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July 20, 2022

TECHNICAL NOTE

ANALYSIS OF SYSTEMIC LIQUIDITY

Prepared by
Monetary and Capital Markets Department (MCM)

This technical note was prepared by IMF staff in the context of a Financial Sector Assessment Program (FSAP) mission to the West African Monetary Union (WAMU). The note contains technical analysis and detailed information underpinning the FSAP assessment's findings and recommendations. Further information on the FSAP can be found at http://www.imf.org/external/np/fsap/fssa.aspx.

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Glossary

BCEAO	Central Bank of West African States
CFAF	African Financial Community Franc
CREPMF	Public Savings and Financial Markets Regional Board
ELA	Emergency Liquidity Assistance
FSAP	Financial Sector Assessment Program
GDP	Gross Domestic Product
LCR	Liquidity Coverage Ratio
MMCG	Money Market Contact Group
TSD	Treasury Securities Dealer
WAEMU	West African Economic and Monetary Union
WAMU	West African Monetary Union
WSA	WAMU Securities Agency

EXECUTIVE SUMMARY

The limited development of markets in the region represents a key risk factor for financial stability. [1] Since the previous Financial Sector Assessment Program (FSAP) in 2008, the bank deposit base has increased from 18 percent to 30 percent of gross domestic product (GDP) and the buoyancy of the government securities market has benefited from the interruption of public deficit financing by the Central Bank of West African States (BCEAO). Nevertheless, a significant portion of bank funding cannot be considered stable, due to the concentration of deposits held by large corporations. Apart from reserves held with the BCEAO, banks have little in the way of liquid assets, although the secondary market for government securities is beginning to grow for some issuers. Insufficient secondary market liquidity and the prevalence of unsecured intragroup transactions (60 percent of the total) in the interbank market exacerbate the risk and extent of potential losses for banks in the event of liquidity distress.

The exchange rate regime and the setting of monetary policy have implications for the management of systemic liquidity. Under fixed exchange rate regimes, fluctuations in external assets can have an unpredictable impact on systemic liquidity. The introduction of full allotment of the refinancing demand to the BCEAO's seven- and 28-day operations in 2020, in a context where the market does not represent a reliable alternative, has eliminated uncertainty about access to refinancing, and this has reduced the liquidity premium in the market.

The stability of the system's liquidity relies on refinancing by the BCEAO. For its range of eligible instruments, the BCEAO accepts all government securities and private debt under the same conditions regardless of their different risk profiles. This approach has helped absorb systemic fluctuations and idiosyncratic liquidity shocks. On the other hand, it has encouraged risk-taking through reliance on the BCEAO's support, it has resulted in the dependence of some banks on the BCEAO, and it has led the BCEAO to accumulate risk on its balance sheet. In response to this situation, the BCEAO applied limits on refinancing in proportion to bank assets and capital, which have the disadvantage of being procyclical and run the risk of preventing refinancing for banks that might have additional needs.

The mission supports the authorities' efforts to encourage banks to manage liquidity risk internally. The regulator will have to choose objective and verifiable liquidity indicators to determine the assets eligible for Level 1 of the liquidity coverage ratio (LCR) numerator and the haircuts, including those for government securities. If the regulator does not wish to apply different haircuts for different sovereign issuers, a uniform haircut should at least be applied to account for the limited liquidity of the overall market. Ultimately, the LCR should consider the different risk profiles of banks based on a study of the time series of deposits for each bank under Pillar II of Basel III.

Markets need to be developed further to reduce liquidity risk. Improved liquidity in secondary markets reduces liquidity risk and supports the development of repo operations, which are more

[1] This technical note was prepared by Stephane Couderc.

resilient to confidence shocks than unsecured lending. The secondary government securities market is the cornerstone on which the rest of the market develops. Therefore, it is necessary to: (i) include the development of this market as an objective in the states' medium-term debt management strategies; (ii) resolve the market segmentation linked to the syndication procedure (by unifying the legal depository, in particular); and (iii) review the privileges and obligations of the market makers, called treasury securities dealers (TSDs) in the Union. Institutional cooperation between the West African Monetary Union (WAMU) Securities Agency (WSA)[2] and the Public Savings and Financial Markets Regional Board (CREPMF) should be strengthened to promote the best standards of transparency and supervision in both market segments and to contribute to the fungibility of securities.

The mission proposes that the problem of dependence on BCEAO refinancing be resolved on the basis of funding plans. A funding plan is a projection of a bank's balance sheet over a predetermined period of time (for example, three years) that shows changes in funding needs. Banks that exceed a predetermined threshold of dependence on the central bank will have to prepare a funding plan that is reviewed and monitored by the supervisor. In the context of the plan, the bank concerned must reduce its funding requirement below the threshold through asset sales and recapitalizations, by reducing growth in its assets or by actively raising funding from customers or the market. The trigger threshold specified in the plans should be lower than the quantitative limits currently imposed. Subject to diligent execution of the funding plans, the banks concerned would retain access to BCEAO operations.

The collateral framework should include additional haircuts based on risk types. The objective is to maintain a diversified collateral framework while achieving risk equivalence among different kinds of collateral once haircuts have been applied. The haircuts reflect the usual risks, in particular, credit risk and liquidity risk, and apply to both government securities and private debt. For government securities, the credit risk haircut would be based on international ratings, with a larger haircut for unrated sovereign debt. In addition to haircuts, the BCEAO should introduce concentration limits to ensure the diversity of collateral provided.

The BCEAO should introduce a framework for emergency liquidity assistance (ELA). Most central banks have the ability to provide emergency liquidity to viable banks that are facing persistent liquidity shortages and that have exhausted collateral eligible for monetary policy operations. With ELA, the central bank can provide refinancing on the basis of expanded collateral because the additional assumption of risk is offset by strict conditionality and monitoring of repayment plans. ELA is the responsibility of the BCEAO, but close coordination with the supervisor is necessary to assess the viability of counterparties and impose conditionality.

[2] The WAMU Securities Agency is a subregional public institution with the status of a legal entity and with financial autonomy, created by the WAEMU states to boost the public securities market and assist states with their issues concerning the regional market.

Table 1. WAEMU: Table of Recommendations

Recommendations	Authority	Priority[1]
Ex Ante Risk Control Measures		
Introduce Basel-type liquidity ratios to improve liquidity risk management and strengthen resilience to liquidity shocks.	BCEAO	ST
Include the reserve requirement in Level 1 liquid assets in order to reflect the limited universe of liquid assets.	BCEAO	ST
Use the turnover per security to determine the liquidity coverage ratio haircuts. If the regulator does not wish to introduce differentiated haircuts for sovereign issuers, at least apply a uniform non-zero haircut.	BCEAO	MT
Require banks to provide detailed information on the maturities and interest rates of their assets and liabilities in order to monitor maturity mismatches and interest rate risk.	Banking Commission	MT
Consider the stability of each bank's funding estimated on a time series basis in order to impose higher LCR requirements on banks with a higher liquidity risk profile under Pillar II of Basel III.	BCEAO	MT
Local Market Development Measures		
Prepare a regional strategy for the development of the public debt market.	BCEAO, WSA	MT
Consolidate the central securities depository for auction and syndication issues at the BCEAO or within an independent infrastructure to increase the fungibility of securities.	BCEAO	CT
Strengthen cooperation between the WSA and CREPMF on securities issues, including mixed auction-syndication issues in order to increase competition in syndication and reduce costs.	BCEAO, WSA, CREPMF	MT
Strengthen cooperation between the WSA and CREPMF to establish common transparency and market supervision standards for securities issued through auctions and syndications.	BCEAO, WSA, CREPMF	MT
Enhance the privileges of TSDs by: (i) reserving access to issues for them; (ii) reserving securities lending for them; and (iii) paying them a commission.	BCEAO, WSA	MT
Create a regular forum for contact among the key players in the interbank market: the Money Market Contact Group (MMCG).	BCEAO, WSA	MT
Monetary Policy Operations		
Introduce funding plans to reduce dependence on the BCEAO without creating risks for the financial sector. Eventually, they would replace the quantitative limits on refinancing by the BCEAO.	BCEAO	MT
Introduce additional haircuts on public and private collateral for BCEAO refinancing to reduce distortions in the market and better protect the central bank's balance sheet.	BCEAO	MT
Introduce concentration limits for public and private collateral for BCEAO refinancing to diversify the collateral available.	BCEAO	MT

