capital against their large government debt portfolios due to zero risk weighting. As discussed in previous IMF analysis[2], all these three channels may have significant effects: (1) the *exposure* channel, arising from banks' direct exposure to sovereign risk through

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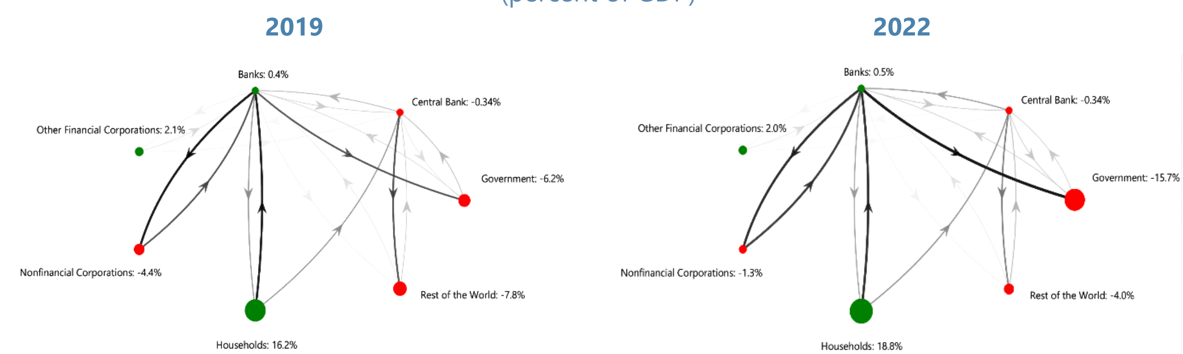
[1] For a general discussion of the sovereign nexus, see BCBS' Discussion paper on the regulatory treatment of sovereign exposures and IMF Departmental Paper on Managing the Sovereign Bank Nexus.

[2] IMF Global Financial Stability Report, Chapter 2, April 2022.

government debt holdings, can lead to a credit crunch as a rise in sovereign spreads diminishes the market value of such debt, impacting collateral and tightening banks' capital constraints; (2) the *safety net* channel, involving government guarantees to banks, which face risks as sovereign distress may limit the government's ability to provide support, potentially destabilizing banks and placing additional strain on both fiscal accounts and the sovereign; and (3) the *macroeconomic* channel, operating indirectly through the broader economy, and may hence affect credit risk. With respect to the last channel, a weakened sovereign balance sheet can impact the private sector by elevating borrowing costs, posing the need to implement fiscal consolidation measures like tax increases or expenditure reductions, and increasing overall policy uncertainty. It may also increase the burden on domestic banks to finance government debt, crowding out bank lending to the private sector and affecting economic activity (see Figure 9).

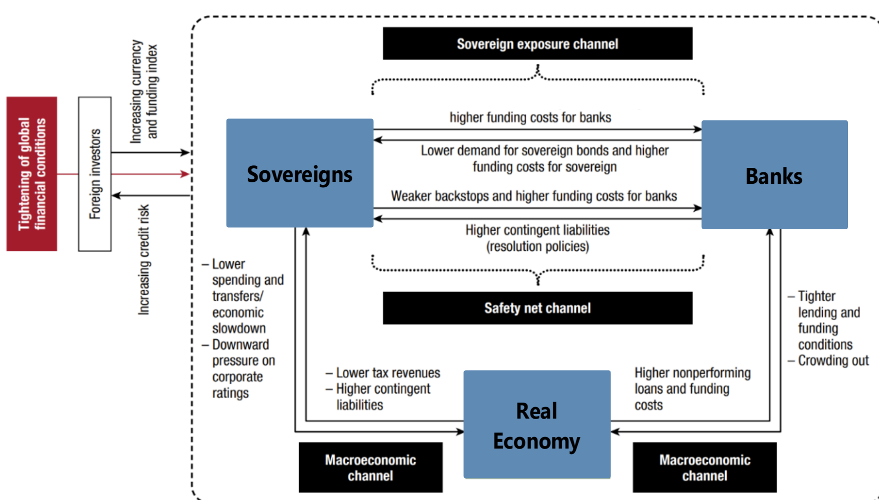
Figure 8. Evolution of Balance Sheet Exposures

(percent of GDP)



Sources: IMF Balance Sheet Approach Matrix; and IMF Staff calculations.
Note: The red nodes represent net borrowers and green nodes net lenders. The direction of the arrows indicates flow of funds from lender to borrower. The diameter of the nodes and thickness of arrows show the relative size of imbalances and exposure, respectively.

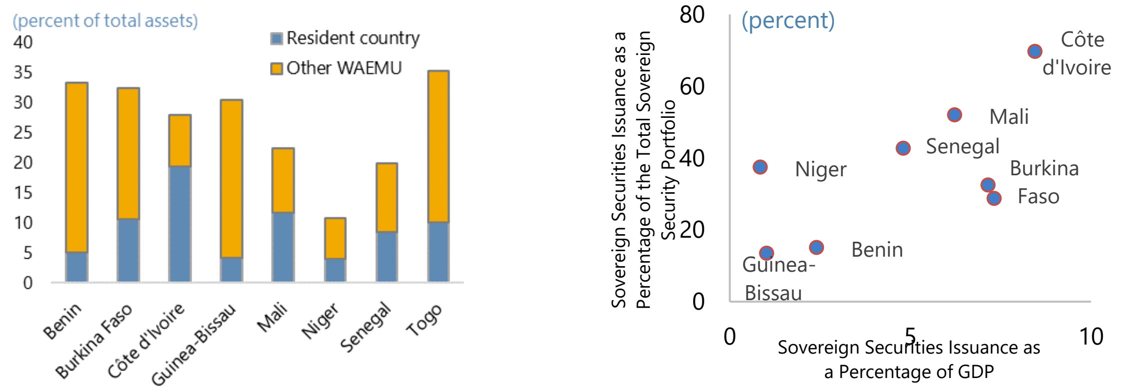
Figure 9. Key Channels of the Sovereign-Bank Adverse Feedback Loop in the WAEMU



Source: IMF Global Financial Stability Report, Chapter 2, April 2022, with modifications by the WAEMU team.

20. Banks' sovereign securities portfolios are characterized by a national bias (Figure 10). As of June 2022, on average, securities held by banks which were issued by the state where banks reside, ranged from 4 to 19 percent of assets, depending on the country (top left panel). Across the union, the Ivoirian banks stand out as their sovereign exposure is significantly concentrated in the securities issued by the Côte d'Ivoire government. Indeed, as expected, larger countries are associated with a larger share of issuances (top right panel). Network representation of the sovereign bank relationship shows that bank sovereign exposures are heavily concentrated in the debt issued by the state of their country of residence (bottom panel), including because of preferential fiscal treatment. Securities issued by the governments of Côte d'Ivoire and Burkina Faso represent the second-largest shares in the banks' security portfolio.

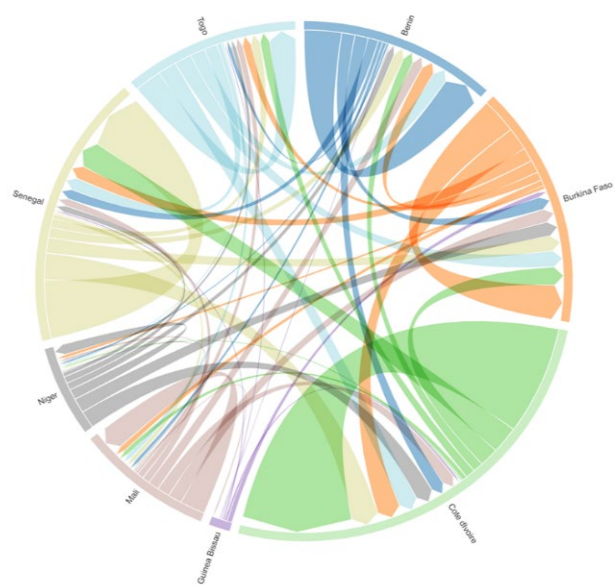
Figure 10. Banks' Sovereign Security Portfolio, by Country



Bank sovereign exposures are heavily concentrated in the debt issued by the country in which they are located; securities issued by the government of Côte d'Ivoire and Burkina Faso are the next largest.

Network Representation of the Sovereign-Bank Relationship

(June 2022)

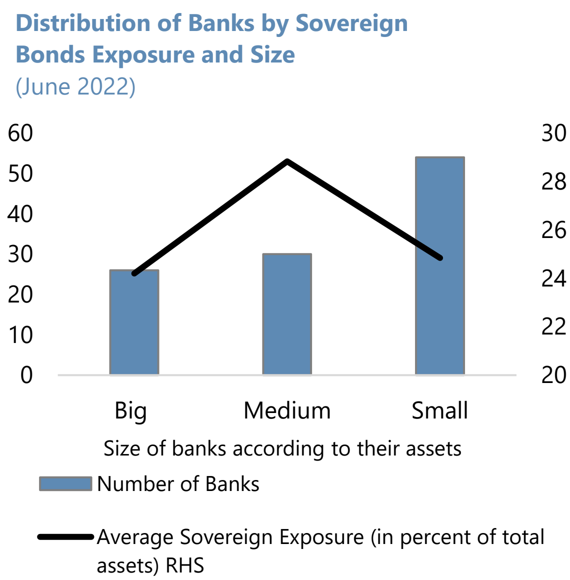


Sources: BCEAO; UMOA-Titres; and IMF staff calculations.

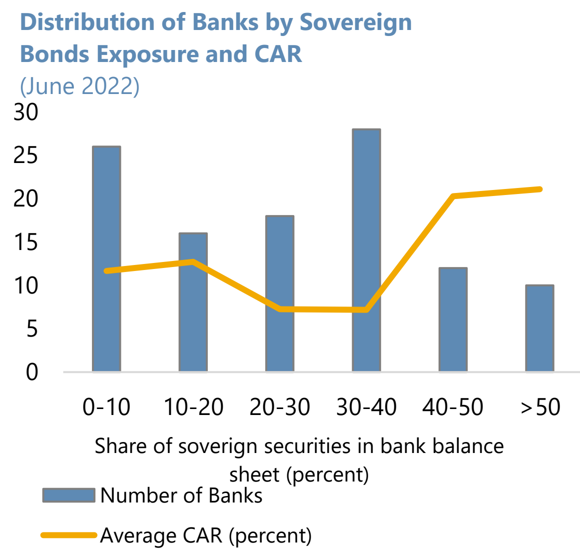
21. Large holdings of government securities are concentrated in medium-sized banks with limited capital buffers, amplifying the banking sector's vulnerability to sovereign risk (Figure 11). On average, 40 banks accounting for 45 percent of the banking system's assets hold government securities representing 20 to 40 percent of their respective assets, have the lowest solvency ratios. The high concentration of sovereign risk in banks with insufficient capital buffers heightens the bank-sovereign nexus, increasing the likelihood that shocks in government securities markets would have a pronounced widespread impact on banks. At the same time, on average, a few banks, representing only 7 percent of the banking system's assets, hold government securities of more than 50 percent of their respective assets and show high solvency ratios.

Figure 11. Banks' Sovereign Exposures and Associated Risks

Sovereign exposures are heavily concentrated in medium-sized banks...



... with low capital buffers.



Sources: BCEAO; and IMF staff calculations.
Note: CAR = capital adequacy ratio. The sample covers 110 banks. Banks are categorized into size classes based on the share of their assets relative to the total assets of the banking system: under 5% are small, 5-10% are medium-sized, and over 10% are considered big.

22. The rise in banks' sovereign exposures and greater reliance on BCEAO short-term funding exacerbate the aforementioned interest rate risk. Banks buy securities with relatively long maturities and generally hold them to maturity, which explains the maturity mismatches in bank balance sheets, given the short-term nature of bank funding. The sharp rise in government debt holdings and expanded use of BCEAO short-term funding have raised banks' asset-liability mismatches and the risk of a contraction in their interest rate margins should interest rates rise.

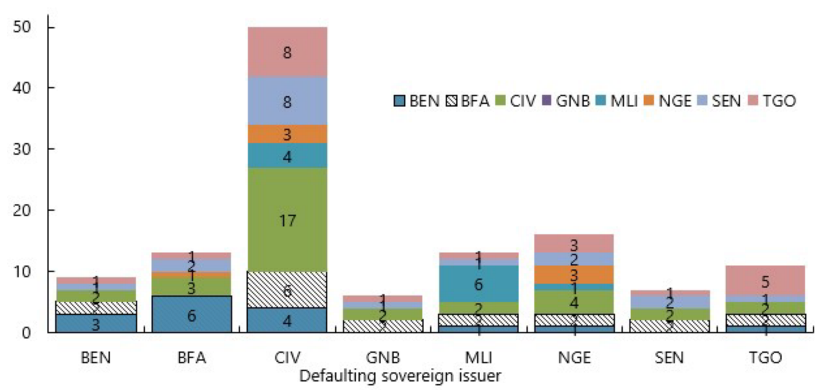
23. Risks associated with rising sovereign-bank nexus can endogenously compound. Tight financing conditions and higher sovereign borrowing rates could amplify concerns about debt sustainability. At the same time, the limited ability to borrow and to widen fiscal space can reduce governments' ability to support banks. In turn, balance sheets exposure to sovereign debt may expose banks to sovereign risk, and further raising the potential need for actual fiscal support.

Moreover, these risks can undermine government creditworthiness, thus exacerbating the limited access to financing. And rising borrowing costs could harm economic growth and intensify bank losses.

24. The 2022 FSAP mission to WAEMU conducted a comprehensive stress-test analysis considering the exposure channel between sovereign and banking sectors.[3] The simulation analyses were based on a scenario of default by sovereign issuers on their short-term domestic debt maturities (i.e., the outstanding maturities due by end-2022). For all WAEMU countries, the outstanding debt maturing by 2022 represented 34 percent of total outstanding securities at end-September 2021 and ranged from 20 percent (Togo) to 48 percent (Niger).

25. The results showed that the regional banking system is significantly vulnerable to sovereign defaults (Figure 12). This is, of course, particularly relevant in the case of default by the largest country. Almost 50 banks, among the 100 included in the stress test, would not have sufficient capital buffers to cope with a default by Côte d'Ivoire on its short-term maturities in the WAEMU government securities market, reflecting the high concentration of bank portfolios in the country's debt instruments, given the large size of the country in the union. The defaults of Senegal and Togo, among the largest securities issuers in the regional market, had only a limited impact on the banking system, causing the failure of 7 and 11 banks, respectively. In the event of defaults by Niger, Mali, Burkina Faso, Benin, and Guinea-Bissau, the number of banks with insufficient capital buffers to cover sovereign defaults would be 16, 13, 13, 9, and 6, respectively.

