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# Key Banking System Risks in the WAEMU

Knarik Ayvazyan

SIP/2024/014

**IMF Selected Issues Papers are prepared by IMF staff as background documentation for periodic consultations with member countries.** It is based on the information available at the time it was completed on March 1, 2024. This paper is also published separately as IMF Country Report No 24/091.

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**IMF Selected Issues Paper**
African Department

# Key Banking System Risks in the WAEMU

**Prepared by Knarik Ayvazyan**

Authorized for distribution by Luca Antonio Ricci
May 2024

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**ABSTRACT:** 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.

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SELECTED ISSUES PAPERS

# Key Banking System Risks in the WAEMU

WAEMU

Prepared by Knarik Ayvazyan[1]

[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.

INTERNATIONAL MONETARY FUND

# WEST AFRICAN ECONOMIC AND MONETARY UNION

## SELECTED ISSUES

March 1, 2024

Approved By
**African Department**

Prepared By Knarik Ayvazyan.

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## ANNEXES

# 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**

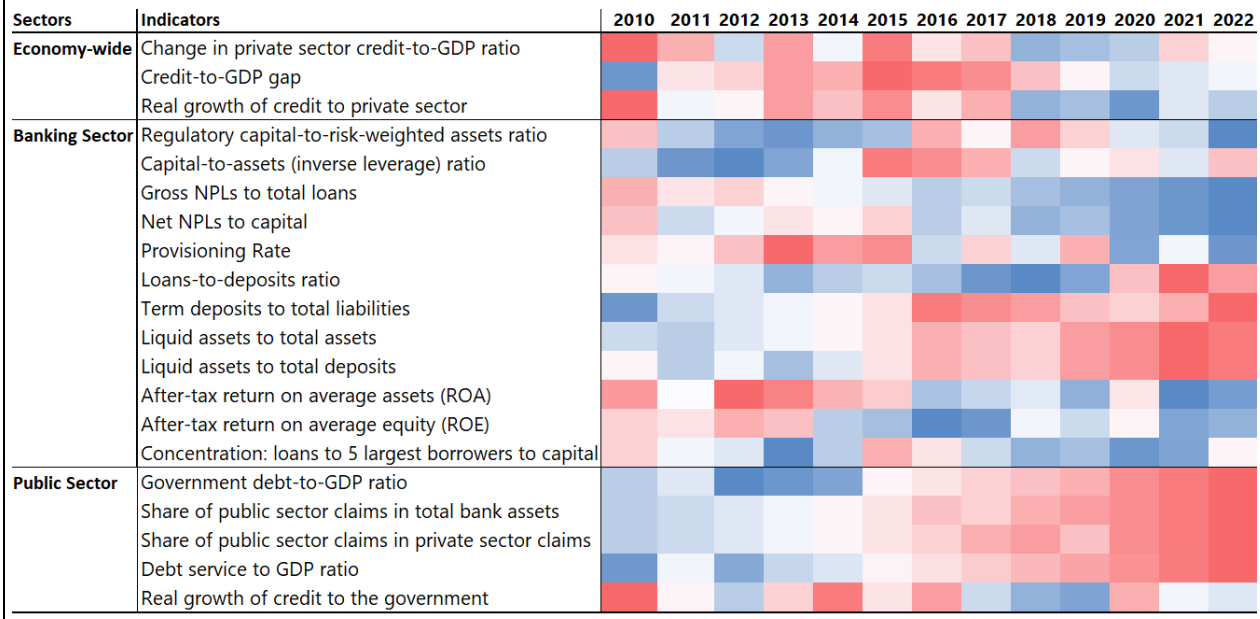
[1] Prepared by Knarik Ayvazyan, with helpful comments and inputs from Luca Antonio Ricci, Alain Feler, Annalisa Fedelino, Ljubica Dordevic, Lawrence Norton, and the staff of the BCEAO.

**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.

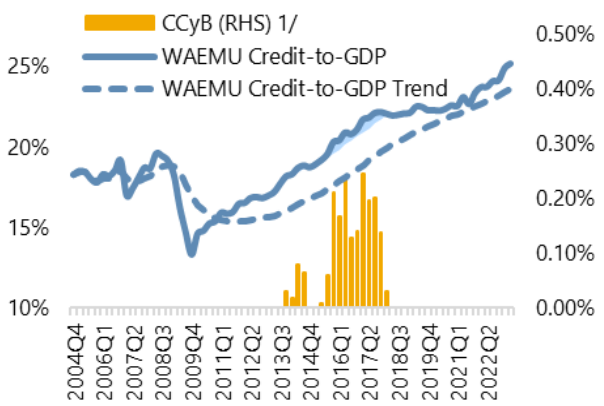
## B. Credit Risks

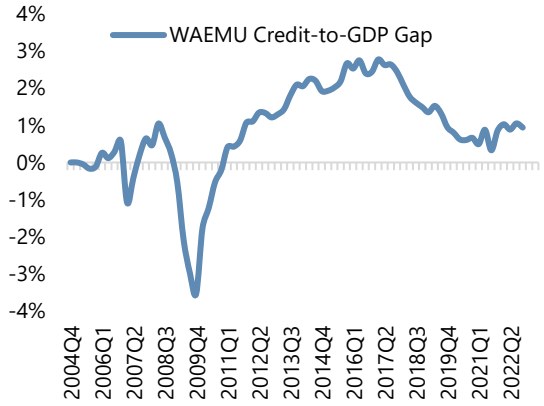
**6. Bank credit growth to the private sector remained high in recent years and slowed down in 2023.** It grew by 14.2 and 10.3 percent in 2022 and 2023, respectively. The credit gap (the deviation of the credit-to-GDP ratio from its estimated long-term trend) for the union stabilized at around a modest 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).