Table 1. WAEMU: Table of Recommendations (Concluded)		
Emergency Liquidity Assistance (ELA)		
Determine the collateral universe for ELA as well as the risk management measures that apply to ELA collateral.	BCEAO	MT
Prepare a framework agreement to be signed by the counterparties benefiting from the ELA that defines the conditions of the ELA.	BCEAO	MT
Align funding plans with ELA repayment for ELA recipients.	BCEAO	MT
Establish in an agreement the procedures for the sharing of information and the coordination of tasks between the BCEAO and the Banking Commission in the context of ELA.	BCEAO	MT

[1] ST = short term (between one and two years); MT = medium term (between three and five years).

INTRODUCTION

1. Through exchange controls, the BCEAO has developed an inflation targeting system in the context of a fixed exchange rate regime. Since 1948, the CFA franc (CFAF) has been pegged to the French franc, then to the euro following its introduction in 1999, at a fixed exchange rate. Through the use of capital controls, the BCEAO has a degree of autonomy to determine monetary policy and manage systemic liquidity. In this context, it developed an inflation targeting system in the 2000s based on an interest rate operational target. Notwithstanding this policy, a minimum coverage of currency issuance by foreign exchange reserves of 20 percent, which reflects the constraint imposed by the exchange rate regime, remains a legal obligation for the BCEAO (Article 76 of the statutes).

2. Systemic liquidity analysis examines the management of situations in which the central bank might be required to provide liquidity to the market. Such analysis starts with an assessment of the liquidity risk, including the risk in stress situations (stress test). It then focuses on measures that can encourage the market to absorb some of the liquidity risk internally, such as microprudential and macroprudential measures, and that can improve market resilience to liquidity risk without central bank intervention. Since the full internalization of risk may not be possible or may be economically too costly, the analysis of systemic liquidity then enumerates the instruments that the central bank can deploy to manage the residual liquidity risk that has not been internalized by regulation, including the provision of ELA. Finally, it assesses the measures that the central bank must deploy to manage the risk it transfers from the market to its balance sheet by providing liquidity. This is, therefore, a cross-cutting exercise for the FSAP that touches on three pillars: stability, supervision, and crisis management.

3. The analysis of systemic liquidity considered the specific characteristics of the WAEMU market. The financial sector is dominated by banks. The development of debt and asset markets is limited, resulting in bank funding that is primarily deposit-based. This context involves specific risks and analytical methods, such as an analysis of the stability of the deposit base, the development of

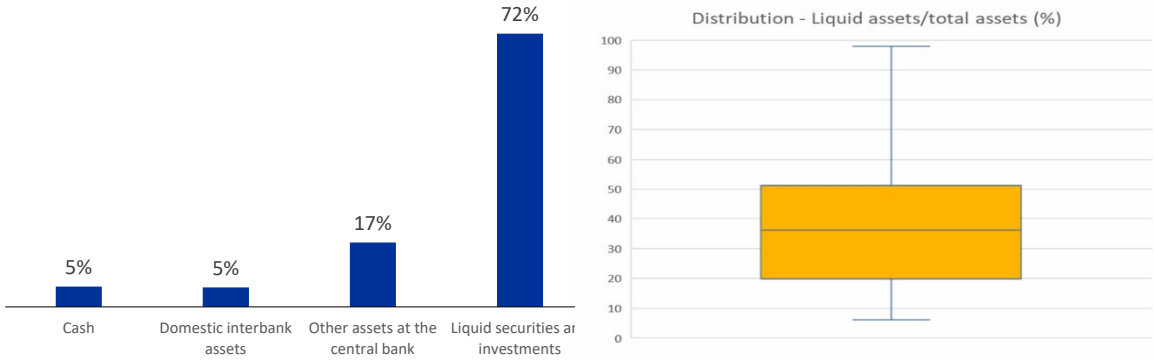
market liquidity indicators, and other measures. Until now, prudential regulation has provided a limited screening of risk, which the stress test assesses as significant for some banks. The lack of risk internalization leads to dependence on BCEAO refinancing, which can be high in some cases. The planned introduction of the LCR and other measures recommended by the mission should ease the pressure on the BCEAO.

LIQUIDITY RISKS

A. Liquid Assets

4. Potentially liquid assets in the WAEMU financial sector are concentrated in government securities. An asset is said to be liquid if it can be easily and immediately converted into central bank money with little or no loss in value and without excessive costs. Central bank money, which includes currency in the possession of banks (vault cash) and banks' reserves at the central bank, is the most liquid asset in a financial system. It represents 21 percent of liquid assets in the WAEMU (Figure 1). The universe of other potentially liquid assets is limited due to the shallow nature of the capital markets. Driven by the abandonment of monetary financing of government deficits in 2008, the share of government securities in banks' portfolios nevertheless increased to more than 31 percent of bank assets. The BCEAO considers government securities to be liquid. They currently represent 72 percent of liquid assets. The mission discusses this assumption in paragraphs 8 through 11. The sum of potentially liquid assets averages 37 percent of the total, but the disparities among banks are significant.

Figure 1. Potentially Liquid Assets in the WAEMU



Sources: BCEAO, and IMF staff calculations.

Banks' Reserves at the Central Bank

5. A portion of the reserves is subject to a regulatory restriction, which is the reserve requirement,[3] and this may reduce their availability in times of stress. The Basel Committee's guidance note on liquidity ratios and liquidity monitoring tools indicates that reserves, including the required reserve, may be included among the most liquid (Level 1) assets if they are available in times of liquidity stress. It leaves it up to the supervisor to decide whether to include them as liquid assets. [4] This raises the question of whether required reserves, and not just the portion of reserves that exceeds the required reserve (excess reserves), should be included in Level 1 liquid assets. Currently, only excess reserves are factored into the denominator of liquidity ratios in the WAEMU.

6. The mission considers that the required reserve should be included in liquid assets in the same manner as excess reserves. First, the required reserve is available at any time in its entirety and, a priori, at no cost to meet a one-time liquidity need, because it is constituted on an average basis in the WAEMU. In addition, the period during which it must be maintained is equal to one month (from the 16th of the month to the 15th of the following month), which is in line with the withdrawal period recommended by the Basel principles. The only limitation is that the use of the required reserve can be costly if it leads to a shortfall at the end of the period, which results in a financial penalty. Nevertheless, given the limited universe of liquid assets in the region (see below), excluding the required reserve would strain banks' balance sheets and lead to a disproportionate demand for excess reserves.

Government Securities

7. The main buyers of government securities are banks. 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. This explains the maturity mismatches (and thus the transformation risk) in bank balance sheets, given the short-term nature of bank funding. In addition, the market is segmented between different issuance methods (auction or syndication).

8. The liquidity indicators suggest a shallow secondary market. Although issuance has become more regular, secondary market liquidity remains low. The number of transactions has been limited to 3.4 per day on average since January 2019. Out of 132 banks, 32 participated in the secondary securities market, while there are 43 TSDs, which should maintain a minimum market share of 2 percent of transactions in the secondary market.[5] In fact, market participants traded an average of only 0.5 percent of their securities portfolio (Figure 2). Finally, of 149 banks and financial

[3] The reserve requirement obliges banks to maintain a certain percentage of their noncapital liabilities ("the base") in reserve at the central bank (see Instruction No. 005-12-2019 on the procedures for establishing required reserves at the BCEAO).