Figure 12. Number of Banks With Insufficient Capital Buffers to Cover Sovereign Default



Source. WAEMU FSAP 2022: Technical note on Systemic Risks and Macroprudential Policy Framework.
Note: BEN = Benin, BFA = Burkina Faso, CIV = Côte d'Ivoire, GNB = Guinea-Bissau, MLI = Mali, NER = Niger, SEN = Senegal, TGO = Togo

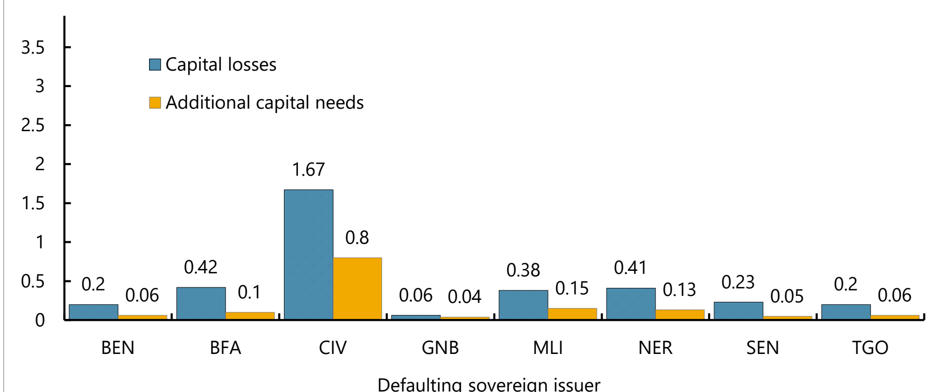
26. The FSAP estimated that aggregate bank capital losses due to contagion from all sovereign defaults in the WAEMU could reach 3.6 percent of the 2021 regional GDP. Bank capital loss profiles reflect the national bias in the holdings of government securities and the

[3] See West African Economic and Monetary Union: Financial Sector Assessment Program 2022 -Technical Note on Systemic Risks and Macroprudential Policy Framework (imf.org)

concentration in Ivoirian debt instruments, with the maximum losses incurred by the banks associated with the default scenario of Côte d'Ivoire (given its large size) and of the issuing country in which they are located. With the default scenario in Côte d'Ivoire, the maximum capital loss could reach 1.7 percent of the regional GDP. Defaults in Burkina Faso, Niger, and Mali would result in losses of about 0.4 percent of the regional GDP each. Moderately sized capital losses would occur in the event of defaults in Senegal, Togo, and Benin—maximum losses would be about 0.2 percent in each case—while for Guinea-Bissau they would be about 0.06 percent of the regional GDP (Figure 13).

27. Based on the FSAP analysis, and capital buffers at that time, the additional total amount of capital needed to cover contagion risk from common sovereign exposures was estimated at 1.4 percent of regional GDP (Figure 13). Depending on the sovereign default scenario, the additional capital needs are as high as 0.8 percent of regional GDP in the event of a default by Côte d'Ivoire (the largest issuer in the region) and only 0.04 percent of regional GDP in case of a default by Guinea-Bissau (the smallest issuer in the regional securities market).

Figure 13. Losses and Additional Capital Requirements
(Percent of regional GDP of 2021)



Source. WAEMU FSAP 2022: Technical note on Systemic Risks and Macroprudential Policy Framework.
Note: BEN = Benin, BFA = Burkina Faso, CIV = Côte d'Ivoire, GNB = Guinea-Bissau, MLI = Mali, NER = Niger, SEN = Senegal, TGO = Togo

28. While a default by Côte d'Ivoire would have the most substantial adverse impact on the regional banking system, other WAEMU sovereigns have lower credit ratings. Côte d'Ivoire's sovereign rating stands at BB-, the highest in the region. According to published IMF debt sustainability analyses, overall debt sustainability risk is high in Guinea-Bissau, while other WAEMU member countries face a medium risk. Benin, Côte d'Ivoire, and Senegal generally have access to international capital markets, with average spreads in the performing bond category (Figure 14).

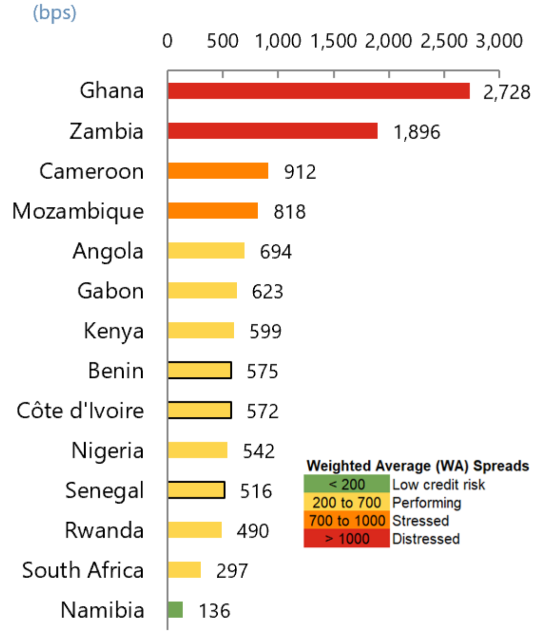
Figure 14. Assessment of The Risks to Debt Sustainability of WAEMU Countries

S&P Sovereign Credit Rating, 2023

Debt Sustainability Risk Assessment

Country	S&P Sovereign Rating	Date	Moody's Sovereign Rating	Date	LIC DSA Rating (IMF, WB)
Benin	B+/Positive/B	Oct-23	B1	Sep-23	Moderate
Burkina Faso	CCC+/Stable/C	Oct-23	…	…	Moderate
Cote d'Ivoire	BB-/Stable/B	Oct-23	Ba3	Jun-22	Moderate
Guinea-Bissau	…	…	…	…	High
Mali	…	…	Caa2	Sep-22	Moderate
Niger	…	…	Caa2	Feb-24	Moderate
Senegal	B+/Stable/B	Oct-23	Ba3	Mar-22	Moderate
Togo	B/Stable/B	Oct-23	B3	May-23	Moderate

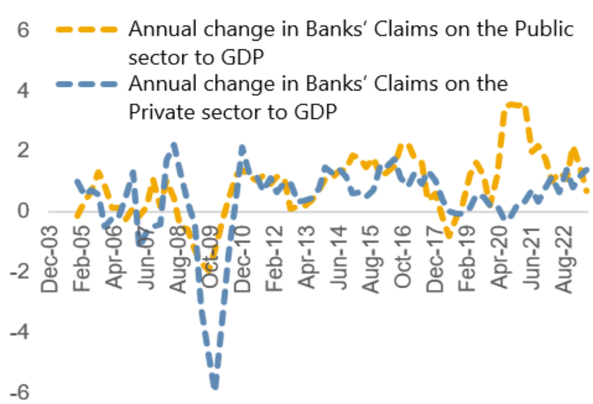
Weighted Average Spread of International Issues
(bps)



Sources: IMF Sovereign Spread Monitor (updated on February 9, 2023); DSA assessments from IMF country reports; S&P and Moody's Sovereign ratings.

29. Rapid expansion of the sovereign debt exposure could also lead to the crowding out of private sector credit. At the end of 2022, banks' claims on the public sector amounted to 21.7 percent of GDP, up from 14.2 percent at the end of 2019. As Figure 15 shows, the increase in claims on the public sector as a share of GDP is accompanied by a rising share of claims on the private sector, which has grown from 22.8 percent of GDP before the pandemic to 24.7 percent as of 2022. However, the rapid growth of banks' claims on the public sector and the continuous deepening of the sovereign-bank nexus could crowd out private sector credit in the future.

Figure 15. Annual Change in Public and Private Sector Claims to GDP
(percentage points)



Sources: BCEAO; and IMF staff calculations.

30. Although achieving structural de-risking relies on fiscal reforms and investor base diversification, the system's resilience can be enhanced through prudential measures. These measures include strengthening buffers with containing sovereign exposure by using concentration limits, introducing positive risk weights on sovereign holdings, and discouraging excessive risk concentrations by applying Pillar 1 or 2 capital surcharges (see 2022 WAEMU FSSA and Annex 2 to this SIP), while avoiding unintended consequences such as a significant decrease in liquidity, bond market pressures, or other undesirable macrofinancial dynamics. Developing the domestic institutional and retail investor base that could invest in government securities is imperative to mitigate the high degree of sovereign-bank nexus.

31. In particular, with respect to Pillar 2 capital surcharges, an additional capital requirement should be calibrated to discourage banks' excessive concentration of sovereign exposures. As recommended by the 2022 WAEMU FSAP, the calibration should be nonlinear, with the requirement increasing gradually beyond a minimum concentration threshold based on the level of a bank's exposure to a specific sovereign relative to its risk-weighted assets.

G. Conclusions and Policy Implications

32. This paper aims to analyze the key cyclical and structural vulnerabilities within the WAEMU financial system. It specifically emphasizes systemic risks within the banking sector, considering that the banking assets account for almost three quarters of total financial sector assets, and amount to over half of WAEMU's GDP.

33. Despite their profitability, the WAEMU banks have a high level of portfolio concentration, limited capital and liquidity buffers, relatively persistent nonperforming loans, and substantial sovereign exposures. Banks have withstood the COVID-19 crisis well and remained stable, helped by liquidity support from the BCEAO and policies aimed at supporting domestic demand. The solvency ratios of banks have improved in recent years; however, concentration, contagion, and interest rate risks in the system have been increasing, in part linked to high sovereign exposures. Nevertheless, the union's banking sector remains heterogeneous in terms of solvency, risk exposures, and performance.

34. Credit risk is amplified by high asset concentration. The concentration of bank exposures to private borrowers and sovereigns could amplify the impact of credit shocks and raise recapitalization needs.

35. Liquidity risk is exacerbated by deposit concentration, increased interest rate risks and the limited liquidity of the secondary market for government securities.

36. Maturity mismatches and interest rate risk have increased, especially with the historical expansion of securities portfolios issued at low interest rates up to 2023 and with relatively long maturities compared to banks' funding. The options to hedge these risks in the market are limited, exposing banks to reduced intermediation margins when interest rates increase.

37. **Systemic risks from the sovereign-bank nexus are elevated and could potentially threaten financial stability.** Elevated fiscal vulnerabilities in the presence of limited access to international financing, combined with the risk of tightening financial conditions as monetary policy remains contractionary, make an increase in sovereign stress more relevant at the current juncture. Uncertainty stemming from regional insecurity and geopolitical tensions could also exacerbate macro-financial stability risks. Moreover, the increased holding of sovereign debt by the banking sector could limit banks' capacity to extend private credit.

38. **While the financial sector has remained resilient in the face of recent shocks, the authorities should remain vigilant in monitoring the evolution of systemic risks and vulnerabilities.** Significant progress was made at the regulatory level in 2023 through adopting new statutes for the banking and microfinance sectors by the WAEMU Council of Ministers. As a result, the supervisory framework has become more risk-oriented, supervisory resources have increased, and the supervisor's independence has been statutorily assured. Prudential regulation has been enhanced and is aligning with Basel II/III standards, with ongoing implementation. The BCEAO's recent decision to double the minimum share capital of banks will help promote resilience within the banking system and enhance financial stability. Despite these improvements, pockets of vulnerabilities persist. The authorities should actively support the implementation of risk-based supervision and be prepared to take further actions if vulnerabilities intensify.

39. **The authorities should consider additional measures to further strengthen system resilience and stability in line with the WAEMU FSAP 2022 recommendations.** These measures include: (1) imposing extra capital requirements within the Basel Pillar 2 framework to address interest rate and concentration risks; (2) ensuring the full operationalization of the banking resolution framework; (3) introducing new measures to reduce the excessive reliance of certain banks on BCEAO refinancing; (4) improving the monitoring of maturity mismatches and interest rate risk; (5) implementing Basel-type liquidity ratios to enhance resilience to liquidity shocks; (6) adopting measures to mitigate balance sheet risks; and (7) considering the activation and implementation of the broad-based capital (CCyB) tool in the event of an increase in cyclical risks.

40. **The authorities' ambitious regulatory reform has consolidated the prudential base and established the conditions for further strengthening banking supervision and increasing the effectiveness of macroprudential policy.**

Annex I. Macroprudential Measures in the WAEMU

Table 1. WAEMU: Macroprudential Measures in Use		
Measures	**Current Calibration**	**Last Change**
Broad-Based Tools		
Countercyclical capital buffer (CCyB)	As announced June 24, 2016, and effective January 1, 2018, the transitional provisions of the Prudential System Applicable to Credit Institutions and Financial Firms in the WAMU became applicable. The regulations provide that the authority responsible for macroprudential policy is empowered to require institutions to establish a countercyclical buffer consisting of CET1 capital and representing no more than 2.5% of total RWAs. The criteria for activating the countercyclical buffer must be determined by BCEAO instruction.	January 2018 This rate is currently 0%.
Capital conservation buffer (CCoB)	The framework in place for the conservation buffer is the same as that of Basel III. As of January 1, 2018, all institutions are required to establish a permanent conservation buffer consisting of CET1 funds. This buffer is set at 2.5% with gradual phasing to achieve the target of 2.5% by 2021 as follows: Effective January 1, 2018, the conservation buffer rate was set at 0.625%. Effective January 1, 2019, the conservation buffer rate has been increased from 0.625% to 1.25%. As of January 1, 2020, the conservation buffer rate was originally planned to be increased from 1.25% to 1.875% in accordance with the phase-in plan. But, as announced and effective June 26, 2020, WAEMU authorities extended by one year the period initiated in 2018 for the transition to Basel II/III bank prudential requirements. The CCoB remained unchanged at end-2020 from its 2019 level. Effective January 1, 2021, the rate was increased from 1.25% to 1.875%. Effective January 1, 2022, the conservation buffer rate increased from 1.87% to 2.5%. If annual required levels are not met, banks are subject to an earnings conservation requirement based on the CET1 ratio.	January 2022
Limit on leverage ratio	As announced June 24, 2016, and effective January 1, 2018, all institutions are required to adhere to the minimum leverage ratio of 3%. This is the ratio of Tier 1 core capital to total exposures (on- and off-balance-sheet items). Systemically important banking institutions (SIBIs) may be subject to a higher leverage ratio.	January 2018
Limit on distributions	As announced June 24, 2016, and effective January 1, 2018, distributions are restricted when the institution’s capital level falls within one of the ranges below. An institution whose CET1 ratio is between: - 5% and 5.625% is required to retain at least 100% of its distributable profits; - 5.625% and 6.25% is required to retain at least 80% of its distributable profits; - 6.25% and 6.875% is required to retain at least 60% of its distributable profits; - 6.875% and 7.5% is required to retain at least 40% of its distributable profits; - 7% or above is required to retain 0% of its distributable profits.	January 2018
Capital surcharges for systemically important institutions	Effective March 27, 2020, the list of SIBIs was adopted and released by the CBU. The methodology for identifying SIBIs and for calculating the surcharge applicable to them was published by the CB on December 19, 2019. It is based on the indicator method proposed by the Basel Committee and takes into account the criteria of interdependence, substitutability/financial infrastructure, and complexity. The Supervisory Framework states that regional SIBIs must build up a capital buffer (or systemic cushion) composed primarily of core capital (CET1) elements. The level of the capital buffer to be achieved was set to 1% effective March 27, 2020. This target is to be achieved in accordance with the following transitional provisions: - effective June 30, 2021: the capital buffer was 0.40%; - effective June 30, 2022: the capital buffer was 0.70%; - effective June 30, 2023: the capital buffer must be 1%.	June 2022