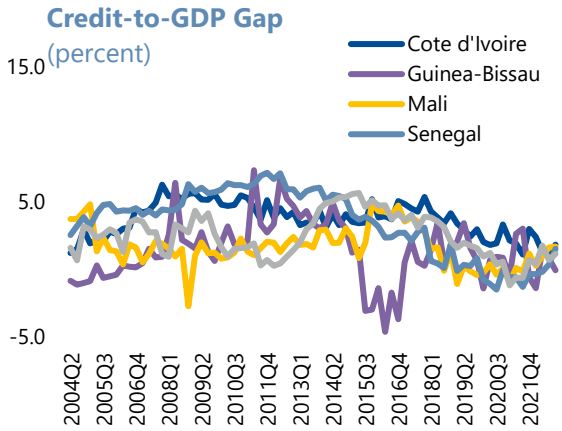
**Figure 2. Credit-to-GDP Gap Estimates**

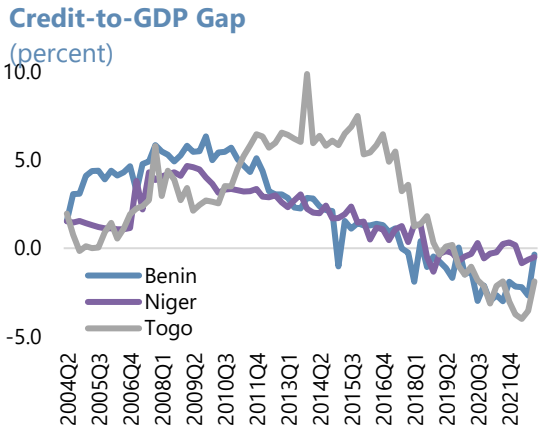
*The WAEMU's credit-to-GDP ratio remains slightly above its trend level*




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



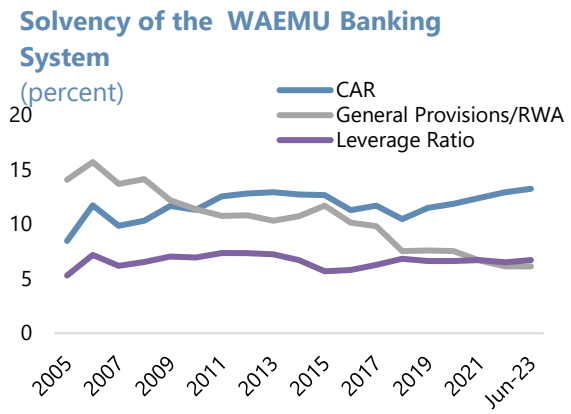

Sources: BCEAO; IMF Systemic Risk Tracker and IMF staff calculations.
Note: Credit-to-GDP trend is determined using a Hodrick-Prescott one-sided filter with λ=400,000. The shaded area represents the part of the credit-to-GDP ratio that exceeds its trend level by more than 2 percentage points.
1/ CCyB: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

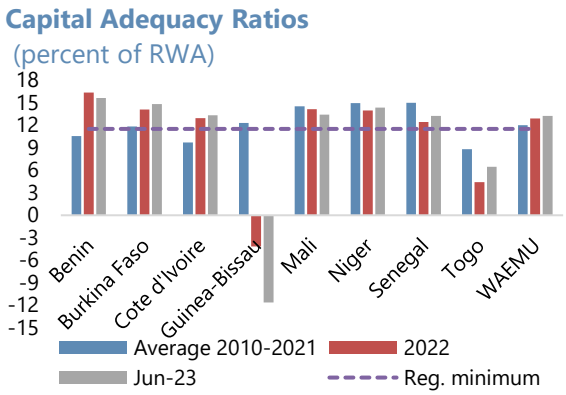
WAEMU average in Guinea-Bissau, Mali, and Senegal. Bank loan loss provisioning rates have improved over the past decade (from 63.7 percent in 2010 to 68 percent in 2022), but the cross-country dispersion is significant (ranging from 39.6 percent in Niger to 80.2 percent in Burkina Faso).

