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Recent Challenges to the Conduct of Monetary Policy in the WAEMU

Alain Feler and Lawrence Norton

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Recent Challenges to the Conduct of Monetary Policy in the WAEMU

Prepared by **Alain Feler and Lawrence Norton**

Authorized for distribution by Luca Antonio Ricci
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ABSTRACT: This paper discusses recent challenges in BCEAO monetary policy, from a recent spike in inflation, the persistent erosion of external reserves, and strains in the regional financial market. In response to these shocks, the BCEAO operated via both policy rates and liquidity management, including by shifting from fixed to variable rate auctions. The paper finds that the conduct of monetary policy became progressively more constrained by financial stability and external viability challenges, arguing for enhanced monetary-fiscal policy coordination to help the BCEAO meet its reserves objectives.

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SELECTED ISSUES PAPERS

Recent challenges to the Conduct of Monetary Policy in the WAEMU

WAEMU

Prepared by Alain Feler and Lawrence Norton



WEST AFRICAN ECONOMIC AND MONETARY UNION

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March 1, 2024

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African Department

Prepared By Alain Feler and Lawrence Norton.

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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 CFA franc 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 <i>General orientation of monetary policy</i>	BCEAO Governor <i>Bank Liquidity Regulation</i>
Setting : <ul style="list-style-type: none"> ● 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 : <ul style="list-style-type: none"> ● 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 collateral⁵ 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 1 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:

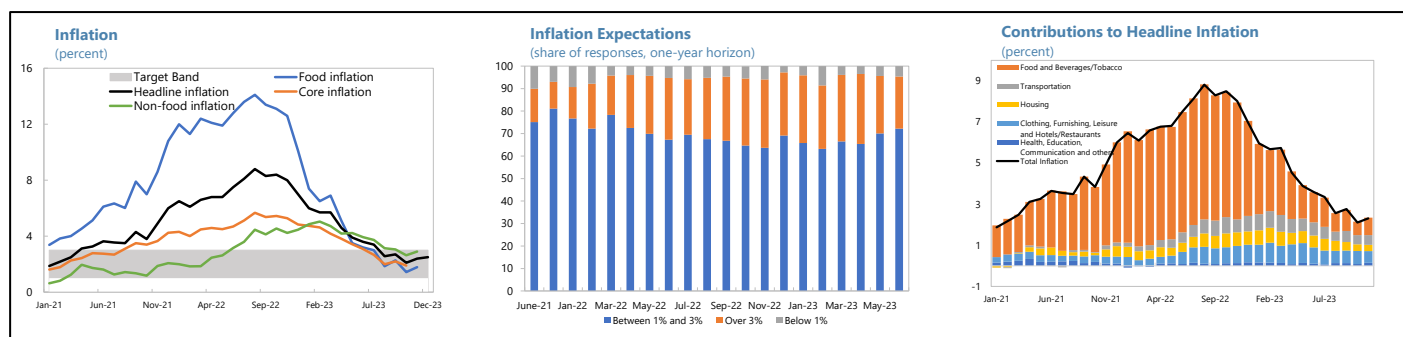
- a) can improve the effectiveness of monetary policy, by providing a clear signal to the market regarding the monetary policy stance and also by enhancing the ability of the policy rate to steer financial conditions through the elimination of the discrepancy between the minimum bid rate and the average 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.

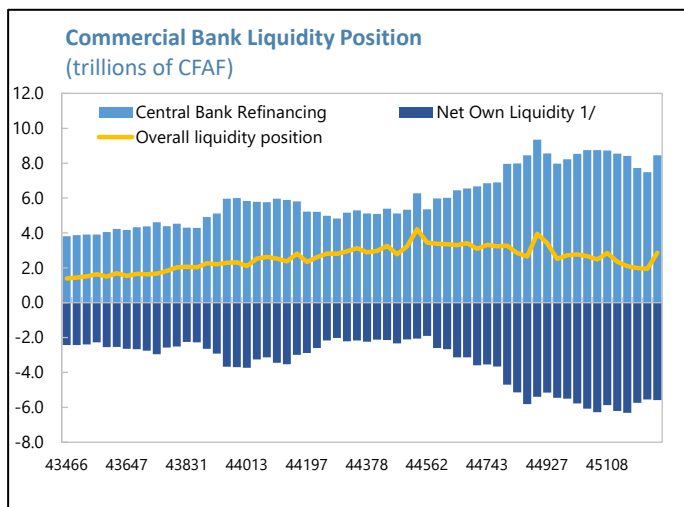


11. Against this background, headline inflation started to decline to reach 7 percent at end-2022, before returning within the BCEAO's 1-3 percent target range since August 2023.