Table 1. WAEMU: Macroprudential Measures (continued)

Limit on leverage ratio for systemically important institutions	The CBU may require a leverage ratio greater than 3% from SIBIs. Effective July 2, 2018, the new Banking Commission circulars stated that SIBIs are subject to higher qualitative governance, management control, and risk control requirements (establishment of additional specialized committees: appointment and remuneration as well as the institution of a specific compliance function).	July 2018
Liquidity Tools Applied to the Banking Sector		
Liquid asset ratio	Pending the finalization of the implementation of the Liquidity coverage ratio (LCR), a provisional system for monitoring the liquidity risk of institutions has been in place since April 2018. It includes a liquidity ratio, which is the ratio between liquid and marketable short-term assets (three months maximum), and the denominator consists of short-term current liabilities or commitments by signature.	April 2018
Household Sector Tools		
Household sector capital requirements	As announced June 24, 2016, and effective January 1, 2018, a risk weight of 75% is applied to exposures to retail customers, which include households and small- and medium-sized enterprises (SMEs) comparable to retail customers. As announced June 24, 2016, and effective January 1, 2018, a risk weight higher than 75% is required when the retail customers' gross portfolio deterioration rate exceeds, over two consecutive quarters, a threshold set by the BCEAO. For retail customers, the gross portfolio deterioration rate is the ratio between the outstanding amount of gross NPLs in the retail customers' portfolio and the total outstanding amount of gross loans granted to this segment. As announced June 24, 2016, and effective January 1, 2018, with respect to residential property, the following conditions must be met for a weight of 35%: - the debt service coverage ratio must not exceed 40%; - the LTV ratio must not exceed 90%. As announced June 24, 2016, and effective January 1, 2018, in cases where the LTV ratio of 90% and the DSTI ratio of 40% for household real estate loans are not met, the debt is treated like that of retail customers (weight of 75%), subject to compliance with criteria defined for this category (destination, level, low individual value, and customer's consent to Credit Information Bureau (BIC)). Otherwise, a weight of 100% applies.	January 2018
Corporate Sector Tools		
Corporate sector capital requirements	As announced June 24, 2016, and effective January 1, 2018, risk weights between 20% and 150% are applied to corporate exposures. As announced June 24, 2016, and effective January 1, 2018, a risk weight greater than 100% is required when the gross corporate portfolio deterioration rate exceeds, for two consecutive quarters, a threshold set by the BCEAO. The gross portfolio deterioration rate is the ratio between the outstanding amount of NPLs recorded and the total amount of gross loans granted to this segment. As announced June 24, 2016, and effective January 1, 2018, the LTV ratio must not exceed 90% to be eligible for loans guaranteed by commercial real estate which should benefit, respectively, from a weighting of 75% under Pillar 1.	January 2018
Limits on Foreign Exchange Positions		
Gross foreign exchange positions	As announced June 24, 2016, and effective January 1, 2018, banks are not allowed to maintain open foreign exchange positions, because of the surrender requirement. However, the BCEAO grants individual dispensations that allow banks to keep working balances in their correspondent accounts for the smooth completion of international payments, up to the equivalent of 5% of total customer demand deposits. This limit reduces the institution's net position in a given currency and, consequently, the capital requirements for foreign exchange risk. In addition, external financial regulations allow EU residents to carry out capital transactions abroad (investments, borrowings, etc.) under certain conditions. These transactions may also	January 2018

Table 1. WAEMU: Macroprudential Measures (concluded)

	generate foreign exchange risk exposures for institutions. The volume of the institution's foreign exchange transactions is the highest amount of the sum of gross long positions and that of gross short positions for all currencies combined. Paragraph 327 of the prudential framework states that institutions are exempt from calculating foreign exchange risk capital requirements when the following two conditions are met: - the volume of the institution's foreign exchange transactions does not exceed 100% of eligible capital; - the overall net foreign exchange position in foreign currency does not exceed 2% of the institution's effective capital.	
Measures to mitigate risks from interconnectedness		
Additional risk weights on exposures between financial institutions	As announced June 24, 2016, and effective January 1, 2018, additional weights on exposures between institutions apply in the following cases: - when a financial institution fails to comply with solvency ratios, an exposure to that financial institution is weighted at 250%; - when an institution has negative capital, an exposure to that institution is deducted from the capital, resulting in a weight of 1250%.	January 2018
Source: IMF Macroprudential Policy Survey.		

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Annex II. The Regulatory Treatment of Banks' Sovereign Exposures in the WAEMU[1]

Restrictions on Banks' Sovereign Exposures

1. Under the current regulatory framework (see BCEAO Prudential framework, "PF"), there are no explicit restrictions on bank lending—direct and indirect—to the sovereigns.

2. In line with Basel standards for large exposures (BIS, 2014), in WAEMU the existing concentration limit excludes sovereigns. The BCEAO prudential framework (PF:451) restricts large exposures to a single counterparty to 25 percent of Tier 1 capital—whereby a large exposure is defined as the sum of all exposures of a bank to a single counterparty that are equal to or above 10 percent of its Tier 1 capital—with sovereigns being excluded (PF:457). However, the regulation has an embedded provision which allows the regulator (BCEAO) to introduce concentration limit for sovereigns at a chosen limit (PF:460). Such a provision has not been utilized by the BCEAO so far.

3. It is important to note that, even in the absence of regulatory restrictions on sovereign exposures, some bank groups, however, have in place internal limits on sovereign exposures (e.g., expressed as a ratio to non-concentrated deposits), in line with their risk appetite.

4. Similarly, under Pillar 1, minimum capital requirements assume 0 percent risk weighting for sovereign exposures in local currency (PF:117), meaning that the banks do not have to hold any capital against these exposures for the purposes of maintaining capital adequacy, which is also in line with Basel standards as currently stipulated.[2] For WAEMU Eurobonds— like exposures to other sovereigns—when kept in the banking book as opposed to trading book (which is almost all WAEMU sovereign bonds, given shallow secondary market), the risk-weighting ranges from 0 percent to 150 percent, depending on the external rating of the issuance (PF:115).

5. To contain bank concentration risk from sovereign exposures, the WAEMU FSAP 2022 called for "targeted" additional capital surcharges (as a short-term priority)—especially for banks most exposed to this risk—which could be done under Pillar 1 or Pillar 2 (see 2022 WAEMU FSSA). Relatedly, while the recent FSAP does not call for sovereign concentration limits on banks' side, its recommendations on introducing concentration limits for assets under BCEAO's collateral framework—as a way of ensuring diversity of eligible assets for refinancing—could indirectly discourage concentration in sovereign holdings (see paragraph 46 of 2022 WAEMU FSSA). These

[1] Prepared by Ljubica Dordevic (AFR). I am thankful to Jean-Charles Normand (AFRITAC West) for useful comments and suggestions.

[2] As per BIS, CRE20 (2022): "at national discretion, a lower risk weight may be applied to banks' exposures to their sovereign (or central bank) of incorporation denominated in domestic currency and funded in that currency". However, the BIS discussion paper on Regulatory treatment of sovereign exposures (BIS, 2017) provided for the abandonment of the 0 percent risk weighting, but in the absence of agreement on these proposals, the Basel Committee published a text concerning disclosure obligations for sovereign exposures which are voluntary (BIS, 2021). The question is, therefore, overall still unresolved under the international standards.

recommendations are under consideration by the BCEAO (the regulator) and the Banking Commission-CBU (the supervisor).

Default on Sovereign Exposures

6. When it comes to the treatment of defaults on sovereign exposures in the banking book, both direct exposures (loans) and indirect exposures (public securities) are treated on the basis of the instruction relating to the recognition and valuation of doubtful debts (BCEAO Instruction No. 026-11-2016, "Ins.26"). The key distinction for sovereign exposures is that the categorization as non-performing occurs after 180 days of default (Ins.26:8 and PF:155), as opposed to the standard 90 days, and that the provisioning is optional (Ins.26:16). However, once classified as non-performing—as for non-sovereign exposures—there is a steep adjustment in risk weighting (PF:157) which jumps from 0 to 100 percent (if provision coverage is at least 20 percent) or to 150 percent (if provision coverage is smaller than 20 percent) for part of the exposure not covered by the provisions.

Box 1. Temporary Regulatory Forbearance for Niger Sovereign Securities

On January 22, 2024 BCEAO issued a regulatory forbearance decision which exonerates Niger securities from classification as "non-performing" after 180 days, and forestalls the associated adverse effects on bank capitalization. Niger's halt on servicing its public debt is a direct result of Niger's operational inability to execute payments due to sanctions, regardless of its ability to continue debt service. As such, the forbearance is intended as a temporary measure until the political impasse is resolved and Niger can resume servicing its debt. Only securities (accounting for 88 percent of total bank exposure to Niger sovereign) have been subject to forbearance, due to their potential spillovers on a wider bank portfolio. The implications of non-payments on direct loans will be contained, as they constitute only 12 percent of total bank exposures to Niger (mostly held by Nigerien banks) with no spillovers beyond the individual affected loans. Meanwhile, BCEAO conducted stress tests to identify the banks most exposed to Niger's debt servicing halt, and supervisory action will follow to increase these banks' resilience to the shock. The identified banks will be instructed to take measures for capital preservation (such as dividend withholding) and subjected to intensified supervision.

In the absence of regulatory forbearance, exposure to securities not serviced by Niger government would have worsened capitalization of affected banks starting from end-January, 2024, and over time debt service arrears would accumulate. Niger government debt service arrears started on July 31, 2023. After 180-days, i.e. end-January, banks' exposures to Nigerien sovereign would have normally (i.e. in the absence of regulatory forbearance) been classified as "non-performing" (NPLs, with loans referring to both direct and indirect loans, which are unlisted securities). In case of a security, all exposures to Niger government debt of the same bank holding the security with missed payment beyond 180 days would become classified as NPLs, with no contagion to other banks (unless they themselves experienced a missed payment on the same security). In case of direct loans, due to their less standardized nature, only that loan would become NPL after 180 days of missed payment (PF:158). As a result of NPL classification, risk weight of the sovereign exposures would jump from 0 percent to at least 100 percent, and likely to 150 percent (associated with NPL provision cover smaller than 20 percent, given that provisioning for sovereign lending is generally low, as it is optional). In turn, this would reduce the capital adequacy ratio due to an increase in the denominator (higher risk weighted assets). There would also be an effect on provisioning and thus capital, as past-due interests would enter the income statement and must be fully provisioned. As debt service arrears on Niger's public debt reach 180-day mark and continue to accumulate, the situation would deteriorate over time. As of end-2023, over 80 percent of Niger debt issued through the auction segment of the regional sovereign security market (*UMOA-Titres*, which accounts for great majority of Niger sovereign securities) was held in other WAEMU countries and by the BCEAO. By February 5, 2024, the Government of Niger accumulated CFAF 300 billion (about US$480 million, 2.9 percent of GDP) of arrears on debt service. In 2024, CFAF 265 billion is due in debt service (of which CFAF 216 billion principal, and CFAF 49 CFAF interest payments).

On February 24, 2024, the ECOWAS Commission issued a decision to lift most sanctions (notably economic and financial ones) on Niger with immediate effect.

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CLIMATE CHANGE IN THE WAEMU: TRENDS, MACRO-CRITICALITY AND OPTIONS GOING FORWARD[1]

This paper focuses on the trends in climate change in the WAEMU, assesses the criticality of climate change for the region, and reviews the related policy and financing options going forward. Climate change has been increasingly affecting the lives and livelihoods in the WAEMU. Temperatures have risen significantly, and climate-related disasters have hit the region more frequently in recent decades. Climate change can exacerbate the current challenges and hinder long-term economic prospects by threatening economic growth, food security, fiscal and external sustainability, and social outcomes. Macroeconomic policies, structural reforms and cooperation among different parties remain critical alongside with regional efforts, in particular to have access to necessary financing and bolster adaptation efforts.

A. Climate Trends in the WAEMU

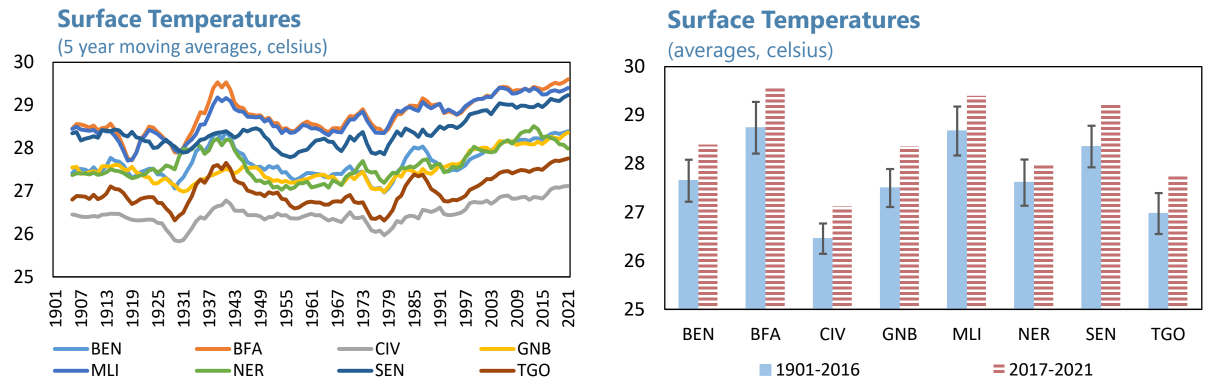
1. Climate change has been increasingly materializing in the WAEMU in the form of rising temperatures, as well as more frequent and larger climate-related disasters. Temperatures have been rising in the region, particularly starting from the 1980s, and the trend does not show signs of a deceleration. For instance, average temperatures during the last 5 years of available data (2017-2021) were higher by 0.4-0.9 Celsius in all WAEMU countries, compared to the long-run averages, i.e., since the 1900s (Figure 1). Moreover, there were 232 climate-related disasters in the WAEMU countries over the period of 1966-2022, and such events have become more frequent since the 2000s (Figure 2). About 65 percent of those disasters (151 out of 232) took place during the last 23 years (i.e., since 2000), and only 35 percent of them hit the region during the first 34 years of the sample (i.e., 1966-1999). This means about 7 disasters per year in the region since the 2000s, whereas this ratio was around 2 in the pre-2000 period. Such shocks are widespread in the WAEMU, where all countries except Guinea-Bissau experienced more than 15 events since 1966.[2] Regarding the types of events, droughts and floods are the most common forms (218 events out of 232). Strikingly, many of these events were large, with about two-thirds of the disasters (150 out of 232) estimated to affect the lives and livelihoods of more than 10,000 people.[3]

[1] Prepared by Can Sever (AFR). I thank Luca Antonio Ricci for useful comments and suggestions. I also thank Peter Lindner, Luc Tucker and my colleagues in the WAEMU country teams for feedback and inputs.