**Figure 3. Banks' Solvency Ratios**

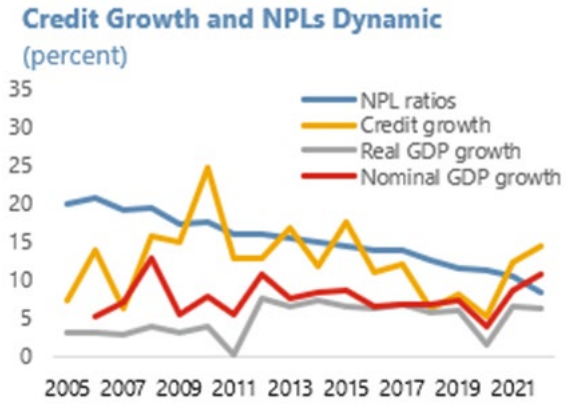
*Under Basel II/III, the banking system has strengthened its capital buffers…*

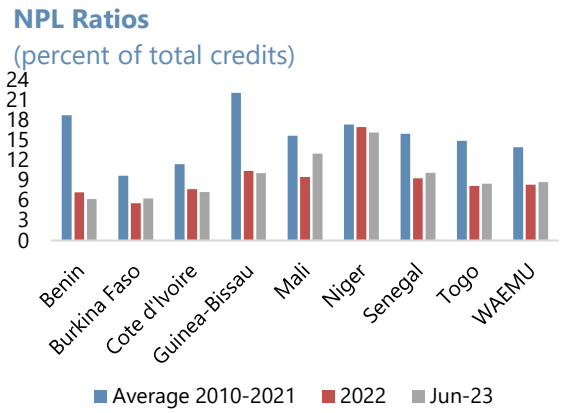



*… but a few banks with negative capital continue to weigh on the average capital adequacy.*




*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),

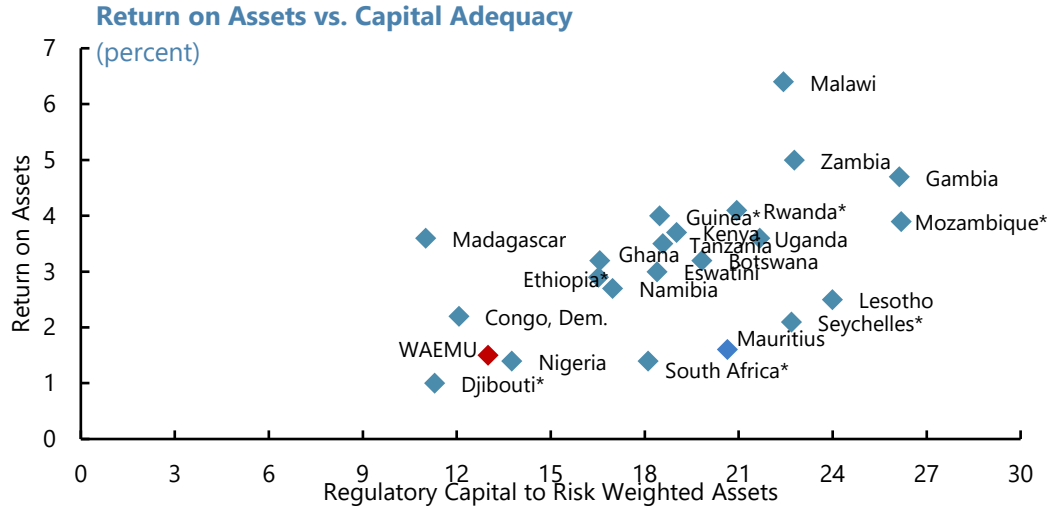
with a return on equity (ROA) persistently around 1.2–1.5 percent in recent years, albeit increasing. The COVID-19 pandemic has had no significant effect on the system's profitability.

## C. Concentration Risks

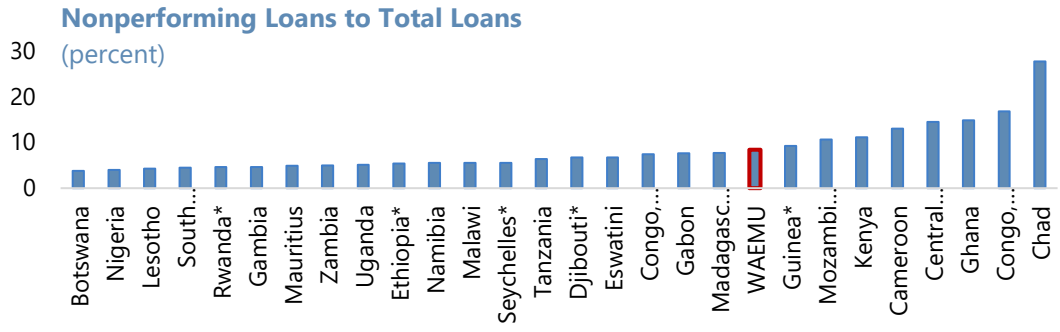
**9. Banking assets have a strong sectoral concentration in the WAEMU (Figure 5).** Banks' credit portfolios mostly consist of exposures to retail, wholesale trade, restaurants and hotels; manufacturing; and other services sectors (63.5 percent of the total). Despite the importance of agricultural production 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.*



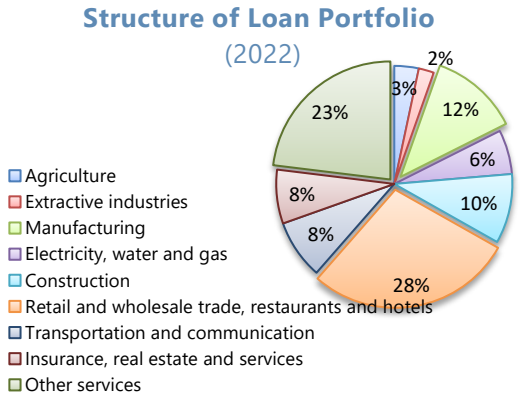

Sources: BCEAO; and IMF Financial Soundness Indicator (FSI) Database.