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



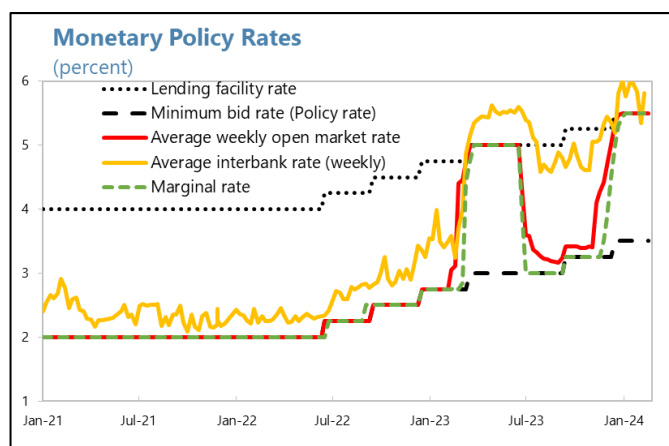
percent higher than one year earlier, with the bulk (89 percent) of this increase occurring in the second half of the year, against the background of a gradual tightening of the FRFA rate by a total of 75 bps. Thus, the BCEAO was providing more liquidity to the system while it was also raising interest 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.

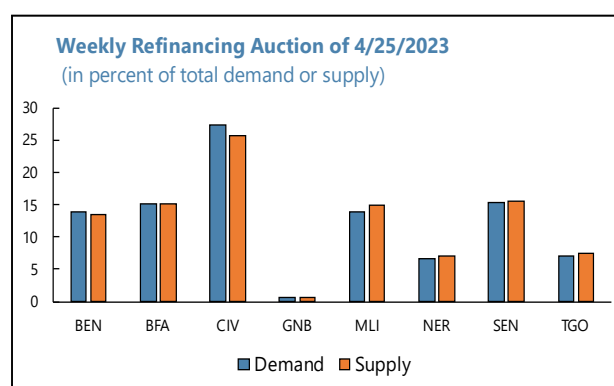
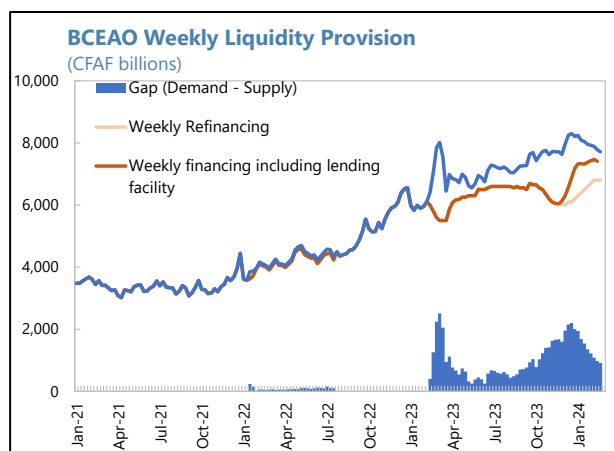
15. However, such a liquidity tightening undermined the BCEAO's ability to steer its operational targets within the monetary policy rate corridor. The amount of liquidity supplied by the BCEAO under the quantitative allotment method fell significantly short of banks' demand for refinancing at available 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.