[2] While some of the cross-country variation in the number of events can be explained by different surface areas of the member states.

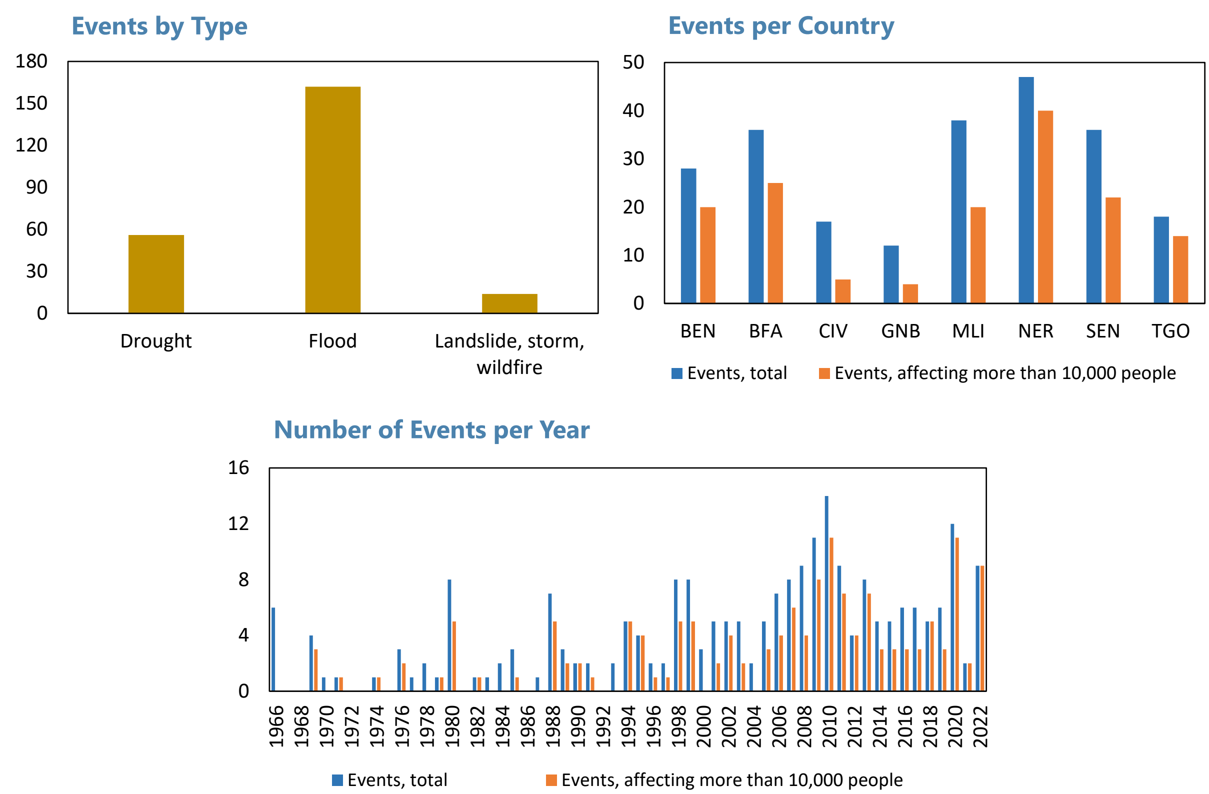
[3] It should also be noted that data on climate-related disasters is generally subject to underreporting.

Figure 1. Temperatures in the WAEMU



Source: World Bank (1901-2021), IMF staff calculations. Vertical lines in the right-hand-side chart indicate one standard deviation interval.

Figure 2. Climate-Related Events in the WAEMU



Source: EM-DAT (1966-2022), IMF staff calculations. Events in EMDAT include drought, flood, landslide, storm and wildfire.

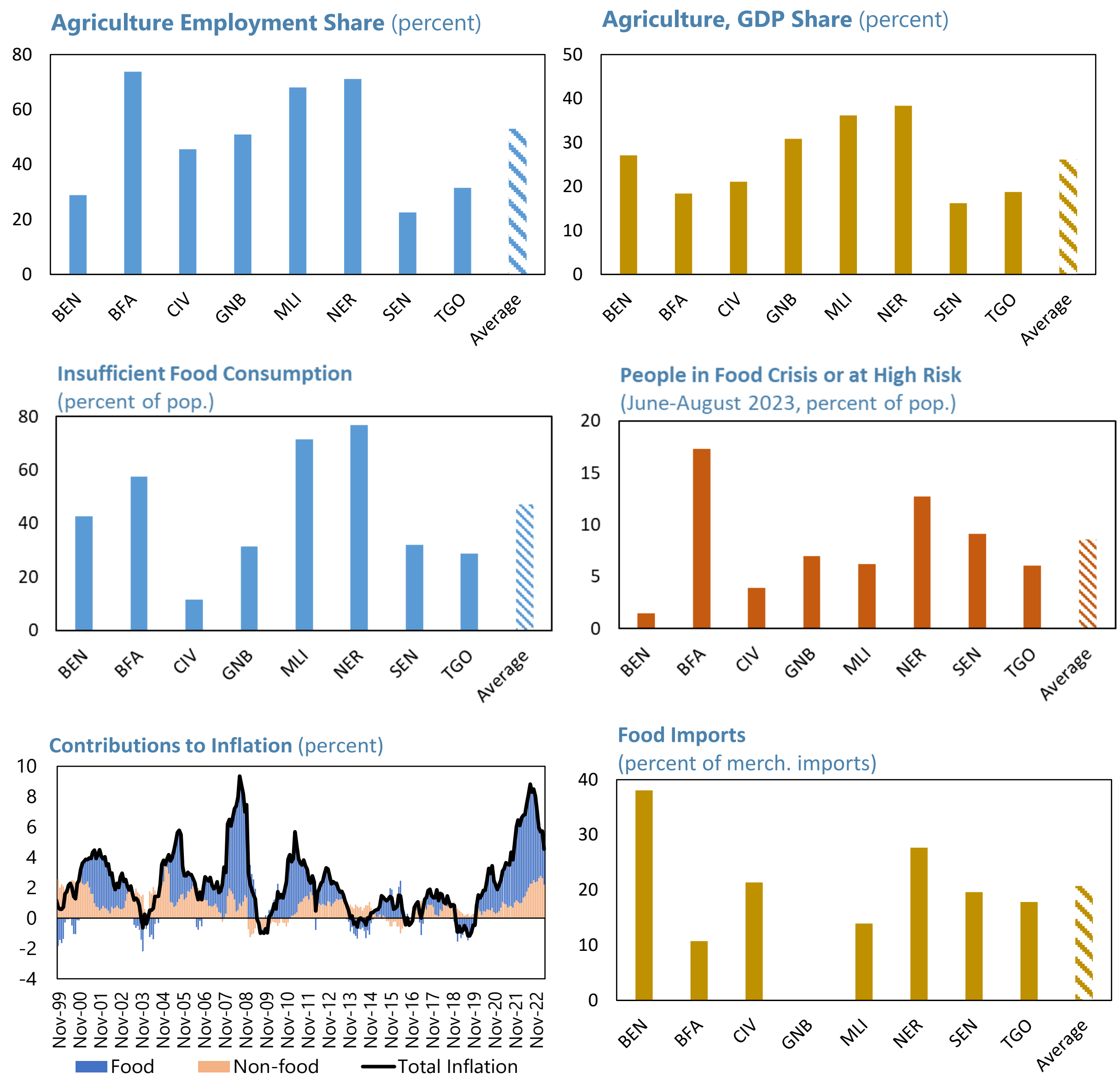
B. Macro-Criticality of Climate Change in the WAEMU

2. **Climate change can have particularly large macroeconomic effects in the WAEMU given its high dependence on the agricultural sector.** Around 53 percent of the WAEMU population is estimated to depend on agricultural employment, with this rate particularly being high for Burkina Faso, Mali and Niger (Figure 3). The agricultural sector is also a key contributor to the region's GDP (26 percent). The evidence from developing countries suggests that a 1 Celsius increase in temperatures is associated with a 3-percentage points reduction in agricultural production (Dell et al. 2012). Analysis based on sub-Saharan Africa similarly suggests that monthly economic activity in the region would decline by 1 percentage point, if the temperatures go above the long-run average by 0.5 Celsius. This effect is larger relative to developing economies in other regions, reflecting sub-Saharan Africa's limited resilience and coping mechanisms, large agricultural dependence and high sensitivity of its crops to the rainfall (IMF 2020).[4] It is also projected that GDP losses can be as large as 7 percent in Burkina Faso, 11 percent in Mali and 12 percent in Niger by 2050 without any adaptation policies to address the impact of climate change (World Bank 2022). This corresponds to a 3 percent GDP loss in the WAEMU, stemming only from these 3 countries (representing about 30 percent of the regional GDP). Moreover, climate change is estimated to lead to around 30-40 percent loss in the agricultural productivity in the WAEMU countries (Ortiz-Bobea et al. 2021).

3. **The effects of both higher temperatures and more frequent floods and droughts on the agricultural production can exacerbate the already high food insecurity in the WAEMU.** Survey data suggest that around 47 percent of the WAEMU population faced insufficient food consumption in 2022-23 (Figure 3). Around 9 percent of the WAEMU population (about 11 million people) is estimated to be either facing extreme food crisis or being at risk of it as of mid-2023. Analysis based on sub-Saharan Africa shows that food insecurity intensifies significantly (by 5–20 percentage points) following floods or droughts (IMF 2020). The disruptions to the agricultural production due to rising temperatures and frequent climate-related disasters can also add to inflationary pressures on food products—a major contributor to overall inflation—which further hinders food insecurity. WAEMU countries are also likely to be vulnerable to climate shocks elsewhere in the world regarding food security, since the member states tend to rely heavily on food imports for their consumption needs, and external shocks can restrict global supplies while pushing up the prices of globally traded goods (Table 1).

[4] In addition, Diallo (2023) uses data from household surveys in Niger—the second most agricultural dependent country in the WAEMU (as shown by Figure 3)—and finds that a decline in rainfall lowers the households' income by 11 percent on average. Also, see IMF Mali Selected Issues Paper (2023) for an assessment of climate vulnerabilities in Mali (prepared by Luc Tucker).

Figure 3. Agricultural Production and Food Insecurity in the WAEMU



Source: World Bank, UN, World Food Programme, Food Security Cluster, BCEAO, IMF staff calculations. "Average" reports the population-weighted average in the WAEMU. Data on food imports is not available for GNB.

Table 1. WAEMU: Main Agricultural Products, Exports, and Imports in the WAEMU Countries

Country	Main agricultural products	Main agricultural exports	Main agricultural imports
BEN	Yam, cassava, maize, cotton	Cotton, cashews, pineapple	Rice, meat, fish
BFA	Sorghum, millet, cowpeas, maize, sugar cane, cotton, peanut, sesame seed, rice, cashew nuts, karite	Cotton, cashew nuts, sesame seeds, vegetables	Rice, cereals (wheat, corn)
CIV	Cocoa, cassava, yam	Cocoa, rubber, cashew nuts	Rice, wheat, essential oils, vegetal extracts.
GNB	Cashew, rice, fish	Cashew nuts, fish	Rice, wheat flour, soy oil
MLI	Cotton, cereals (including corn, rice, millet and sorghum), livestock (meat, dairy products)	Cotton, livestock, shelled groundnuts (including karite)	Cereals, sugar, leather
NER	Millet, cowpeas, sorghum, livestock	Onion, cowpeas, livestock	Cereal (rice, millet, maize), palm oil, sugar.
SEN	Millet, rice, corn	Cotton, tomato, green beans	Rice, wheat, milk, soybean
TGO	Cassava (manioc), yams (igname), corn (mais)	Cotton, palm oil, cocoa	Rice, wheat, palm oil

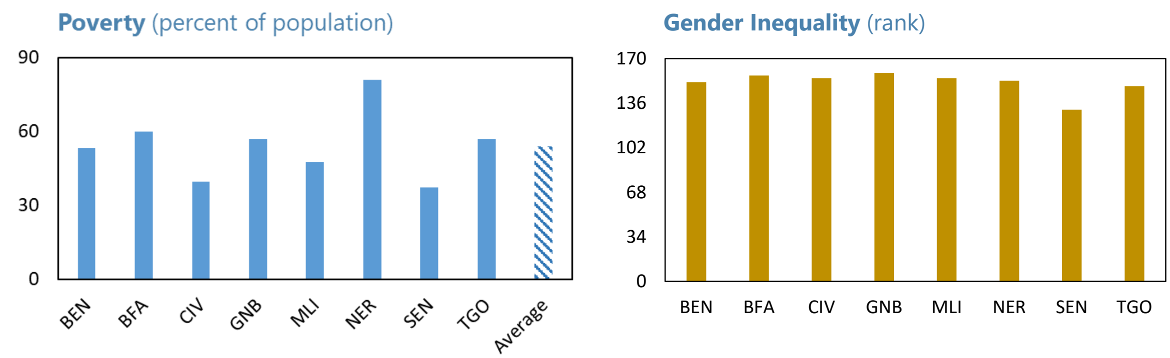
Source: IMF country teams.

4. **Together with its adverse impact on growth, climate change can heighten the current pressures on fiscal and external balances**. Climate-related shocks lead to a persistent decline in economic growth by around 1 percentage points in sub-Saharan Africa, estimated to be much larger than the impact on developing economies in other regions (IMF 2020). Besides a decline in government revenues driven by lower economic growth in the aftermath of climate-related disasters, those shocks force governments to increase spending due to the damage to the infrastructure, as well as the emerging needs for social and health spending. These pose risks to fiscal sustainability in the WAEMU, and point to the need for rebuilding fiscal buffers. Regarding external balances, foreign financial assistance or remittances following disasters rarely fully offset the drag on external positions from the decline in agricultural exports and the increase in imports for post-disaster reconstruction spending. Consistently, the evidence shows that the countries in sub-Saharan Africa experience an increase in both current account and fiscal deficits following climate-related disasters (IMF 2020).

5. **Climate change can hold the WAEMU back from achieving long-term development goals through its long-lasting impact on economic and social outcomes.** Climate-related events likely have long-lasting effects on economic growth through several channels such as the damage to infrastructure (IMF 2020). They can also undermine the role of financial development in long-term growth by putting financial stability at risk, to the extent the financial sector is dependent on climate-sensitive sectors, such as agriculture. Poverty and income inequality can be affected by

climate change, given the limited financial buffers, low levels of education, lack of social safety nets, and lack of wide-spread and accessible healthcare, which overall limit the ability of the poor to adapt, making them more prone to food insecurity, income losses, and unemployment (Islam and Winkel 2017) (Figure 4). In addition, climate change likely worsens the WAEMU's already high gender-based disparities, since the burden of disasters is likely to fall on women, due to their roles in the household and possible segregation in the labor market due to gender-based disparities in education (UNDP 2014) (also see the Selected Issues Paper). Climate-related shocks can lead to migration waves (within and across the member states), local conflicts, and social unrest in the region (Diallo and Tapsoba 2022). Finally, the disruptions to the much-needed accumulation of human capital from deaths, malnutrition, or lower school enrollment in the aftermath of disasters pose a drag to economic development (Caruso et al. 2023).