[4] See Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools, paragraph 50, footnote 12.

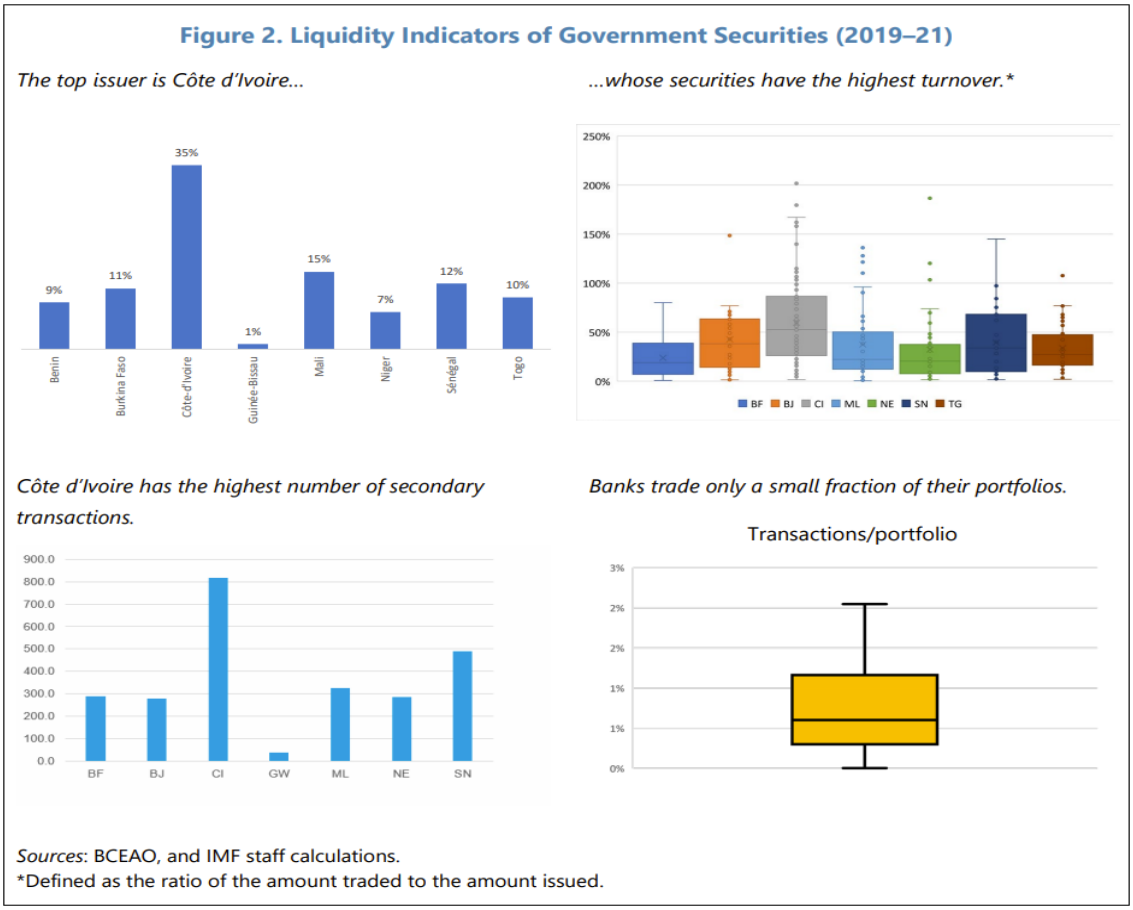
[5] TSDs accept certain obligations in exchange for offsets, which are described in the following document: https://www.umoatitres.org/fr/specialistes-en-valeur-du-tresor/. This is a market maker agreement.

institutions reporting their trading portfolios to the banking supervisor, only 18 report non-zero portfolios, with a median of no more than 3 percent of total assets. The secondary market's lack of dynamism in part also reflects the passive investment strategy adopted by many banks.

9. Some securities do, however, generate a great deal of interest. In particular, Côte d'Ivoire securities have the highest liquidity in terms of number of transactions, amounts traded, and number of securities available on the market. In addition, it appears that the Ivoirian Treasury is also making greater efforts to develop a yield curve by issuing securities with a maturity of less than two years more regularly than the others.

10. The mission recommends calculating the turnover of securities to determine their liquidity. Turnover is the number of transactions per security in the secondary market as a percentage of the amount issued. The transactions should reflect genuine secondary market transactions, which implies excluding intragroup carry trades. The regulator should also watch out for attempts by some market participants to trade in a security to artificially improve its liquidity status. Based on the available data, the mission was able to calculate the turnover of each sovereign issue (Figure 2). Once the secondary market has developed, a range of indicators can be considered.[6]

Figure 2. Liquidity Indicators of Government Securities (2019–21)



Sources: BCEAO, and IMF staff calculations.
*Defined as the ratio of the amount traded to the amount issued.

[6] Lybek, T., and A. Sarr. 2002. "Measuring Liquidity in Financial Markets." Working Paper No. 02/232, International Monetary Fund, Washington, DC.

Measures to Increase the Liquidity of the Government Securities Market

11. There are several advantages to a liquid secondary securities market. A liquid secondary market increases resilience to liquidity shocks because more of the banks' assets are liquid. In addition, the liquidity of this market has beneficial impacts on other markets, such as: (i) increasing the demand for securities issuance; and (ii) facilitating the development of the repo market because it should be possible to regularly value and liquidate without major risks to the collateral pledged under repurchase agreements. The repo market is more resilient to liquidity shocks (see below), and it is beneficial because it allows banks' liquid assets to be monetized. Finally, the use of repurchase agreements is less damaging than unsecured transactions for the LCR and has less impact on capital consumption.

12. The securities market should be strengthened by eliminating the segmentation between auctions and syndication. Syndication, which accounts for 20 percent of securities issues, targets the same investor group as auctions (banks). It minimizes uncertainty about placement since the entire issue is placed with the "syndicate," but it is problematic from the standpoint of transparency in pricing. Finally, the costs of funding through syndication are higher than those involved in auctions. Two important changes should therefore be considered:

- Merge the central depositories into a single infrastructure to ensure the fungibility of issues. The management of the central depository could be entrusted to the BCEAO or to an independent market infrastructure.

- Strengthen cooperation between the auction supervisor (WSA) and the syndication regulator (CREPMF) to promote the transparency of the two markets (both the primary and secondary segments) and improve their fungibility. This cooperation could also extend to organizing mixed issues, which are opened by syndication and completed by auction or vice versa, in the case of large issues.

13. Debt management strategies should include a market development objective in addition to cost and risk objectives. In the regional context that includes eight issuers, the WSA is ideally positioned to coordinate issues and ensure market transparency. The WSA could also promote a regional strategy for the development of the public debt market that would include an agreement on the benchmark issues to be placed in the market, the timing of those issues, and the securities that TSDs should target for listing in the secondary market.[7] In this context, the development of a medium-term debt management strategy and its communication to WAMU-Securities by each treasury should be a prerequisite for issues in the regional market. Finally, diversification of the investor base should be part of the market development strategy.

[7] Most of these points are already being addressed by the WSA.