Note: * the data is available for 2021.

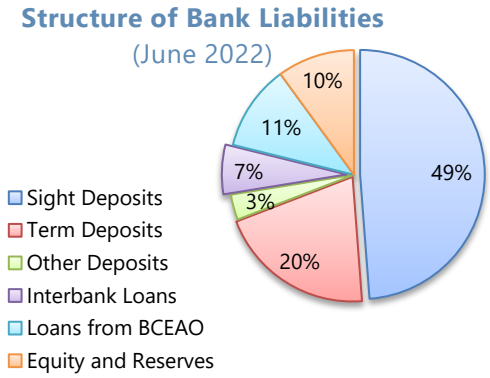
The database is based on IMF FSIs methodology, which ensures cross-country comparability and reflects advances in the regulatory framework, most prominently embodied in the Basel III reform and revised International Financial Reporting Standards (IFRS) and consistent with current Basel Committee guidance.

## Figure 5. Concentration of Bank Assets and Liabilities

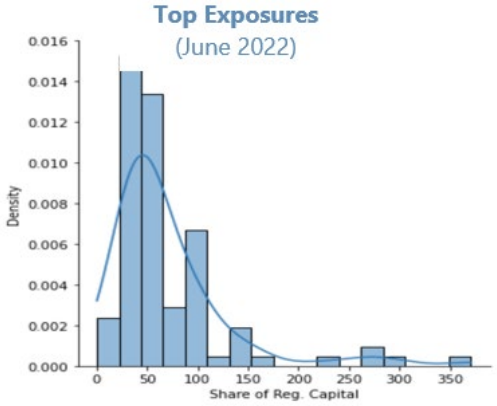
*The banks' loan portfolio exhibits a high degree of sectoral concentration.*



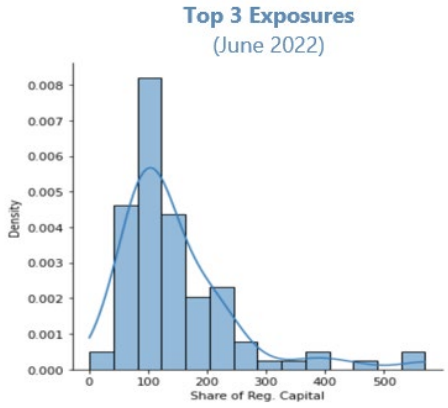

*Banks' financing stems mostly from customer deposits and BCEAO refinancing.*



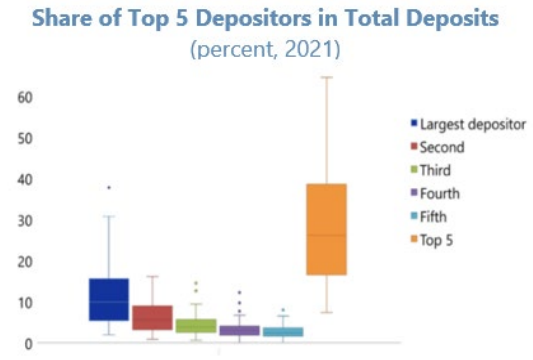

*Despite strong heterogeneity across banks, their largest exposures to private borrowers account for a substantial share of regulatory capital…*



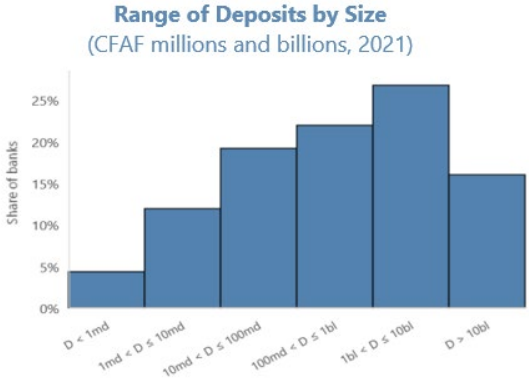

*…and their top 3 exposures often exceeding their total regulatory capital.*




*The deposit base is concentrated…*




*…with a distribution skewed towards large amounts.*




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.