Figure 4. Poverty and Gender Inequality in the WAEMU



Source: World Bank, UN, IMF staff calculations. "Average" reports the population-weighted average in the WAEMU. Poverty reports the headcount ratio at 3.65 USD a day (2017 PPP). The global sample for the gender inequality includes 170 countries

C. Climate Adaption and Financing

6. Efforts regarding climate change typically involve mitigation and adaptation. Generally, for many countries globally, mitigation efforts include (i) reducing greenhouse gas emissions (i.e., transition to a greener economy, for instance, by introducing carbon taxes, or emissions trading), and (ii) alleviating the impact of existing greenhouse gases on climate (e.g., through forestation and other technologies). Adaptation measures consist of (i) building resilience (to address the exposure and vulnerability to climate change), and (ii) enhancing coping mechanisms (such as disaster relief).

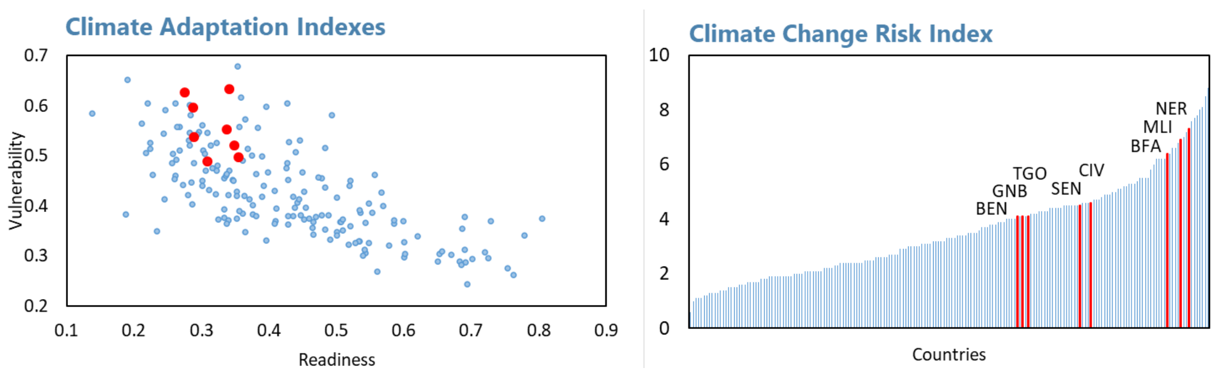
7. In terms of mitigation, the WAEMU can consider stepping up efforts, for instance, through introducing carbon taxes, phasing out energy subsidies, transforming the existing energy sources to green ones, making efforts for reforestation, and implementing necessary regulations to restrict investment in polluting capital.[5] The choice of specific measures in each

[5] It is also important to evaluate the risks to the economy and financial sector associated with such policy options (e.g., see Sever and Perez-Archila (2021) for a review of the risks in financial sector arising from carbon tax).

member state should align with the commitments in the Nationally Determined Contributions (NDCs) and development objectives. In the current juncture, some examples of these policies for the WAEMU countries include phasing out the subsidies for polluting energies (which is a cost-effective mitigation measure) and increasing the share of renewable energy in the energy mix.

8. However, adaptation strategies likely play a greater role in the WAEMU considering its limited impact on global emissions and its immediate needs. Despite being responsible for only about 0.4 percent of global greenhouse gas emissions (according to the data from the Word Bank), WAEMU countries are assessed to be at substantial risk of humanitarian crises led by climate change, with low performance regarding the two key dimensions of adaptation compared to the rest of the world, high vulnerability to climate-related shocks (including an assessment of exposure, sensitivity and adaptive capacity), and high limitations on the readiness to adapt quickly (including an assessment of economic, institutional and social constraints) (Figure 5). In this context, adaptation policies remain crucial in the WAEMU, and also in the rest of the sub-Saharan Africa, since (i) high dependence on climate-sensitive sectors (particularly agriculture) poses immediate needs to safeguard against the effects of climate change, and (ii) rapid implementation of adaptation policies can promote economic growth in the short-term allowing the region to accumulate resources for mitigation policies going forward.

Figure 5. Climate Risks and Adaptation in the WAEMU



Source: ND-GAIN (Notre Dame Global Adaptation Initiative), INFORM, IMF staff calculations. Vulnerability and readiness indexes range between 0 and 1. Higher values of the readiness index (vulnerability index) represent high readiness (high vulnerability). Climate change risk index ranges from 0 to 10, higher values indicating greater risk for humanitarian crises triggered by climate change. Charts report global sample versus WAEMU countries.

9. Although implementing adaptation measures is likely to be more cost-effective and sustainable compared to frequent disaster relief in general, adaptation to climate change is expensive, posing a challenge for the WAEMU countries given current financing pressures and other development needs. Policies for adaptation range from building buffers (such as fiscal and international reserves) and extending the social safety nets to strengthening institutions and frameworks that promote structural transformation aimed at building resilience and enhancing coping mechanisms. Overall, adaptation costs are estimated to be large in general, e.g., in sub-Saharan Africa, around 2-3 percent of regional GDP on average each year over the next decade, while the cost of inaction is estimated to be even larger, as it will increase the need for frequent disaster relief (IMF 2020). Amid tight financial conditions, current pressures on public and external balances, and the ongoing security and political issues in the region, it is challenging for the WAEMU governments to allocate resources for such spending. Moreover, it is crucial to do so by ensuring that adaptation efforts aimed at addressing the impacts of climate change and the ongoing food insecurity do not crowd out other spending needs in development sectors, such as in education and health.

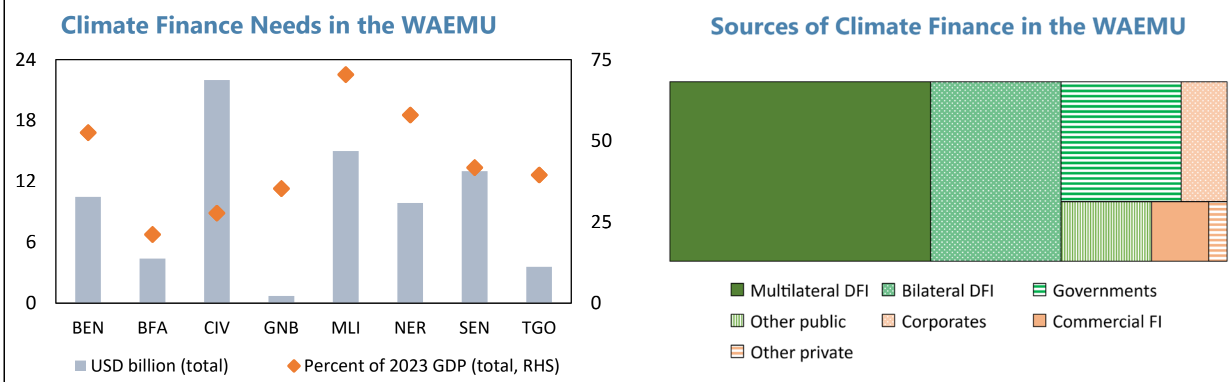
10. Financing options generally include (i) concessional financing, (ii) private finance via climate-linked debt instruments, and (iii) climate-related insurance products (Belianska et al. 2022, IMF 2023). Development partners need to expand support beyond disaster relief and should target building resilience and coping mechanisms (including insurance products). In this context, development partner–financed resilient infrastructure is estimated to achieve the same welfare level as frequent disaster relief, with the associated costs being at least a 30 percent lower (Cantelmo et al. 2019). It is also important that climate finance provided by the international community should be in addition to current aid flows. International financial institutions also have an important role regarding unlocking financing for adaptation via a range of instruments (including loans and guarantees) and by reducing investment risk.

11. Climate financing in the WAEMU remains much lower than the needs, and is dominated by flows from public sources, calling for mobilizing private climate finance to fill the gaps going forward. Implementing nationally determined contributions (NDCs) in the WAEMU is estimated to cost about $79 billion (encompassing both adaptation and mitigation) in total over the medium-term.[6] This corresponds to about 39 percent of the 2023 regional GDP, ranging from 21 to 70 percent of the 2023 GDP across the member states (Figure 6). However, climate finance flows to the WAEMU remain limited compared to the needs estimated above, e.g., about $3.6 billion in 2020 with almost 90 percent of it being from public sources that encompass multilateral development finance institutions (including the World Bank and African Development Bank), bilateral funding and other donors, according to the June 2023 Technical Report by SPARC.[7] Dominance of public sources of climate finance in the WAEMU points to the need for new mechanisms to mobilize private investment, potentially at the regional level, such as making use of green finance, bolstering local and regional debt markets, de-risking approaches (i.e., via blending public and private sector finance), or debt-for-nature swaps. Multilateral development banks and development finance institutions can help design and implement innovative financial instruments to provide risk absorption capacity and to leverage investment by the private sector (IMF 2022). Moreover, reform measures supported by the IMF's Resilience and Sustainability Facility (for Benin and Senegal so far, with Cote d'Ivoire in the pipeline) also aim to attract more private climate finance flows to the region.

[6] Based on the UNFCCC NDC Registry. Available at https://unfccc.int/NDCREG.

[7] However, it is worth noting that tracking private climate finance are subject to some challenges, as explained by the Climate Policy Initiative (CPI) here.

Figure 6. Climate Finance in the WAEMU



Source: World Bank, Country NDCs (Nationally Determined Contributions), CPI (as adopted from the SPARC Report), IMF staff calculations. DFI stands for development finance institutions. Right-hand-side chart illustrates the share of each source in total climate finance in the WAEMU based on the data from 2020. Green colors in the right-hand-side chart represent public resources.

12. **Building awareness of the links across adaptation and economic outcomes can be a first step for the WAEMU governments to develop comprehensive strategies.** For instance, improved seeds, insecticide, fertilizer, irrigation, and reliable access to electricity and water, are important for adaptation. Better access to finance (to provide financial buffers to the most vulnerable) and telecommunication services (to improve access to early warning systems), and robust housing and sanitation boost the resilience of households to climate-related shocks. Such efforts are found to reduce the likelihood of post-shock food insecurity in sub-Saharan Africa up to 30 percentage points (IMF 2020). Moreover, strong institutions should support the enforcement and effectiveness of the regulations aimed at addressing weather sensitivity of infrastructure and production activities. Improving the social safety nets (e.g., for poorer households and small and medium enterprises) helps the most vulnerable build resilience to climate shocks. The WAEMU can also benefit from climate-relate stress tests to assess the risks from climate change in the financial system. Macroeconomic policies and structural reforms to create fiscal space, build external buffers and promote economic diversification (e.g., addressing high reliance on agriculture) can help the WAEMU not to forgo other development needs while limiting and mitigating the effects of climate shocks.

13. **Cooperation and coordination, including at the WAEMU level, should also play a role in the adaptation efforts.** Effective adaptation encompasses a continuous process of identifying climate risks, planning of adaptation, implementing necessary measures, and monitoring and evaluating those measures (UNFCCC 2020). An effective operationalization of these stages requires coordination within the government (including across the Ministries of Finance, Agriculture, Education, Environment, and Health, and other agencies responsible for specific infrastructures) and with development partners (IMF 2020). Regional coordination and cooperation remain crucial as well. These can include, but are not limited to, the following:

- Regional guidelines on the appropriate institutional and legal frameworks, as well as the roles and responsibilities of the bodies in charge of adaptation and mitigation measures, can help synchronize efforts with potential synergies across the member states. In this context, capacity building efforts at the WAEMU level can accelerate the implementation of climate strategies at the national levels.

- At the WAEMU level, regional regulations to build resilience can be considered, including launching new directives for setting the standards for climate-resilient public investment management.

- Regional initiatives can also play a key role in overcoming the data limitations which are generally an important impediment to effectively identifying and forecasting climate-related risks and vulnerabilities to inform the adaptation strategy.

- Building on regional data, the next step can be to establish a standardized methodology at the WAEMU-level to assess the magnitude and sectoral distribution of climate finance needs.

- Efforts at the WAEMU level can also include sharing of technologies, expertise, knowledge and institutional practices across the member countries to increase the efficiency and effectiveness of adaptation measures.

- Regional initiatives to facilitate digitalization across the region can help farmers by allowing them to use early warning systems and improving their access to financial resources for adaptation.

- Reforms for greater economic diversification as well as deeper regional (i.e., within the WAEMU) and global trade integration, particularly for agricultural inputs and products and combined with resilient storage and transport infrastructures, can provide new opportunities for the private sector and incentivize climate-resilient investment in agriculture (Baptista et al. 2022).

- Developing regional markets for agricultural products could also lower food prices and help improve food security in the WAEMU.

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GENDER INEQUALITY IN THE WAEMU: CURRENT SITUATION AND OPPORTUNITIES[1]

This paper documents the current state of gender inequalities in the WAEMU by focusing on outcomes (health, education, labor market and financial inclusion) and opportunities (economic rights). The findings show that despite significant progress toward gender equality over the last three decades, there are still prevalent gender-based disparities, which prevent women from fulfilling their economic potential. Both empirical and model-based estimates suggest that the WAEMU can reap substantial economic gains by mitigating the existing gender gaps in schooling and labor market outcomes. Hence, achieving gender equality remains a macro-critical goal for the region. Going forward, the need for specific policies supportive of gender equality may vary in each member country, but a multifaceted and holistic approach is needed to unleash the related economic potential in the WAEMU as a whole.

A. Macroeconomic Relevance of Gender Equality

1. Gender equality is not only a goal in the realm of human rights, but also a key element of sustainable and inclusive growth. Ensuring women's full and effective participation in economic activities is one of the priorities in the development agenda, including the 2030 Agenda of Sustainable Development (IMF and World Bank 2007, World Bank 2012, UN 2015, IMF 2017). Moreover, cross-country data shows that greater gender equality is associated with higher economic growth and lower income inequality (Figure 1).

2. Gender equality fosters economic growth and development through several direct and indirect channels. There is extensive evidence in the literature on the positive role of gender equality on economic growth and development (see Bertay et al. 2020 for a review). Gender equality improves economic performance through several direct links, including higher female labor force participation and efficiency of allocation in the workforce, faster productivity growth, and accumulation of human capital. There are also indirect channels through which gender equality contributes to economic performance. For example, women in paid employment invest more in education, food, and health of their children, improving the accumulation of human capital across generations (Schultz 2002, World Bank 2012). Women's economic inclusion can also promote economic diversification, enhance competitiveness, and improve financial stability (WEF 2014, Kazanjian et al. 2016, Kochhar et al. 2017, Sahay and Cihak 2018). In addition, steps toward leveling the playing field for women and men through legal reforms can (i) increase women's participation in the labor force, and (ii) facilitate the economic convergence process through which developing countries can catch up with the living standards in developed countries (Sever 2022, 2023). Greater gender equality is also associated with lower income inequality and poverty (Gonzales et al. 2015). In sum, gender equality is critical for economic growth and development.