A Functional Market Maker Agreement

14. The current TSD system does not contribute to the stimulation of the secondary market. According to the survey of WAEMU banks administered by the FSAP, few institutions (23 out of a total of 127 responses) have TSD status, and large institutions do not participate in this arrangement. [8] The requirement for participation in the secondary market is not met (nor is the requirement to purchase 5 percent of the amounts issued in the primary market). Survey respondents believe that the privileges granted to TSDs, which include restricted access to ad hoc issues, noncompetitive allocation, and privileged access to certain treasury information, are not in line with the obligations imposed on TSDs. Furthermore, they find the transparency of syndicated issues and the secondary market insufficient (in contrast to the detailed information published by the WSA on auctions).

15. The obligations of TSDs should be reviewed. The minimum participation in issues should be set at "5/n" percent, where (n) is the number of states in which a given bank accepts the obligations of a TSD (Table 2) to promote the adoption of TSD status by the same bank in different states and, thus, reduce the domestic bias. With respect to the secondary market, TSDs should: (i) publish a quotation range; (ii) quote a firm minimum amount for other market makers; and (iii) resell a fixed minimum percentage of the securities acquired.

16. The privileges granted to TSDs should be strengthened. The "privileges" should be understood as legitimate compensation given in exchange for a certain function. They should be conditioned on strict compliance with the obligations verified by the WSA. The strengthening of privileges could include the following:

- TSDs are generally expected to place primary issues with other investors. Access is generally exclusively for TSDs for securities issues and a fee is paid to them, similar to that paid in the syndication process, as compensation for the intermediation task (Table 2).

- Similarly, TSDs are often required to facilitate the secondary market as part of the intermediation function. To do this, the treasury or the central bank (depending on the case) provides them with liquidity support either by refinancing the securities or by loaning securities. The WSA could play the role of securities lender based on the securitization of part of the BCEAO's residual claim on governments and in coordination with national treasuries. The BCEAO would continue to refinance the securities, as is already the case.

[8] The results of the survey can be found in the background paper "WAEMU FSAP: The Banking Survey."

Table 2. WAEMU: Obligations and Privileges of Primary Dealers

Obligations	Privileges
• Participate in primary issues for at least "5/n" percent of the issue, where "n" represents the number of states in which the TSD commits to participate in issues. • Publish a range of quotations with a maximum spread on a known IT platform and on a continuous basis. • Quote a firm minimum amount for all other market makers on a continuous basis. • Resell a minimum percentage (e.g., 10 percent) of securities purchased on its own account. • Inform the WSA of the rates and amounts traded.	• Exclusive access to auctions in states in which the TSD has committed to participate at "5/n." • Exclusive access to a securities lending facility by the BCEAO, WAMU Securities Agency, and/or treasuries. • Intermediation fee paid by the issuing states in proportion to the turnover in the primary and secondary markets.

B. Stability of Funding

Customer Funding

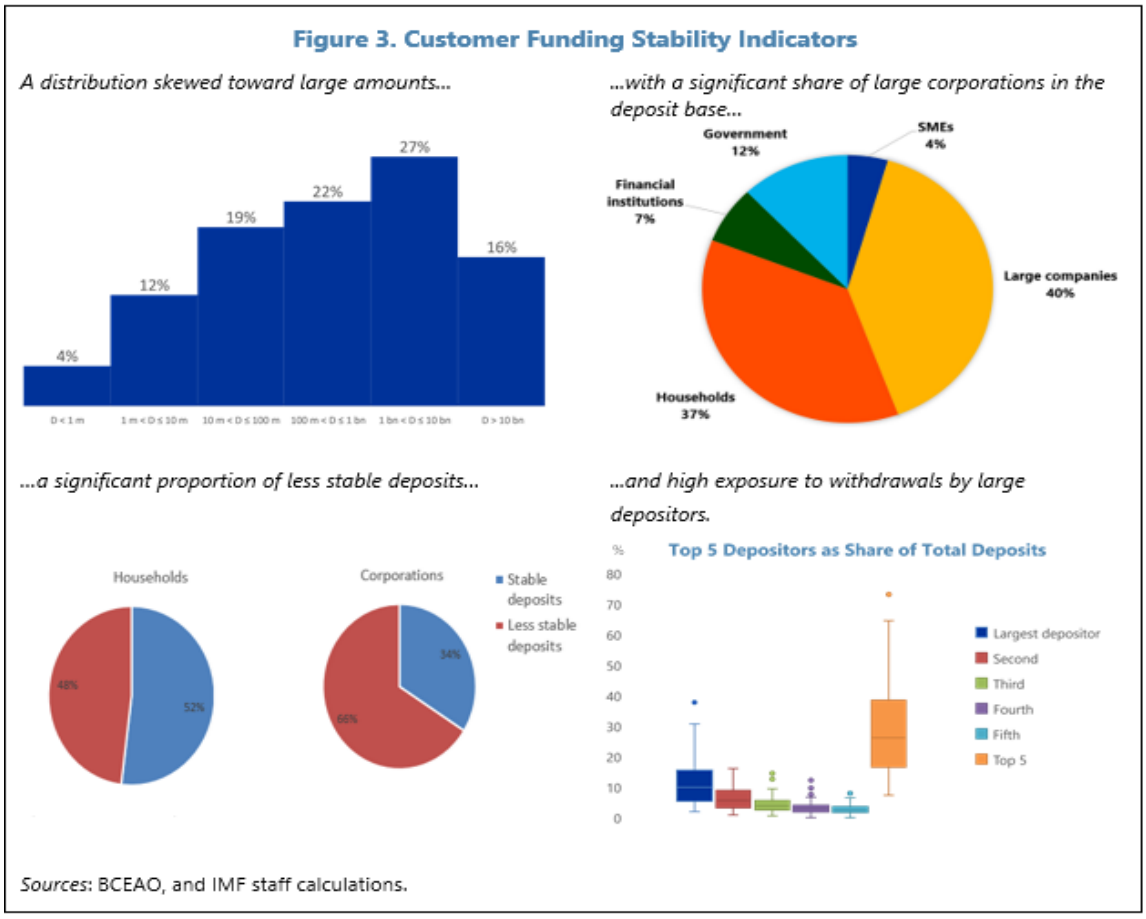
17. Bank funding comes mainly from customers in the form of deposits. Most of these are demand deposits or savings accounts and can be withdrawn at the discretion of the depositor. Time deposits subject to notice of withdrawal and significant penalties for early withdrawal account for a limited share of the deposit base.

18. It is difficult for the regulator to assess the stability of the deposits. These funding sources have no maturity and can be withdrawn at any time but can also be stable, especially if they represent a transactional and atomized deposit base. The regulator should, however, perform an analysis of the distribution of withdrawals based on a granular breakdown of deposits (by type of depositor, size of deposits, and other features) to determine the stability of funding in its jurisdiction over a given period. Ideally, the analysis should be done by individual banks to account for idiosyncratic factors.

19. Customer funding cannot be considered as predominantly stable in the WAEMU. The mission selected a set of stability indicators based on the available data presented in Table 3 and Figure 3. The picture that emerges from these indicators is one of a system in which banks are exposed to the withdrawal of their largest depositors and in which relatively large corporate deposits dominate. There is also a wide disparity in the composition of customer funding across banks, suggesting that some institutions may be exposed to significant liquidity pressures.

Table 3. WAEMU: Description of Customer Funding Stability Indicators	
Indicators	**Assumptions**
• Distribution of deposits by size	• Smaller deposits have a transactional purpose and are therefore more stable.
• The nature of the depositors	• Households and institutional investors hold savings and may therefore provide stable funding. Businesses normally use a large portion of their deposits for operational purposes.
• Determination of stable versus nonstable deposits based on historical data	• Studies of deposit volatility based on time series to separate stable amounts from variable amounts.
• Concentration of deposits	• A high concentration exposes the bank to a withdrawal by one of these major depositors. This risk would be less significant if the depositor base were more diversified.