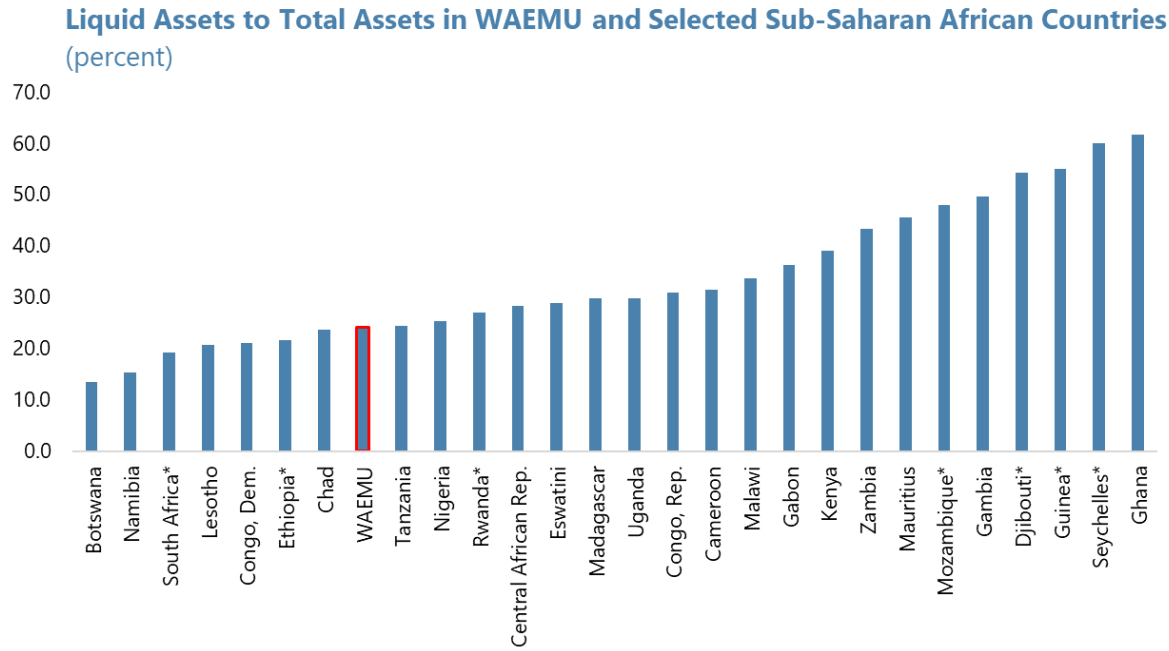
**11. Bank funding comes mainly from customers' deposits, also presenting significant concentration (Figure 5).** The majority of bank funding consists of sight deposits. Large corporations hold a substantial 40 percent share of the deposit base, followed by households (37 percent), and the public sector (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

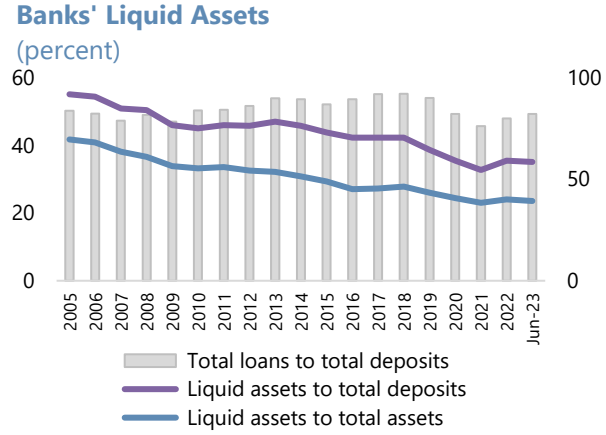
**12. The declining liquidity buffers in the banking sector in the context of an underdeveloped interbank market are exacerbating liquidity risks (Figure 6).** Banks' liquid assets have been declining in recent years. At end-2022, the sum of liquid assets accounted for about 24 percent of total assets, 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

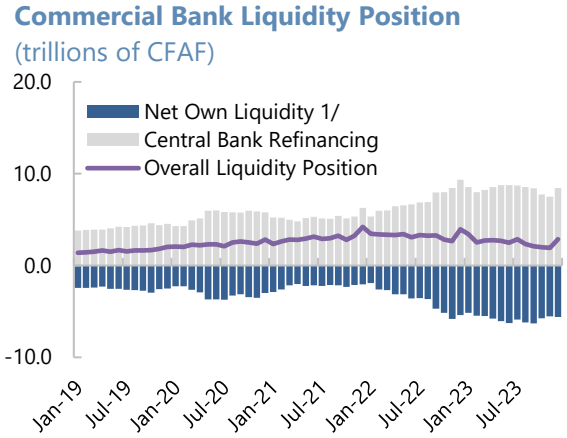
*Banks' liquid assets constitute a relatively small portion of the total assets.*




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




*Banks are increasingly dependent on central bank refinancing.*




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.

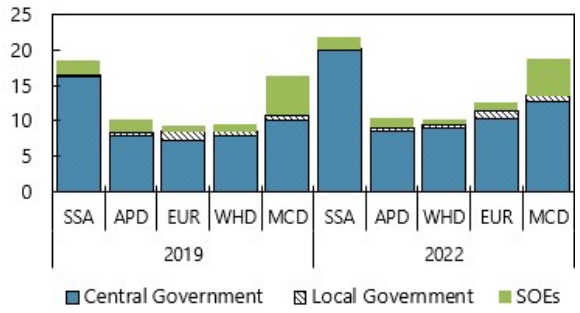
**15. However, potential valuation losses on sovereign securities due to rising yields are limited, as WAEMU banks tend to hold securities to maturity.** The outstanding stock of sovereign bond securities issued during FRFA through the auction segment of the market and held by banks in mid-June 2023 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.[3]