[1] Prepared by Can Sever (AFR). I thank Luca Antonio Ricci, Alain Feler and Lawrence Norton for helpful comments. I also thank Deirdre Daly, Faten Saliba, Luc Tucker and my colleagues in the WAEMU country teams for insightful suggestions.

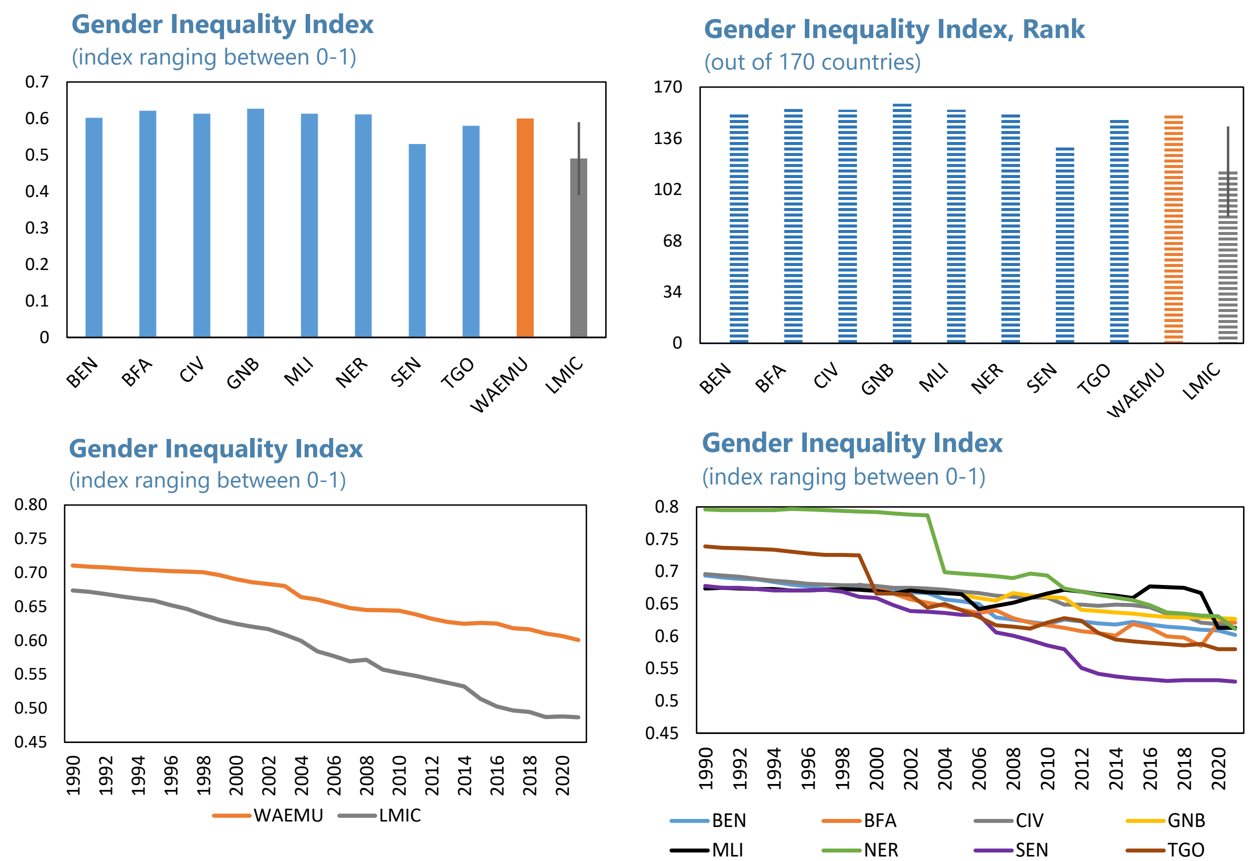
Figure 1. Gender Inequality, Economic Growth and Income Inequality

Sources: World Bank, UN, Standardized World Income Inequality Database (SWIID), and IMF staff calculations. GII: gender inequality index from the United Nations (mainly encompassing gender-based disparities in labor market, education and health outcomes, as well as the political representation). Gini index (a measure of income inequality) is from SWIID and based on disposable income. EMDEs: emerging markets and developing economies. Charts use the growth rate of real GDP per capita (percentage points), GII (ranging between 0-1) and the Gini index (ranging between 0-100). They are averaged over the period of 1990-2021 for each country. Higher values of GII (Gini index) represent higher gender (income) inequality.

B. Gender Inequalities in the WAEMU

3. The WAEMU has made progress toward gender equality in outcomes since the 1990s, but at a relatively low pace, leaving the region behind its peers. Gender inequality is a multidimensional concept spanning outcomes and opportunities. In terms of outcomes, gender inequality index (GII) from the UN (accounting for gender-based disparities in labor market, education, and health outcomes) suggests that the WAEMU made significant progress during the last three decades, with some heterogeneity across the member countries (Figure 2). Most notably, Senegal has made significant improvements in recent years, differentiating itself from other WAEMU countries. However, the WAEMU as a region still has greater gender inequality in outcomes relative to the group of lower-middle income countries (LMICs). Moreover, all the WAEMU countries are currently ranked at the bottom 25th percentile of the global sample regarding gender equality (the ranking of the member states being between 131st for Senegal and 159th for Guinea-Bissau - out of 170 countries globally with available data), significantly behind the LMIC sample, on average. In addition, the pace of progress toward closing gender gaps in outcomes was lower in the WAEMU compared to the LMICs. As a result, the gap between the two country groups have widened over time.

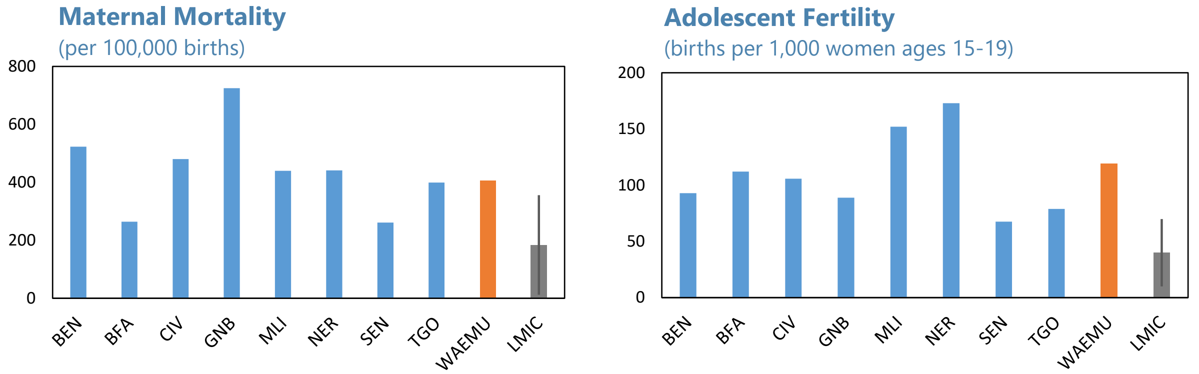
Figure 2. Gender Inequality in Outcomes



Sources: World Bank, UN, and IMF staff calculations. GII: gender inequality index from the United Nations. LMIC: lower-middle income countries excluding WAEMU countries. Higher values of GII (ranging between 0-1) represent higher gender inequality. WAEMU and LMIC averages are weighted with population (except the righthand-side chart on the first row which reports simple averages of the country rankings). The two charts in the first row use the latest data (2021). The charts on the first row also report the one standard deviation confidence intervals for LMIC (vertical lines).

4. The WAEMU significantly underperforms LMICs in health and reproductive outcomes. Maternal mortality rate stands around 405 (per 100,000 births) in the WAEMU, much higher than LMICs (184), posing a big risk to women's lives in the region (Figure 3). A gap is also apparent in adolescent fertility rates. In the WAEMU, adolescent fertility rate remains around 119 (births per 1,000 women ages 15-19), as opposed to 40 in LMICs. This suggests that girls are less likely to continue their education and to stay in schools for higher education (as also shown below), forming an impediment to women's full and effective participation in the workforce, particularly for poorer women and in the absence of wide-spread and accessible childcare facilities (see McQueston et al. 2012 for a review).

Figure 3. Health and Reproductive Outcomes

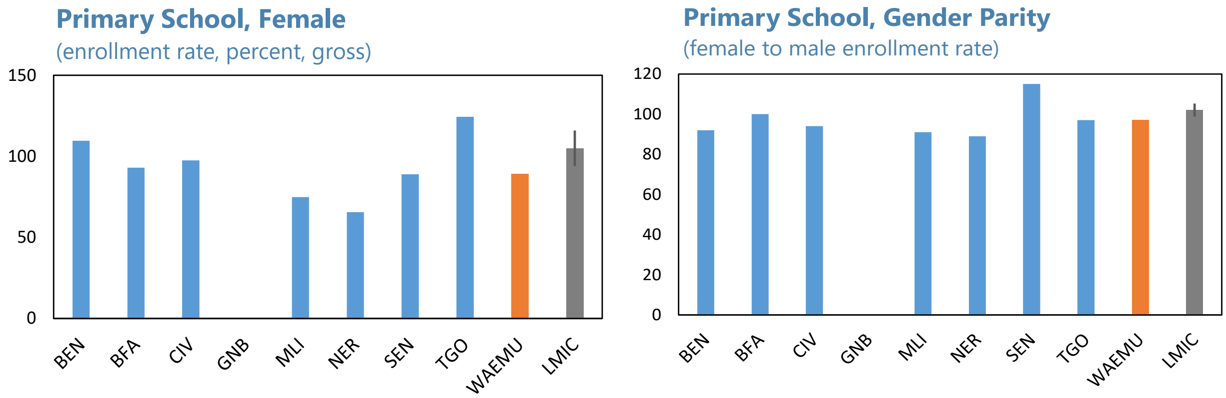


Sources: World Bank, and IMF staff calculations. LMIC: lower-middle income countries excluding WAEMU countries. WAEMU and LMIC averages are weighted with population. The charts also report the one standard deviation confidence intervals for LMIC (vertical lines). The charts use 2020 data.

5. Gender-based gaps in education outcomes remain prevalent in the WAEMU, particularly for higher levels of education. Primary school enrollment rate of girls is lower in the WAEMU (89 percent gross rate) relative to LMICs (105 percent gross rate) (Figure 4).[2] This gap is also visible in the gender parity index —i.e., the ratio of the enrollment rate of girls to boys— which in primary education is about 5 percentage points lower in the WAEMU compared to LMICs. Differences in education outcomes across the WAEMU and LMICs become even more striking in higher levels of education. Looking at secondary education, the enrollment rates of girls are 41 versus 76 percent in the WAEMU and LMICs, respectively (Figure 5). The difference between the gender parity index in secondary education across the WAEMU and LMICs also widens relative to that of primary education (to 13 percentage points). In tertiary education, enrollment rate of females is only around 7 percent in the WAEMU, whereas it is at 31 percent in LMICs (Figure 6). The difference between the gender parity indexes across the WAEMU and LMICs also increases to 49 percentage points in tertiary education. These differences are also reflected in the average years of schooling, in which the WAEMU lags LMICs (Figure 7). These figures suggest that keeping girls in schools longer is particularly a challenge in the WAEMU. This has implication for labor markets, potentially making women more likely to be employed in jobs and positions that typically do not require high skills, pay less, and are less secure, even when women participate in the workforce.

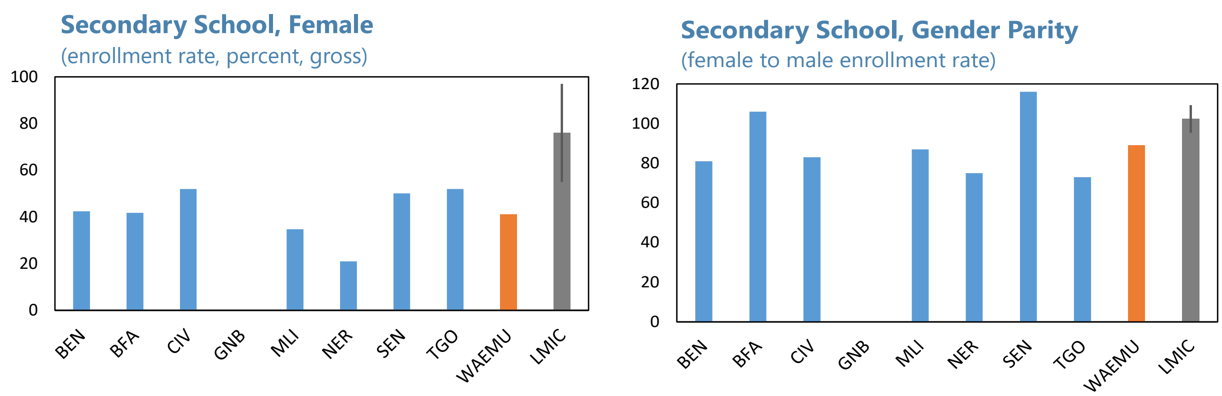
[2] Gross enrollment rates can be over 100 percent, since the definition is regardless of age. In particular, gross enrollment rate for a particular level of education includes students who are older or younger than the official age group for that level of education, encompassing the students who repeat a grade and enroll late (hence, are older than their classmates), or advance quickly (thus, are younger than their classmates). These can make the gross enrolment rate to be above the population which corresponds to that specific level of education. It is also worth noting that enrollment rates do not necessarily reflect actual attendance rates, and are not an indicator of learning outcomes.

Figure 4. Primary Education



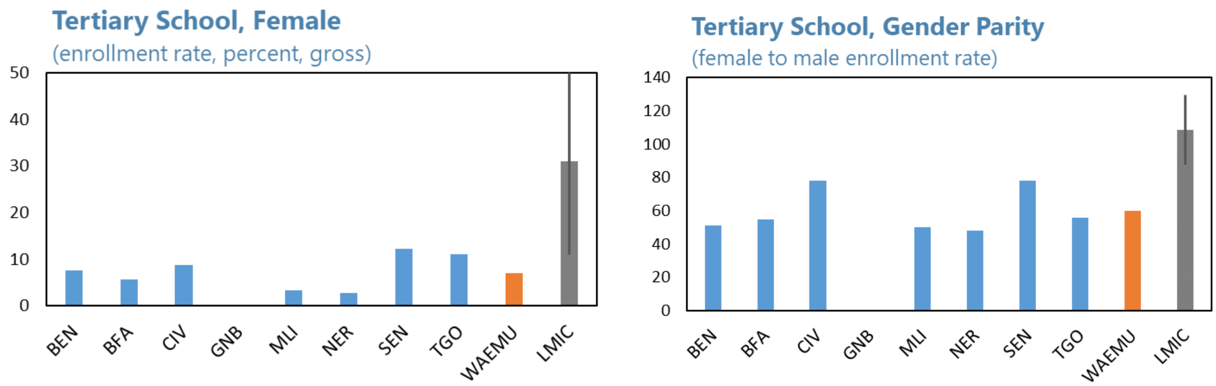
Sources: World Bank, and IMF staff calculations. LMIC: lower-middle income countries excluding WAEMU countries. WAEMU and LMIC averages are weighted with population. The charts also report the one standard deviation confidence intervals for LMIC (vertical lines). Gender parity index is in percent. The charts use 2020 data. Data is not available for GNB.