Figure 3. Customer Funding Stability Indicators

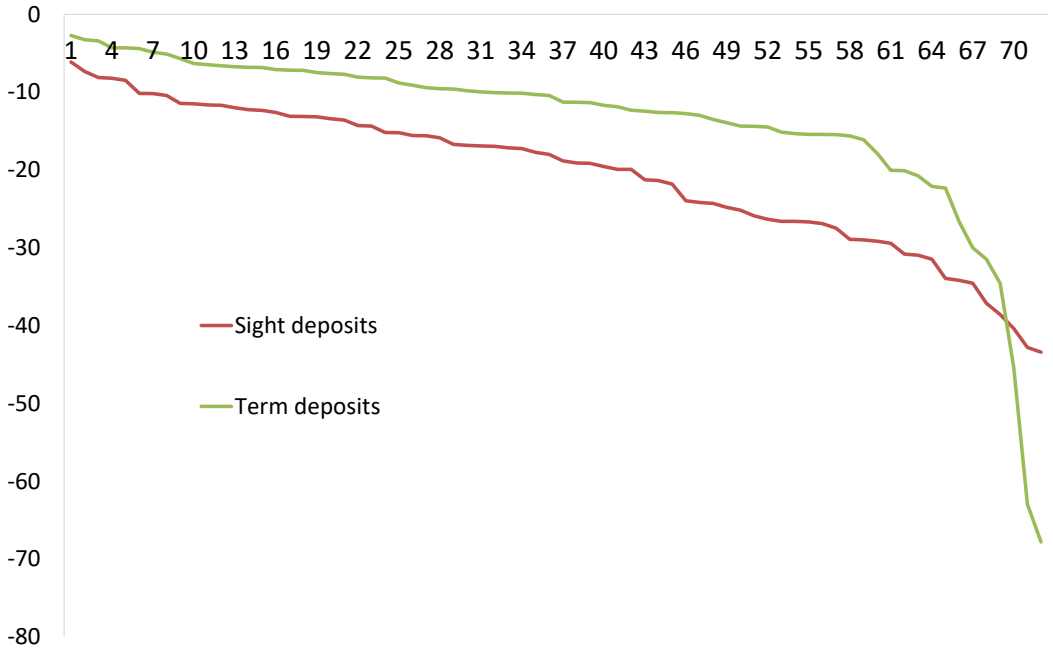


Sources: BCEAO, and IMF staff calculations.

20. The time series studies show differences in run-off rates by type of deposit and among banks. Based on the available data, the mission was able to calculate the distribution of quarterly

changes in time and demand deposits for more than 70 banks (Figure 4). The volume of demand deposits is slightly higher than that of time deposits (55/45). The run-off rate in the 5th percentile of the demand deposit distribution is higher than that of time deposits in most cases. The spread of run-off rates across banks is high, especially for time deposits.

Figure 4. Top 5th Percentile of Withdrawals by Bank



Sources: BCEAO, and IMF staff calculations.

21. The monitoring of maturity mismatches and interest rate risk should be strengthened. These risks are likely to increase, especially with the creation of portfolios of securities with relatively long maturities compared to bank resources. The options to hedge these risks in the market are limited. The supervisor should, therefore, require banks to disclose in detail the maturities of their assets and liabilities as well as the variable or fixed nature of the interest rates that apply to these balance sheet items. A more granular view of maturity mismatches will be needed for introducing a long-term structural ratio.

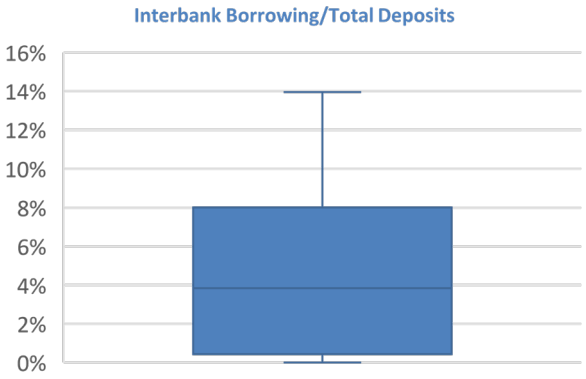
Market Funding

22. The market plays a minor role in the funding of banks. At the end of 2020, it represented on average less than 4 percent of total deposits, well below the refinancing obtained from the central bank, which reached 20 percent in June 2020 (the heavy reliance on the central bank is discussed in Section III B). Banks and financial corporations rarely issue bonds and certificates of deposit.

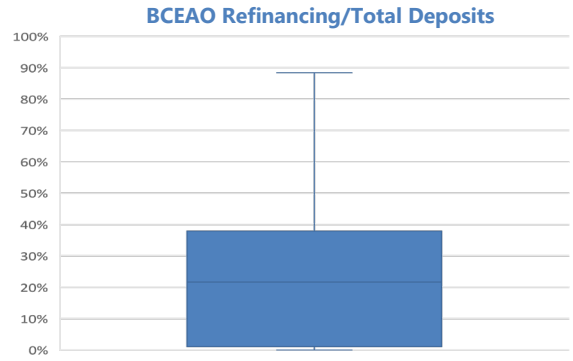
23. Interbank financing largely involves intragroup transactions. Most interbank transactions are unsecured within regional groups, which redistribute liquidity to subsidiaries (Figure 5). One of the positive aspects of the presence of regional groups is the absence of market fragmentation on a national basis because intragroup transactions are by definition cross-border operations. The network of interbank transactions has also grown, with more banks participating in the market and more transactions between banks (Figure 6). The increase in risk aversion during the COVID-19 crisis affected the transaction network in 2020.

Figure 5. Interbank Transactions

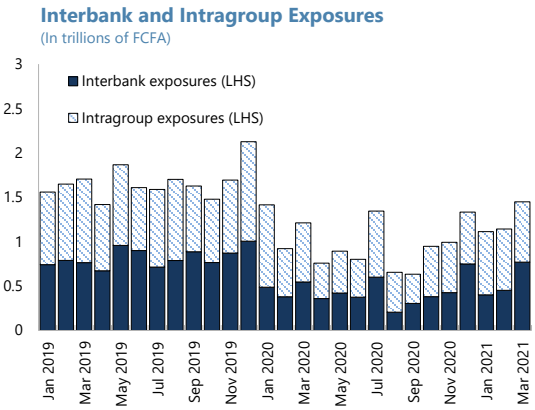
Limited use of market funding…



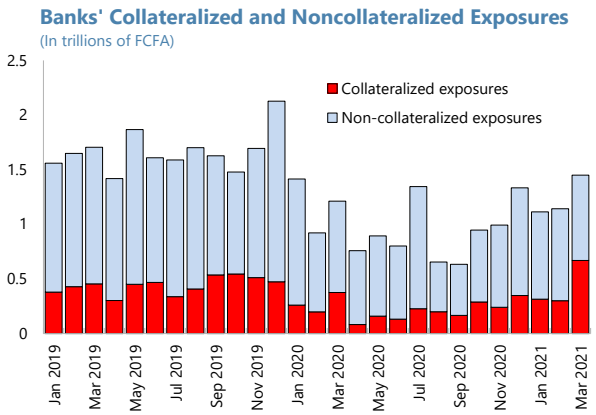
…compared to heavy reliance on the central bank.



The majority of transactions are intragroup…



…and unsecured. Until recently, repo operations were not widely used.