**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.

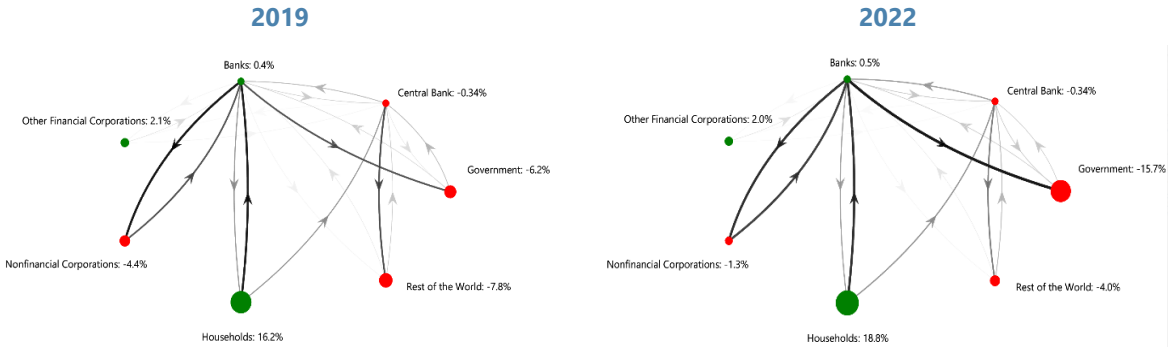
**10. The interconnectedness of the sovereign and banking sectors through exposure, safety net, and macroeconomic channels (Figure 9), can amplify vulnerabilities in sectors by interacting and generating adverse feedback loops.** Such sovereign distress could erode banks' capital rapidly, as banks hold no capital against their large government debt portfolios due to zero risk weighting. As discussed in previous IMF analysis[4], all these three channels may have significant effects: (1) the *exposure* channel, arising from banks' direct exposure to sovereign risk through

[3] 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.

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

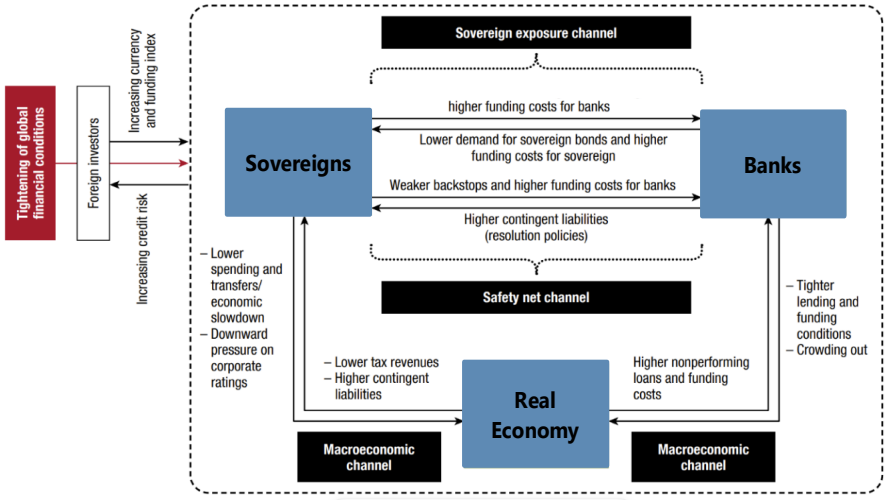
government debt holdings, can lead to a credit crunch as a rise in sovereign spreads diminishes the market value of such debt, impacting collateral and tightening banks' capital constraints; (2) the *safety net* channel, involving government guarantees to banks, which face risks as sovereign distress 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.

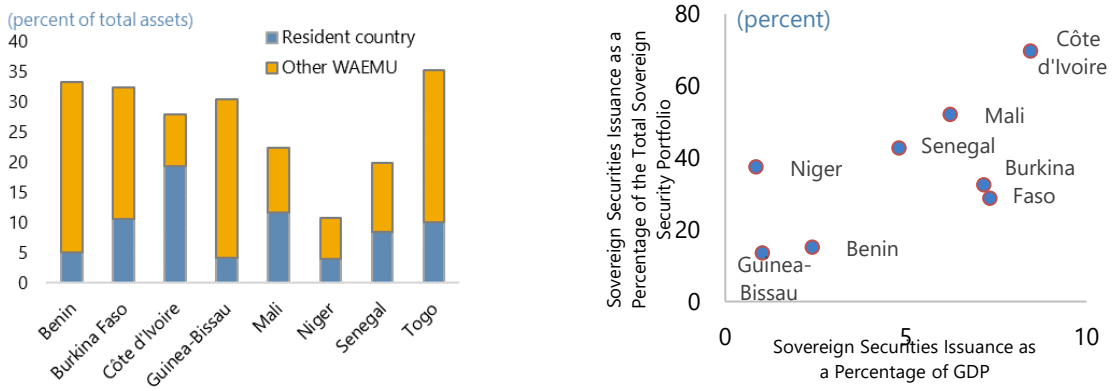
**Figure 9. Key Channels of the Sovereign-Bank Adverse Feedback Loop in the WAEMU**




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.