A. Secondary Market Sovereign Debt Purchases by the BCEAO

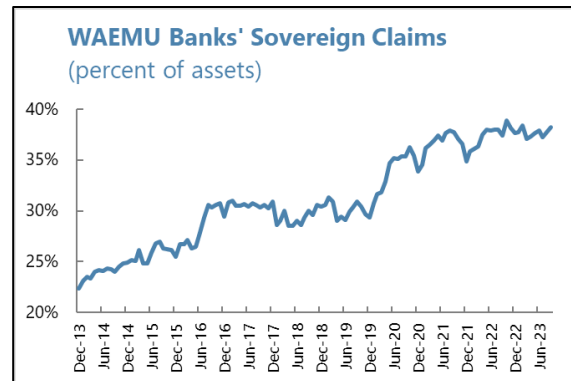
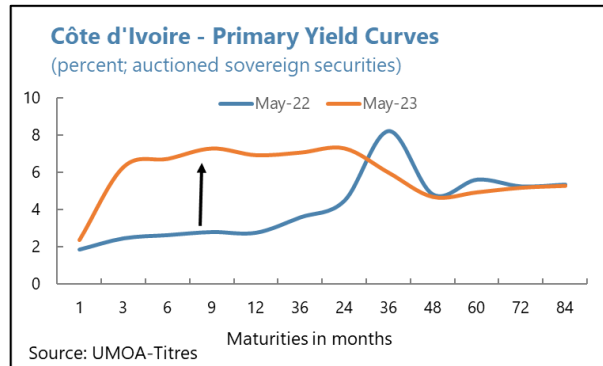
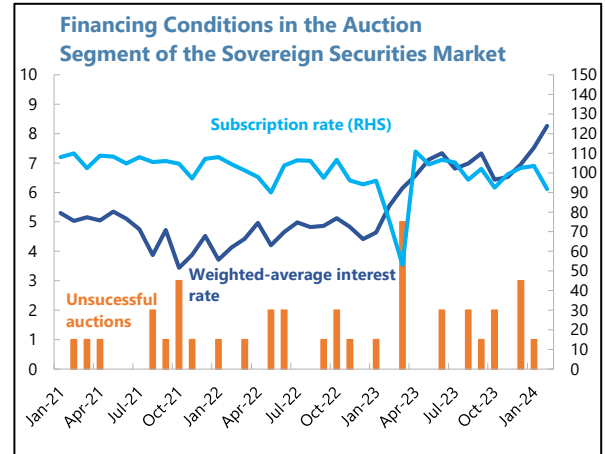
17. The rollover risk and additional interest rate risk on BCEAO refinancing under the FQVR allotment method significantly disrupted the regional sovereign security market. Banks generally buy about 90 percent of WAEMU sovereign securities, which constitute the main assets they use as collateral for 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.

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.

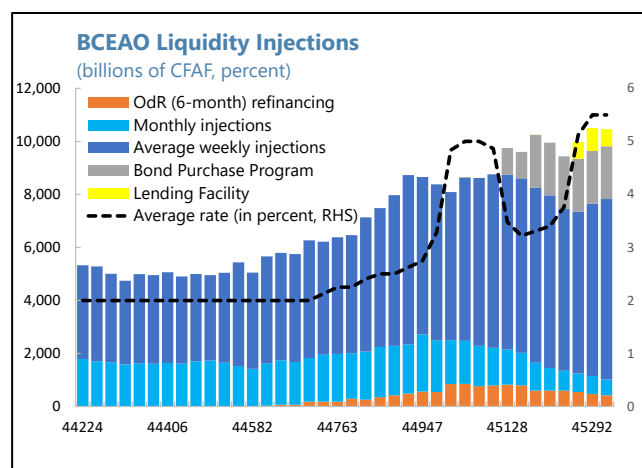
¹⁸ The amount of financing sought by each sovereign was the same for the June and September primary issues, except for Niger, which was not allowed to participate in the latter, because of the financial sanctions imposed by ECOWAS and the WAEMU following the military takeover of July 26, 2023, in that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

(continued)

sought. Accepted bids exceeded amounts sought by 10 percent for all sovereign issuers¹⁹ 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.



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 (months)	Avg. Yield (percent)	Amounts CFAF bln	Res. Maturity Avg (months)
	Sought	Offered	Raised				
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 $\frac{3}{4}$ 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.

B. 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 formulate 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 money¹, 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.