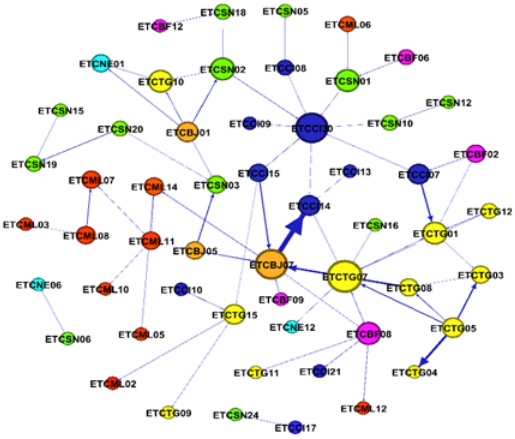
Sources: BCEAO, and IMF staff calculations.

Figure 6. Development of the Network of Interbank Exposures (2015–20)

The density of the network of interbank exposures has increased significantly over the past five years…

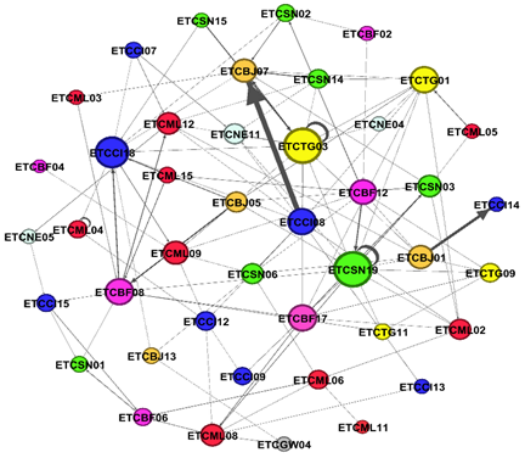
2015

Nodes: 55
Edges: 71
Average path length: 1.75



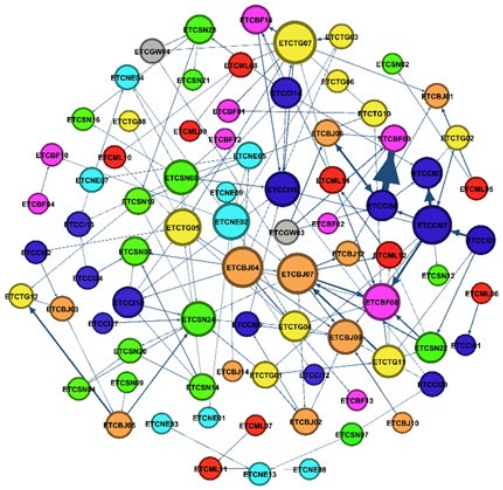
2017

Nodes: 43
Edges: 119
Average path length: 2.96



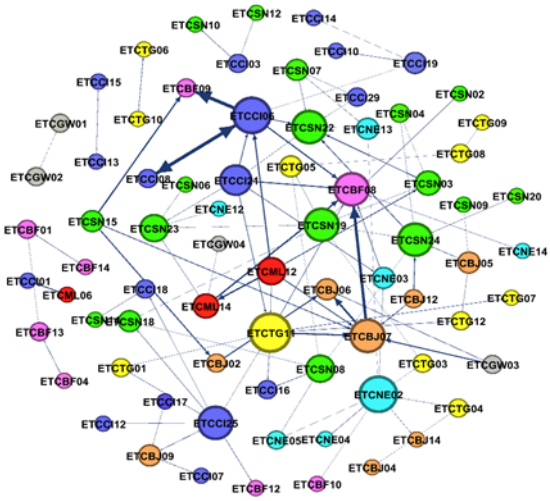
2019

Nodes: 81
Edges: 150
Average path length: 2.89



2020

Nodes: 75
Edges: 98
Average path length: 1.36



Sources: BCEAO, and IMF staff calculations.

Note: Bank color code: orange (Benin), purple (Burkina Faso), blue (Côte d'Ivoire), gray (Guinea-Bissau), red (Mali), turquoise (Niger), green (Senegal), and yellow (Togo).

24. There is a stigma associated with the nongroup interbank market. Banks resorting to the nongroup interbank market are often those that have reached the maximum refinancing amounts at the central bank or that did not obtain refinancing from the BCEAO before the introduction of the

full allocation in 2020. They are, therefore, borrowing in the market at high rates, possibly above the credit facility, which sends a bad signal.

25. The repo market is operating below its potential. Collateralization of repo transactions could help overcome the stigma and expand the transaction network. Fewer transactions are performed under the repo system than under unsecured arrangements, however. The absence of an active secondary market for securities, with observable benchmark prices, is a limitation in terms of: (i) calculating haircuts in the context of repurchase agreements; (ii) regularly valuing collateral (and possibly implementing margin calls); and (iii) liquidating collateral without significant losses in the event of default by the borrowing counterparty.

26. The disparate practices of banks with respect to interbank repo agreements represent a challenge for the widespread use of these agreements. Each bank adapts the master agreement provided by the BCEAO to its own constraints with respect to risk management, maximum maturities, and other considerations. This individualization of repo agreements according to the objectives and constraints of the banks is legitimate, but it requires coordination and dialogue among the banks. This dialogue should allow for the gradual emergence of good practices and greater standardization of interbank repo agreements, which would facilitate the establishment of bilateral repo lines between banks, thus reducing fragmentation of the money market.

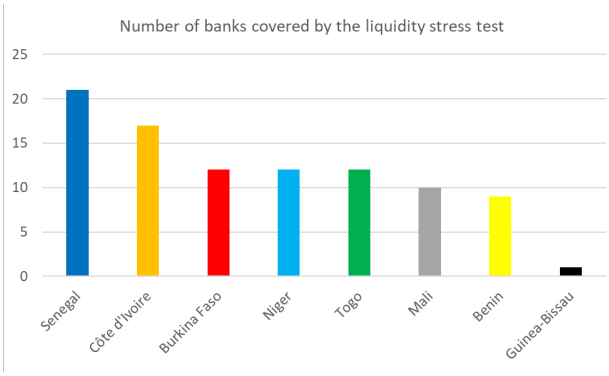
27. Exchanges of information between banks in the region sometimes do not flow as smoothly as they might, which could potentially justify a role for the BCEAO in facilitating these exchanges. Banks have disparate practices with respect to compliance requirements prior to the establishment of interbank lines of credit. To address this issue, as with that of repurchase agreements, a more structured dialogue among local banks, coordinated by the banking association or organized by the BCEAO, would make it possible to identify and promote best practices, which could be formalized in a local agreement. To preclude any technical difficulties with exchanging banking information (financial statements, information on managers and other information, and compliance forms), establishing a dedicated platform for exchanging information could be studied to facilitate the emergence of uniform practices and the establishment of a network of interbank lines of credit that is denser than it is today. Platform access rights could be managed by the BCEAO according to bank requests.

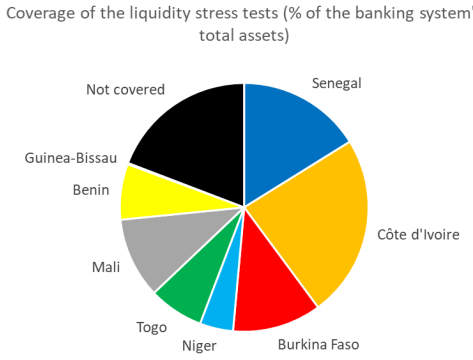
28. The BCEAO should establish an MMCG at the level of the monetary zone. Currently, the dialogue between the BCEAO and banks regarding development of the money market is taking place mainly at the level of the national directorates. Since 2019, the BCEAO has also been organizing an annual seminar for treasurers at the regional level, which serves as a discussion forum and provides training. This seminar should be maintained, as its broader scope makes it a useful complement to a possible MMCG. In addition, the BCEAO conducts surveys of its counterparts at the regional level. These exchanges are beneficial and should be continued, as they allow information from all the banks in the system to be sent to BCEAO headquarters. Nevertheless, this national mechanism should be complemented by a forum for regular exchanges at the level of the monetary zone, with participation by the leading banks in the region. Appendix I provides suggestions for the composition and operation of this MMCG.