Figure 5. Secondary Education



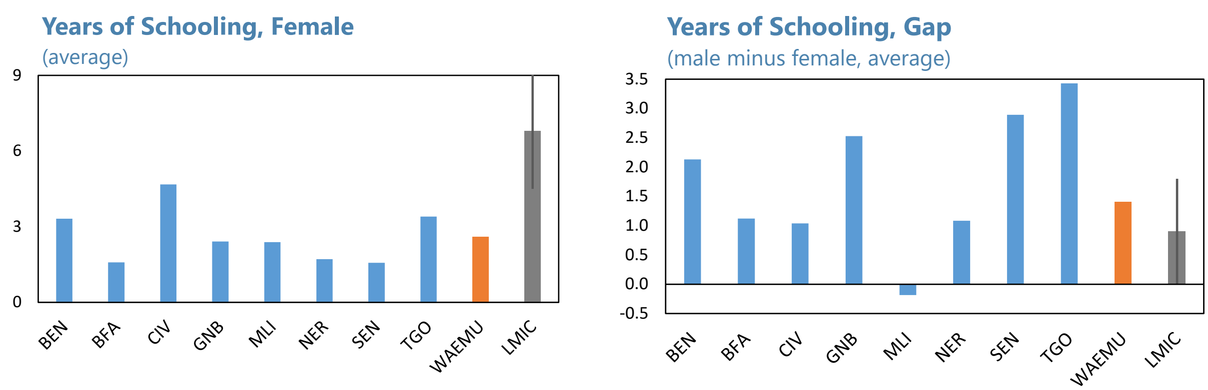
Sources: World Bank, and IMF staff calculations. LMIC: lower-middle income countries excluding WAEMU countries. WAEMU and LMIC averages are weighted with population. The charts also report the one standard deviation confidence intervals for LMIC (vertical lines). Gender parity index is in percent. The charts use 2020 data, or the latest year available. Data is not available for GNB.

Figure 6. Tertiary Education



Sources: World Bank, and IMF staff calculations. LMIC: lower-middle income countries excluding WAEMU countries. WAEMU and LMIC averages are weighted with population. The charts also report the one standard deviation confidence intervals for LMIC (vertical lines). Gender parity index is in percent. The charts use 2020 data, or the latest year available. Data is not available for GNB.

Figure 7. Years of Schooling

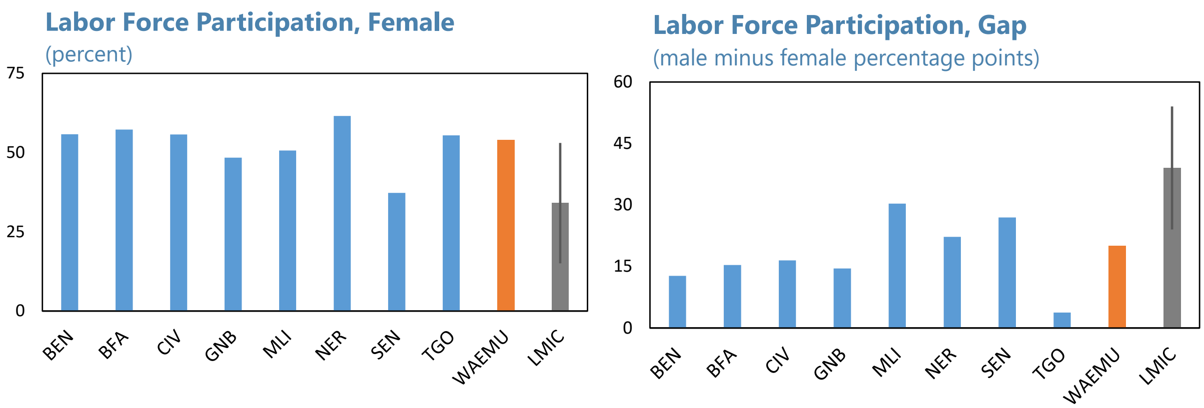


Sources: UN, and IMF staff calculations. LMIC: lower-middle income countries excluding WAEMU countries. WAEMU and LMIC averages are weighted with population. The charts also report the one standard deviation confidence intervals for LMIC (vertical lines). The charts use 2021 data.

6. **The WAEMU appears to outperform LMICs regarding female labor force participation, but there is still a large room for improvement.** Data on labor force participation of females ages 15 and above (as modeled by the International Labour Organization) show that around 54 percent of females participate the workforce in the WAEMU, as opposed to 34 percent in LMICs (Figure 8). Moreover, the gender gap in the labor force participation (the difference between male and female participation rates) seems to be lower in the WAEMU relative to LMICs (20 versus 39 percentage points). Although the WAEMU seems to perform better in labor force participation relative to its peers, there is still a large room for improvement to bridge the large 20 percentage points gap. It is also important to note that women are more likely to work in informal (and/or part-time) jobs which are typically less secure, less stable and pay less, thereby posing economic vulnerability (International Labour Organization 2018, Malta et al. 2019a, OECD and International Labour Organization 2019). Moreover, relatively higher participation rates in the WAEMU do not rule out

other frictions in the labor market, shaped by gender-based segregation, lack of higher education, limited skills, limited career prospects, and wage gap, which overall leave women economically behind.[3]

Figure 8. Labor Force Participation

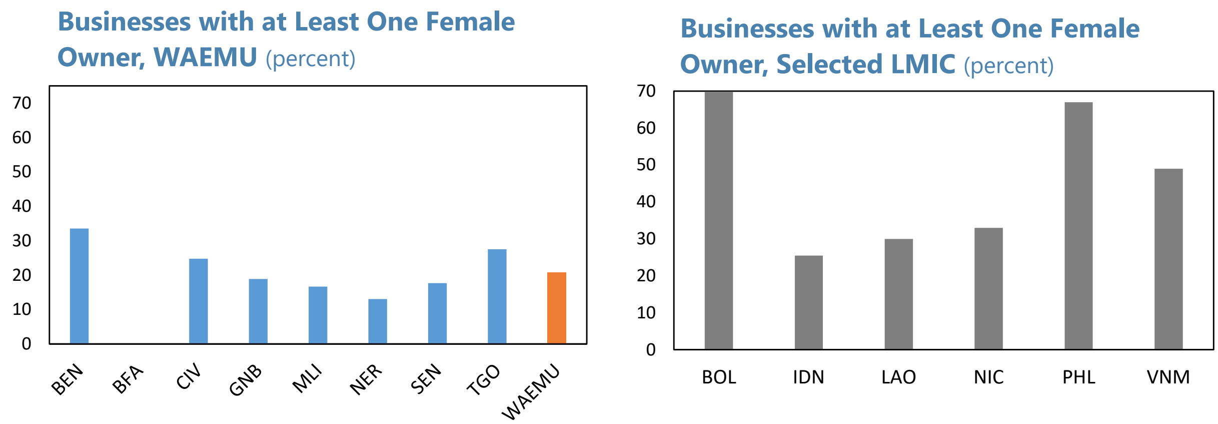


Sources: World Bank, and IMF staff calculations. LMIC: lower-middle income countries excluding WAEMU countries. WAEMU and LMIC averages are weighted with population. The charts also report the one standard deviation confidence intervals for LMIC (vertical lines). The charts use the data from 2020.

7. Despite relatively high labor participation rates, female business ownership rates remain low and gender wage gaps are high in the WAEMU. The share of businesses with at least one female owner is around 21 percent in the WAEMU, according to the World Bank's Enterprise Surveys database (Figure 9). This rate appears to be higher in some selected LMICs. Moreover, the gender wage gap remains high in the WAEMU, with men earning about 43 percent higher than women, based on the data from the International Labour Organization (Figure 10). Lower business ownership rates and higher gender wage gap in the WAEMU point to gender-based disparities regarding entrepreneurship and positions of power, and likely reflect the large gender gap in higher education. Prevailing gaps in these outcomes are closely linked to wider income inequality, poverty rates, and spending on children's health and education in the region (World Bank 2023).

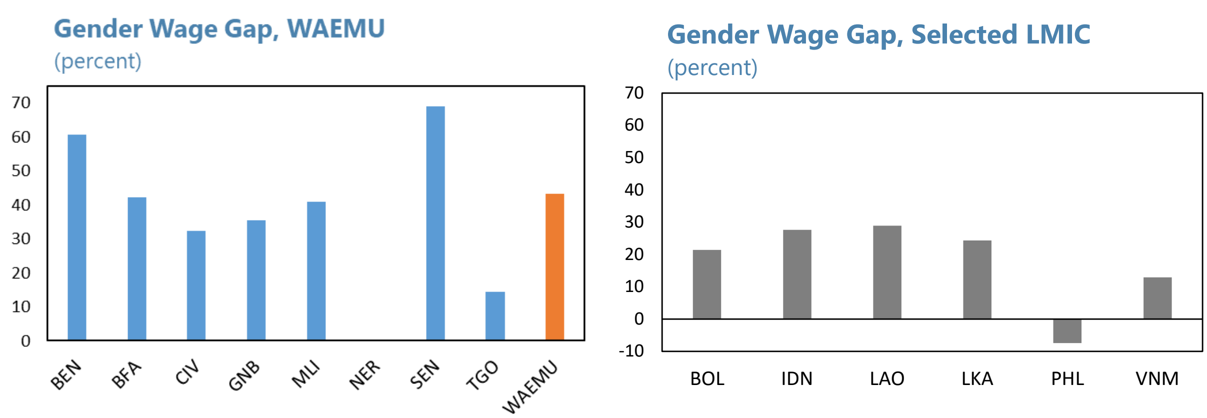
[3] In addition, as farmers, women typically produce less relative to men, due to caregiving responsibilities in the household and limited access to agricultural inputs (e.g., fertilizers). For instance, women in Niger are estimated to achieve yields that are 66 percent lower than those of men (World Bank 2014). Women are also less likely than men to process or to sell their agricultural output, as they tend to keep it for the household's consumption (World Bank 2014). Such disparities in the agricultural outcomes potentially pose another important impediment to gender equality in the WAEMU given that agricultural employment accounts for almost 55 percent of total employment in the region.

Figure 9. Businesses with Female Owners



Sources: World Bank Enterprise Surveys (the latest year for each country), and IMF staff calculations. LMIC: lower-middle income countries. Data is not available for BFA.

Figure 10. Gender Wage Gap

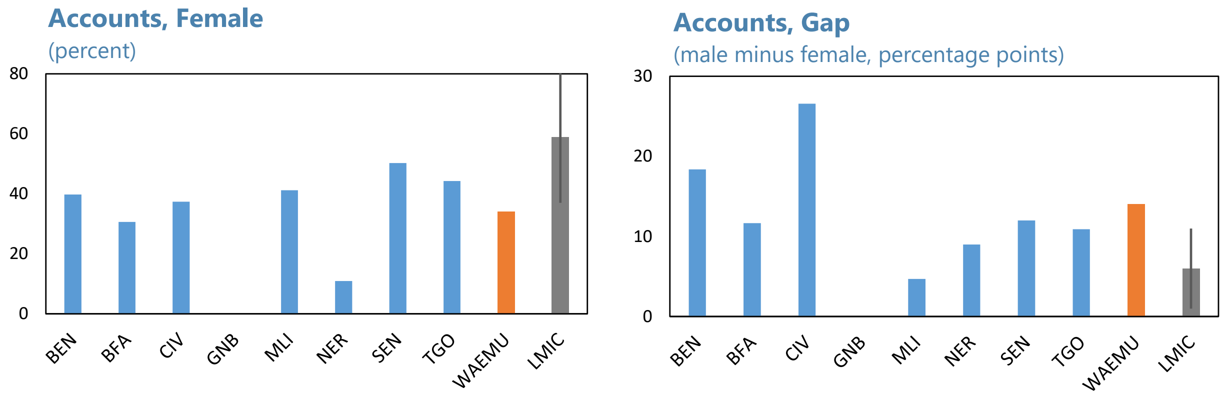


Sources: International Labour Organization (the latest year for each country), and IMF staff calculations. LMIC: lower-middle income countries. WAEMU average is weighted with population. The chart is based on average monthly earnings. Data is not available for Niger.

8. Gender-based disparities in the WAEMU are also pronounced in financial inclusion. Percentage of females who own an account at a financial institution or with a mobile money service provider remains around 34 percent in the WAEMU, whereas it is 60 percent in LMICs (Figure 11). Moreover, the gap between male and female rates in account ownership is high in the WAEMU (15 percentage points), compared to LMICs (6 percentage points).[4] This likely limits the women's ability to invest in education, cushion negative shocks (such as climate-related shocks), and save for old age.

[4] Another option to assess financial inclusion could be to focus on access to bank credit specifically, but currently there is no comprehensive data on this.

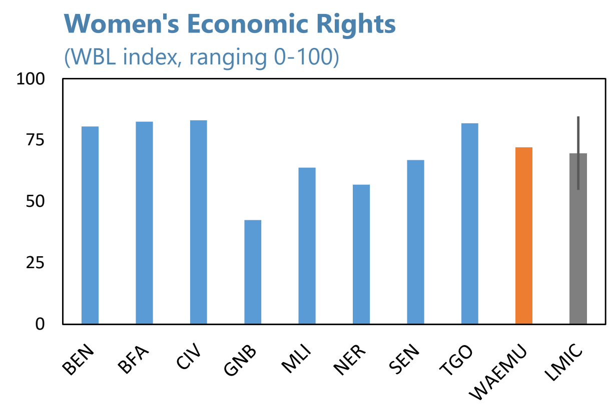
Figure 11. Financial Inclusion



Sources: World Bank, and IMF staff calculations. LMIC: lower-middle income countries excluding WAEMU countries. WAEMU and LMIC averages are weighted with population. The charts also report the one standard deviation confidence intervals for LMIC (vertical lines). The charts use the data from the 2021 survey, or the latest available. Data is not available for GNB.

9. In the WAEMU, women's economic rights (a key factor in equal opportunities) are at a similar level to LMICs, but there is significant room for legal reforms to level the playing field. The law score from the World Bank (focusing on gender-discriminatory laws in the areas of mobility, pay, workplace, marriage, parenthood, asset ownership, entrepreneurship, and pension benefits) is at 72 in the WAEMU, meaning that women have around 72 percent of the economic rights enjoyed by men (Figure 12). Although this is slightly above LMICs (with a law score of 69), it is still far from providing a level playing field for women (which would be associated with a law score of 100). Moreover, the laws and regulations to ensure equal pay, equal economic rights for spouses, a fair treatment of parents with a child, and equal rights regarding asset ownership are lower than the overall law score, thereby calling for legal reforms. For instance, improvements are needed in some WAEMU countries in the legislation related to ensuring equal pay for equal work, improving women's autonomy, preventing discrimination in access to credit and hiring, and addressing domestic violence. It is also important to take necessary actions to strengthen the link between the laws *de jure* and their application in practice to improve gender equality in outcomes.