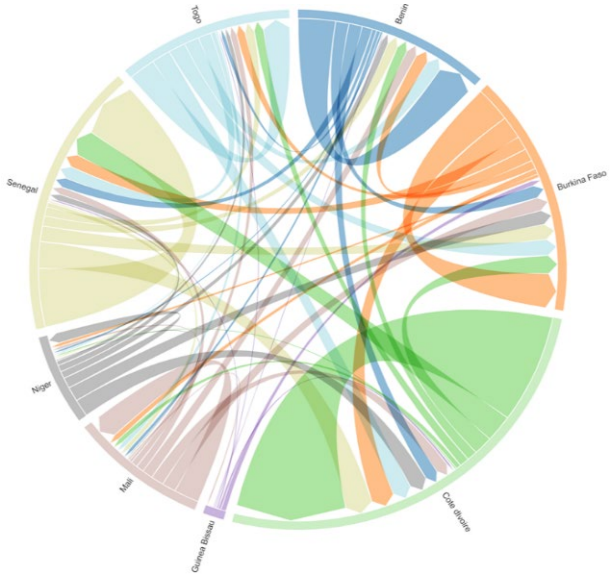
**Figure 10. Banks' Sovereign Security Portfolio, by Country**




*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)

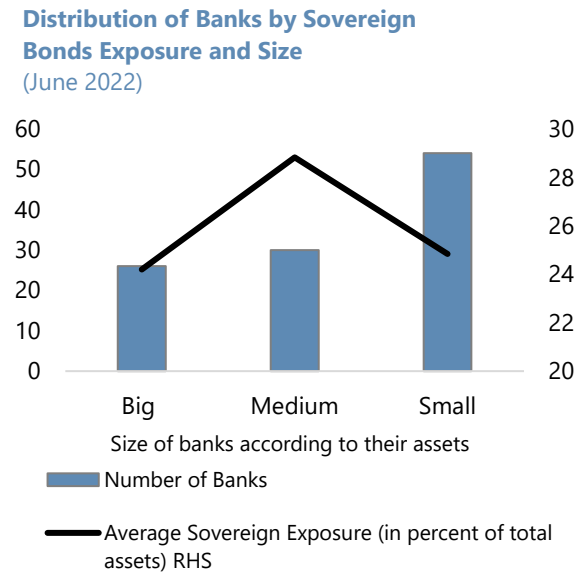



Sources: BCEAO; UMOA-Titres; and IMF staff calculations.

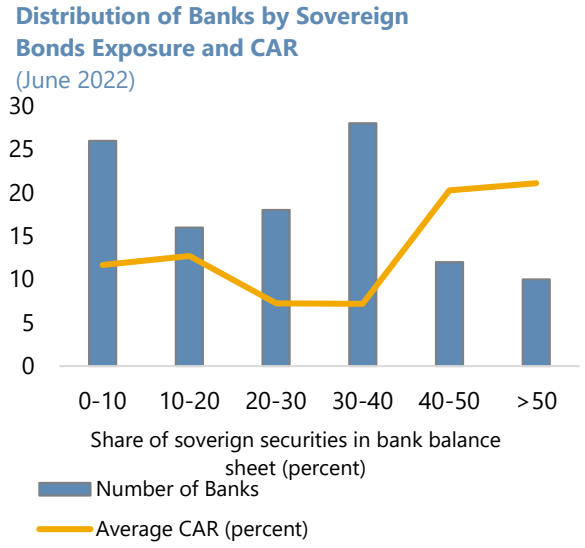
**21. Large holdings of government securities are concentrated in medium-sized banks with limited capital buffers, amplifying the banking sector's vulnerability to sovereign risk** (Figure 11). On average, 40 banks accounting for 45 percent of the banking system's assets hold government securities representing 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.

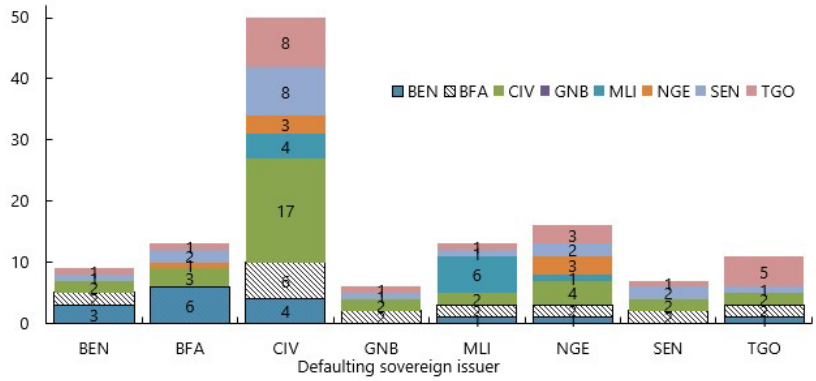
**23. Risks associated with rising sovereign-bank nexus can endogenously compound.** Tight financing conditions and higher sovereign borrowing rates could amplify concerns about debt sustainability. At the same time, the limited ability to borrow and to widen fiscal space can reduce governments' ability 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.**[5] 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.