C. Liquidity Stress Tests

29. Liquidity stress tests assessed the ability of banks to withstand the impact of sudden deposit outflows, across the region and by country. The tests were carried out on the basis of cash flows and the Basel III LCR framework, which has already been implemented by some banks in the region before its planned formal adaption by the regulator. Considering their dominance in the regional financial sector, banks are the focus of the tests: it covers 94 banks, representing about 81 percent of the banking system's assets (Figure 7).

Figure 7. Coverage of the Liquidity Stress Test





Sources: BCEAO, and IMF staff calculations.

30. The assumptions regarding run-off rates were developed on the basis of rates under the LCR framework and information on deposit stability available in the WAEMU. The run-off rates under the moderate scenarios are comparable to those of the LCR, and those under the extreme scenarios are twice those of the moderate scenarios (three moderate and three extreme scenarios: Table 4 and Figure 8). The overall effective withdrawal rates under the extreme scenarios are 25 percent to 27 percent, higher than the 95th percentile of the highest withdrawals experienced by 90 percent of banks (over the period 2000–20, which was not, however, subject to episodes of systemic liquidity crises). These run-off rates are slightly higher than the rates applied on average by banks in their own stress testing exercises (24 percent for individuals and non-financial corporations) and the rates applied by the BCEAO in its latest stress test (2019).[9] For international comparison, an empirical study of liquidity crises shows examples of deposit losses of up to 30 percent over a 12-day period and mentions that FSAP stress tests applied run-off rates of 10 percent to 50 percent.[10]

[9] The run-off rates used in the bank stress tests were reported in the comprehensive survey administered by the FSAP mission.

[10] Schmieder, C., H. Hesse, B. Neudorfer, C. Puhr, and S.W. Schmitz. 2012. "Next Generation System-Wide Liquidity Stress Testing." Working Paper WP/12/3, International Monetary Fund, Washington, DC.

Table 4. WAEMU: Withdrawal Rate Scenarios

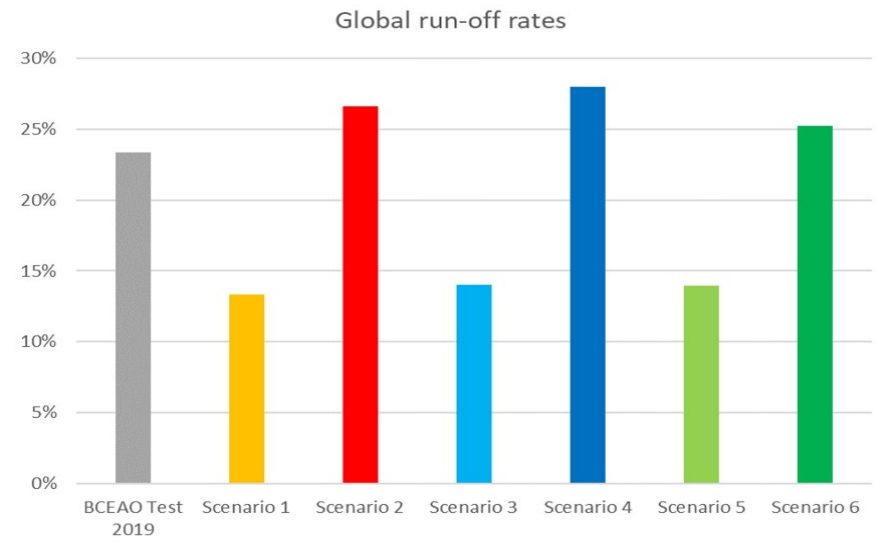
	Run-off rate	
	Moderate scenario	Severe scenario
Deposits ≤ 1,000,000 FCFA	5%	10%
Deposits >1,000,000 FCFA et ≤10,000,000 FCFA	5%	10%
Deposits >10,000,000 FCFA et ≤100,000,000 FCFA	10%	20%
Deposits >100,000,000 FCFA et ≤1,000,000,000 FCFA	10%	20%
Deposits >1,000,000,000 FCFA et ≤10,000,000,000 FCFA	20%	40%
Deposits >10,000,000,000 FCFA	20%	40%
Interbank borrowing		
Unsecured borrowing	50%	100%
Secured borrowing	0%	0%

	Run-off rate	
	Moderate scenario	Severe scenario
Deposits: Households	5%	10%
Deposits: SMEs	10%	20%
Deposits: Large companies	20%	40%
Deposits: Financial institutions	20%	40%
Deposits: Central and local public administrations	20%	40%
Deposits: Nonresidents	20%	40%
Interbank borrowing		
Unsecured borrowing	50%	100%
Secured borrowing	0%	0%

	Run-off rate	
	Moderate scenario	Severe scenario
Deposits: Households		
Stable deposits	5%	10%
Less stable deposits	10%	15%
Deposits: SMEs		
Stable deposits	5%	10%
Less stable deposits	15%	30%
Deposits: Large companies		
Operational deposits	15%	25%
Nonoperational deposits	25%	50%
Deposits: Financial institutions		
Operational deposits	15%	25%
Nonoperational deposits	25%	50%
Deposits: Central and local public administrations		
Operational deposits	15%	25%
Nonoperational deposits	25%	50%
Deposits: Nonresidents		
Operational deposits	15%	25%
Nonoperational deposits	25%	50%
Interbank borrowing		
Unsecured borrowing	50%	100%
Secured borrowing	0%	0%

Source: IMF staff estimates.

Figure 8. Run-Off Rate Scenarios



Sources: BCEAO, and IMF staff calculations.

31. A possible development of liquidity stress tests in the WAEMU would be to adjust the run-off rates of each bank according to the historical volatility of its deposits, differentiating between idiosyncratic and systemic stress scenarios. An analysis of historical data on quarterly changes in the deposits of local banks suggests significantly different levels of vulnerability to deposit flight risk. Thus, the uniform run-off rates applied in this stress test may be considered conservative for some banks, or on the contrary, insufficiently restrictive for others. The run-off rates could be calibrated for each bank according to the 5th or 10th percentile of monthly or quarterly changes in their deposits over a given observation period—although this approach may present technical difficulties, given the increasing number of banks operating in the WAEMU and the rapid changes in the financial system.

32. Banks' liquidity buffers—in the form of high-quality liquid assets (HQLA)—were evaluated under a moderate scenario A and an extreme scenario B. For the purposes of this stress test, HQLA are defined as the sum of cash on hand, deposits and reserves at the central bank, and the value of available government securities after a haircut has been applied. The haircuts are determined as follows:

- *Under the moderate scenario*, a 10 percent haircut is applied to the value of available government securities when they are liquidated to meet liquidity pressures. This haircut is the same as the one applied by the BCEAO for its refinancing and is higher than the 95th percentile of haircuts in the secondary market over the 2019–21 period (which did not experience significant liquidity stress, however).

- *Under the extreme scenario*, a haircut of 30 percent is applied to government securities, which corresponds to the haircuts considered by banks in their stress tests, as reflected in survey

responses, and theoretical price calculations, based on a comparison with bond yields of countries with comparable ratings (Table 5). For comparison: (i) under the LCR, a haircut of 15 percent is applied for government securities rated A+ to BB- (a rating equal to the highest rated country in the WAEMU); (ii) the reference scenarios proposed in the literature mention haircuts of up to 10 percent for investment-grade government securities, but up to 30 percent for lower-quality securities (Schmieder et al. 2012); and (iii) according to the mission's survey of WAEMU banks, the average range of haircuts applicable to the collateral most commonly used as security for interbank transactions is about 23 percent of the face value of eligible assets.