Figure 12. Gender Equality Under the Law



Sources: World Bank, and IMF staff calculations. LMIC: lower-middle income countries excluding WAEMU countries. WAEMU and LMIC averages are weighted with population. The chart also reports the one standard deviation confidence intervals for LMIC (vertical lines). The chart uses the 2021 data.

C. Economic Gains from Moving Towards Gender Equality in the WAEMU

10. Empirical estimates suggest that moving toward gender equality can significantly boost economic growth and income in the WAEMU. Higher gender inequality is negatively associated with economic growth in both LMICs and the WAEMU (Table 1).[1] As a comparison across country groups, the empirical estimates suggest that if the median WAEMU country in 2021 reaches to the median of LMICs regarding gender equality (meaning a 0.15-point decline in GII), the boost to the per capita growth rate would be about 1.7 percentage points on average. Historically, the decline in the WAEMU GII since 1990 was lower though, i.e., about 0.1 points (as shown by Figure 2). Therefore, it may also be sensible to focus on the amount of progress toward gender equality in the past to provide an estimate of potential economic gains for the WEAMU going forward: the same amount of decrease in GII from 1990 to 2021 (i.e., about 0.1 points decline) predicts a 1.2 percentage points higher growth rate in the WAEMU, on average. Instead, focusing on the GDP per capita dynamics using local projections (Jorda 2005), the cumulative boost in real GDP per capita would be around 8 percentage points over a 10-year period, with the same amount of progress in the WAEMU GII during the last three decades (Figure 13).

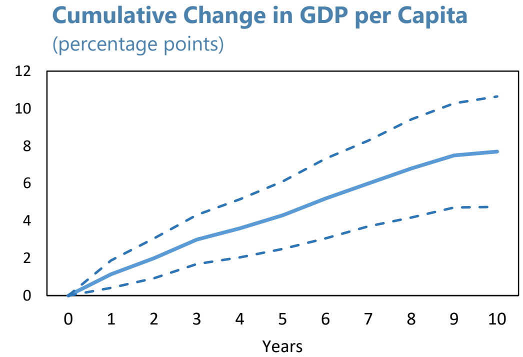
Table 1. WAEMU: Correlation between Economic Growth and Gender Inequality

Variable	Economic growth (t) LMICs	Economic growth (t) WAEMU
GII (t-1)	-4.05***	-11.57**
	(1.25)	(4.84)
Observations	1210	232
R-squared	0.15	0.26

Source: World Bank, UN, IMF staff estimations and calculations. The results are from regressing real GDP per capita growth on gender inequality index (GII) by controlling for year fixed effects in the indicated samples. LMICs: lower-middle income countries (excluding the WAEMU). The analysis is based on the period of 1990-2021. Standard errors in parenthesis are robust. *** p<0.01, ** p<0.05, *p<0.1.

[1] The results remain similar, if the lagged value of GDP per capita is included in the estimations to account for the different levels of economic development and economic convergence.

Figure 13. Cumulative Income Gains from Moving Towards Gender Equality in the WAEMU



Sources: World Bank, UN, IMF staff estimations and calculations. The results are from local projections of the cumulative changes in real GDP per capita (over the years, in percentage points) on gender inequality index (GII from the United Nations) by controlling for year fixed effects. The analysis is based on the WAEMU sample (eight member countries between 1990-2021). The coefficient estimates each year represent the average cumulative gain in real GDP per capita, if GII decreases around 0.1 points (the same amount of the decline in the WAEMU GII from 1990 to 2021) at year 0. Dashed lines represent the 90 percent confidence interval. Standard errors are robust.

11. **Consistently, several theoretical studies and other empirical frameworks estimate large macroeconomic gains from closing gender-based gaps in the WAEMU**. Malta et al. (2019b) calibrate a micro-founded general equilibrium model to Senegal and estimate that GDP in Senegal can increase up to 10 percent, if gender-based disparities in education and labor market are addressed. Ouedraogo and Gomes (2023) use a similar model for Niger and find that bridging gender-based gaps in education can boost Niger's GDP by around 11 percent. Cuberes and Teignier (2016) propose a theoretical model to quantify the income loss from the disparities in the workforce across the globe. Their estimates for five WAEMU countries point to large income per capita gains, if the gender-based gaps in the workforce are eliminated (GDP gains in parentheses): Burkina Faso (18 percent), Côte d'Ivoire (11 percent), Mali (11 percent), Niger (31 percent), and Senegal (17 percent). The estimates from Pennings (2022) suggest that closing gender-based gaps in the labor markets of member countries could increase the WAEMU's per capita GDP by at least about 18 percent in the long-run, with these gains being particularly large in Senegal (26 percent), Mali (20 percent) and Côte d'Ivoire (18 percent). An empirical analysis by the IMF suggests that GDP growth in WAEMU countries can increase by about 0.2-0.5 percentage points if gender-based disparities are brought to the levels observed in several African and Asian benchmark countries (IMF WAEMU Selected Issues Paper 2019).

D. Conclusion and Policies

12. **Despite the significant progress toward gender equality in the WAEMU over the last three decades, gender-based disparities remain significant, thereby holding the region back.** The WAEMU lags behind the LMICs group regarding various gender-based outcomes. Gender inequalities keep preventing women in the WAEMU from fulfilling their economic potential and hinder the allocation and utilization of talent and resources, thereby weighing down on economic growth, development and social outcomes. Addressing the existing gender inequalities thus can

unlock the region's economic potential and generate large economic gains in the WAEMU, as suggested by both empirical and model-based estimates.

13. Achieving gender equality is a multifaceted process which typically requires time. A holistic approach to move towards gender equality is needed to enable women to participate in economic activities fully and effectively. Prevalent gender-based disparities in the WAEMU, such as in the areas of healthcare, education, labor market, financial inclusion and legislation can provide some insights for policymakers going forward. However, the selection and extent of specific policies to mitigate gender inequalities in both outcomes and opportunities could vary in each member state. Against this background, undertaking a comprehensive assessment of existing impediments to gender equality at both national and regional levels, initiated and coordinated at the WAEMU level, can be useful to set up a roadmap. Having said this, based on the documented facts which seem to be quite similar across the region, policies should be aimed at (i) improving accessibility of health services for women; (ii) increasing access and quality of education for girls, as well as ensuring their stay in school and entry into the employment after education; (iii) achieving a greater and also more effective participation of women to the workforce; (iv) promoting women's financial inclusion; and (v) reforming the laws to level the playing field for women and men.

14. Recognizing the criticality of gender equality, the WAEMU authorities have placed strategies and policies to address gender-based disparities. At the regional level:

- A 10-year Gender Strategy was adopted in 2018 with the goal of improving women's role in the economic, social, cultural and political spheres by the WAEMU Commission. The strategy encompasses two pillars: developing frameworks for gender mainstreaming and supporting the initiatives for women's empowerment. Focusing on the former, the WAEMU Commission aims to provide a roadmap on how to integrate the gender aspect into public policies, e.g., by preparing training to raise awareness and developing guidelines for gender budgeting. Regarding the second pillar, the WAEMU Commission launched a network to support women entrepreneurs, but the operations have remained limited due to constrained resources.

- BCEAO also recognizes the importance of gender equality, and has been undertaking various efforts and launched initiatives to tackle gender-based gaps in financial inclusion. The Financial Inclusion Strategy as adopted by the Council of Ministers in 2016 puts an emphasis of women's access to financial services, and the Regional Financial Education Program aims to improve financial literacy in the region, including that of women and girls both in schools and beyond.

At the national level, some examples of policies aimed at moving toward gender equality are as follows:

- The Ivorian authorities recently launched a program and allocated financial support and agricultural equipment and inputs to women involved in food production, took steps to facilitate women's access to health services, and are currently aiming at implementing policies to improve women's financial inclusion.

- Senegal has been implementing gender budgeting for 7 years now and accounting for the impact on gender equality in the context of public investment strategy; it is also planning to increase social spending targeting women as a part of the country's new development plan, to address the obstacles hindering girls' transition from primary to secondary education, and to provide training and credit to female entrepreneurs.

- Benin has also been implementing gender budgeting, as well as efforts to mitigate gender-based disparities on various opportunities and outcomes (including several initiatives toward addressing gender gaps in the tax code, strengthening legal protections against gender-based violence, expanding women's access to health services, improving women's representation in the political sphere, and keeping girls in schools, e.g., through free secondary education).

- The Togolese authorities enacted several legislative reforms to improve women's rights (e.g., within social protection, inheritance, and criminal law), and have also been implementing a series of gender budgeting reforms with the support of the IMF's technical assistance.

- The Nigerien authorities adopted a new National Gender Policy aimed at eliminating unequal opportunities in education for boys and girls and closing the gender disparities in primary and secondary education enrollment by 2027.

- The Malian authorities introduced gender quotas in public agencies and have been working with women's rights organizations to increase women's participation in decision-making processes.

- Burkina Faso has been engaged in the implementation of gender budgeting since 2014, while gender issues have been mainstreamed since the 2018 budget circular.

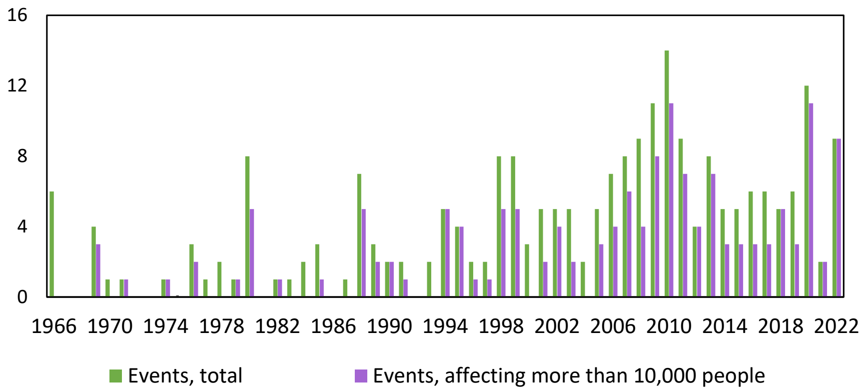
15. Efforts in these areas more likely to bear fruit when the complementarities among them are accounted for. For instance, labor market policies to boost the number of females and to improve the role of them in the workforce without closing the existing gaps in tertiary education may have limited effect on outcomes. Likewise, programs aimed at keeping girls longer in schools are not likely to help bridge gender-based gaps in secondary and tertiary education, as long as adolescent fertility rates remain at current levels and teenage mothers do not have access to widespread and affordable childcare. Such complementarities also exist between outcomes and opportunities. For example, initiatives to support women-owned businesses may not yield the desired results in terms of increasing the number of women entrepreneurs, unless women's autonomy in the marriage is not guaranteed by the law. Moreover, public education programs (with the goal of changing perceptions) can also support this process by enhancing the effectiveness of other policies, since gender inequality is also likely to be driven by social norms and cultural traits in general. When such efforts supportive of gender equality go hand in hand, WAEMU countries likely reap large economic gains both in the shorter and medium term.

16. Finally, the ongoing challenges and recent shocks in the WAEMU, such as the Covid-19 pandemic, climate change and security developments, likely exacerbate gender-based disparities, calling for an acceleration of policies supportive of gender equality. The Covid-19 shock had a disproportionate effect on women's employment (Alon et al. 2020, UN 2020). In addition, school dropouts among girls rose more than boys following the school closures during the pandemic, particularly in poorer and rural areas, which can worsen gender-based disparities persistently in the absence of counteracting policies (UN 2020, Flor et al. 2022). Next, WAEMU countries have been hit by climate-related disasters, with those events becoming more frequent and larger in recent years (Figure 14, also see the WAEMU Selected Issues Paper on climate change). They likely deepen existing gender inequalities, since women (i) have limited access to resources to safeguard against the effects of disasters, (ii) undertake unpaid care work in the household, and (iii) are less educated which makes them be employed in jobs that pay less and are less secure and more prone to climate shocks, e.g., in agriculture (UNDP 2014). Last but not least, security challenges in the WAEMU endure, especially in Burkina Faso, Mali and Niger, with the total number of internally displaced persons amounting to 2.7 million in these three member states (according to the data from the Internal Displacement Monitoring Centre). Internal conflicts and violence, alongside the associated forced migration, likely widen gender-based disparities in labor market, health and education outcomes, and also increase gender-based violence (see Buvinic et al. 2013)[6]. Therefore, in the current juncture, it is even more critical for the WAEMU authorities to act on a timely basis and set out a holistic approach aimed at achieving gender equality.

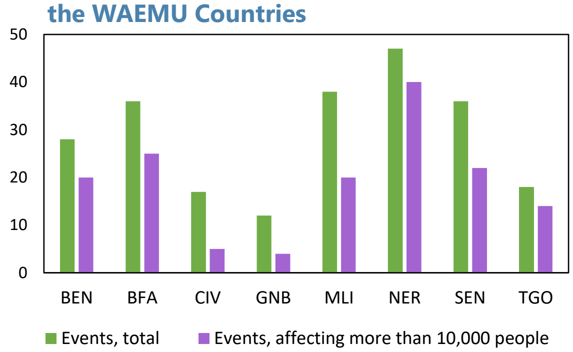
[6] It is worth noting that gender-based violence is also associated with lower economic performance as Ouedraogo and Stenzel (2021) show based on the data from Sub-Saharan Africa in the pre-pandemic period.

Figure 14. Climate Disaster and the Security Situation in the WAEMU

Number of Climate-Related Disaster in the WAEMU

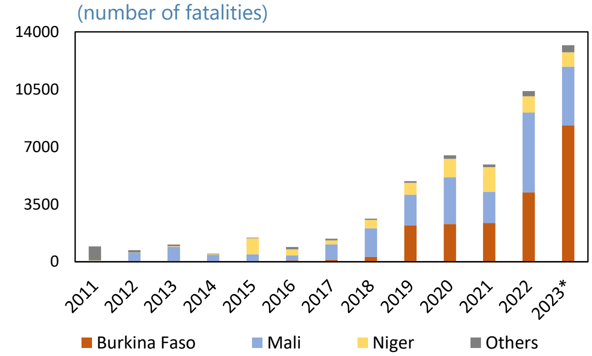


Number of Climate-Related Disasters in the WAEMU Countries



Fatalities Linked to Security Incidents

(number of fatalities)



Sources: EMDAT, ACLED, and IMF staff calculations. Climate-related disasters include droughts, floods, landslides, storms and wildfires (over the period of 1966-2022). Security incidents include battles, riots, explosions, and violence against civilians. Annualized data on security incidents in 2023 is based on mid-September 2023.

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