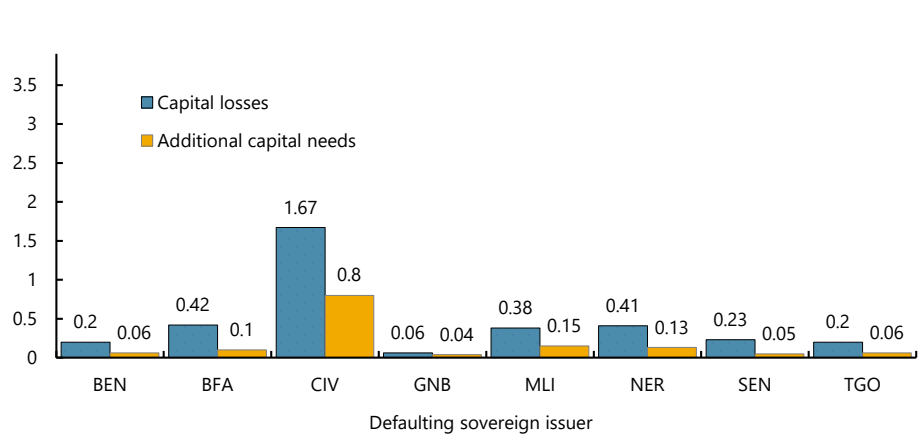
**26. The FSAP estimated that aggregate bank capital losses due to contagion from all sovereign defaults in the WAEMU could reach 3.6 percent of the 2021 regional GDP.** Bank capital loss profiles reflect the national bias in the holdings of government securities and the

[5] 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).

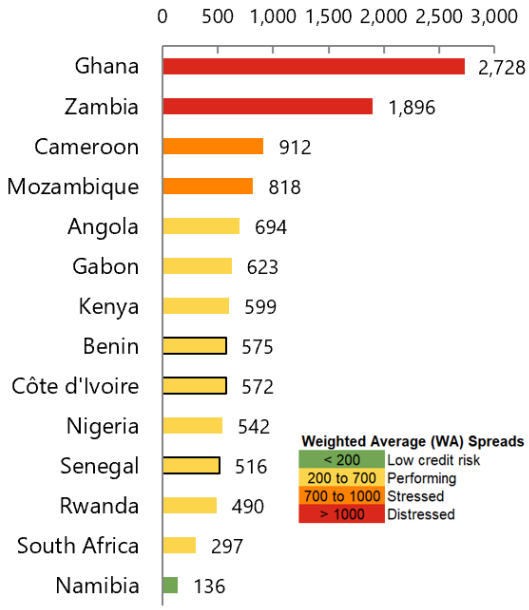
## Figure 14. Assessment of The Risks to Debt Sustainability of WAEMU Countries

**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 |

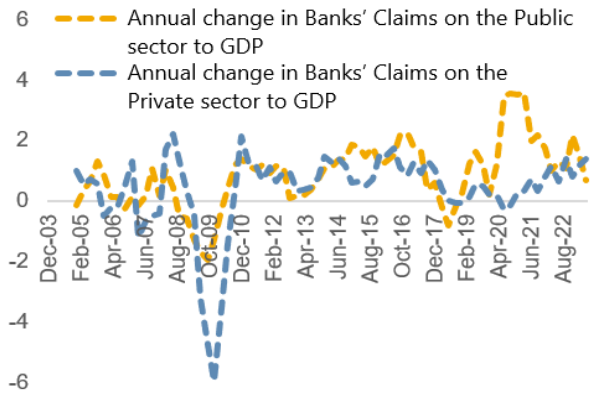
**Weighted Average Spread of International Issues**
(bps)




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<br><br>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:<br>Effective January 1, 2018, the conservation buffer rate was set at 0.625%.<br>Effective January 1, 2019, the conservation buffer rate has been increased from 0.625% to 1.25%.<br>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%.<br>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).<br>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.<br>An institution whose CET1 ratio is between:<br>- 5% and 5.625% is required to retain at least 100% of its distributable profits;<br>- 5.625% and 6.25% is required to retain at least 80% of its distributable profits;<br>- 6.25% and 6.875% is required to retain at least 60% of its distributable profits;<br>- 6.875% and 7.5% is required to retain at least 40% of its distributable profits;<br>- 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.<br>The methodology for identifying SIBIs and for calculating the surcharge applicable to them was published by the CB on December 19, 2019.<br>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.<br>The Supervisory Framework states that regional SIBIs must build up a capital buffer (or systemic cushion) composed primarily of core capital (CET1) elements.<br>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:<br>- effective June 30, 2021: the capital buffer was 0.40%;<br>- effective June 30, 2022: the capital buffer was 0.70%;<br>- 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.<br>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.<br>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.<br>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%:<br>- the debt service coverage ratio must not exceed 40%;<br>- the LTV ratio must not exceed 90%.<br>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.<br>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.<br>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.<br>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.<br>This limit reduces the institution's net position in a given currency and, consequently, the capital requirements for foreign exchange risk.<br>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.<br>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.<br>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:<br>- the volume of the institution's foreign exchange transactions does not exceed 100% of eligible capital;<br>- 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:<br>- when a financial institution fails to comply with solvency ratios, an exposure to that financial institution is weighted at 250%;<br>- 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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