Table 5. WAEMU: Haircut Assumption for Liquid Assets

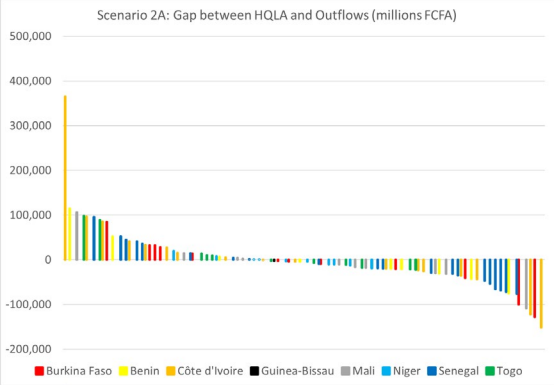
	HQLA depreciation	
	Moderate scenario	Severe scenario
Cash	0%	0%
Reserves at BCEAO	0%	0%
Sovereign debt		
Benin	10%	30%
Burkina Faso	10%	30%
Côte d'Ivoire	10%	30%
Guinea-Bissau	10%	30%
Mali	10%	30%
Niger	10%	30%
Senegal	10%	30%
Togo	10%	30%

Sources: BCEAO, and IMF staff calculations.

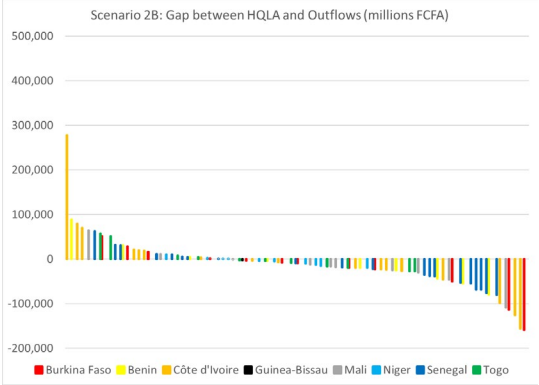
33. The results of the stress test show that aggregate liquidity gaps remain limited. The shortfall in HQLA ranges from 0.3 percent to 2.1 percent of GDP, depending on the severity of the scenarios (Figure 9). The Ivoirian banking system appears highly polarized, with banks holding significant reserves of liquid assets on the one hand, and on the other hand, banks with a large shortfall of liquid assets under extreme scenarios. Applying a deeper haircut on government securities under the extreme B scenarios (30 percent) than under the moderate A scenarios (10 percent) changes the distribution profile of banks, penalizing banks that hold large portfolios of available government securities, for example, those in Burkina Faso.

Figure 9. Results of Liquidity Stress Tests

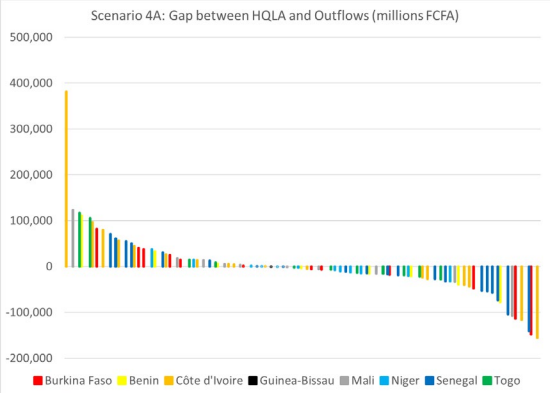
Scenario 2A: HQLA shortfall of CFAF 1,819 billion (1.7 percent of GDP) for 53 banks.



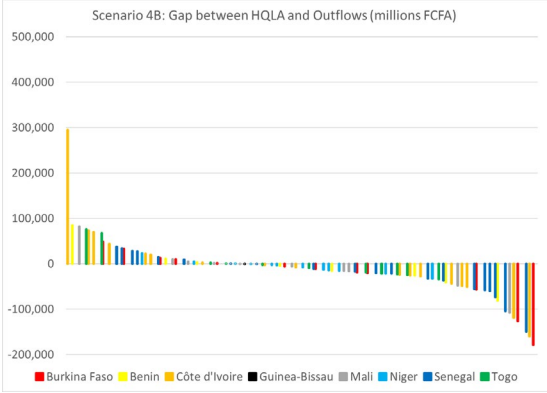
Scenario 2B: HQLA shortfall of CFAF 2,142 billion (2.1 percent of GDP) for 58 banks.



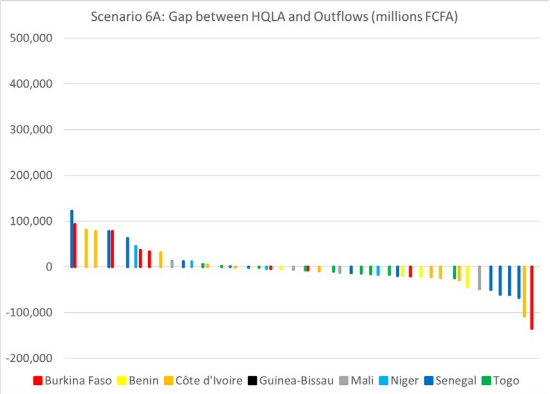
Scenario 4A: HQLA shortfall of CFAF 1,896 billion (1.8 percent of GDP) for 52 banks.



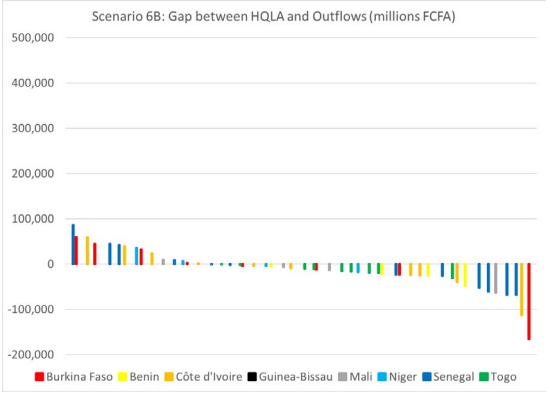
Scenario 4B: HQLA shortfall of CFAF 2,183 billion (2.1 percent of GDP) for 58 banks.



Scenario 6A: HQLA shortfall of CFAF 914 billion (0.9 percent of GDP) for 33 banks.



Scenario 6B: HQLA shortfall of CFAF 1,052 billion (1.0 percent of GDP) for 36 banks.



Sources: BCEAO, and IMF staff calculations.

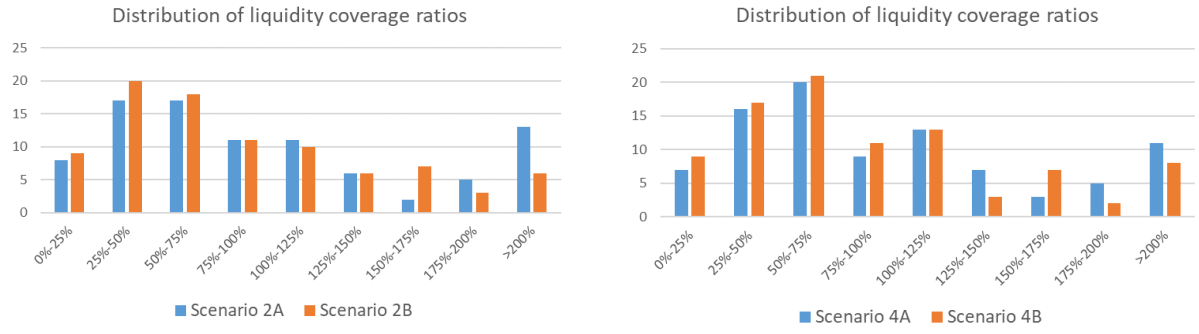
34. The results of the stress tests suggest that while aggregate liquidity gaps remain limited, banks' ability to withstand liquidity pressures is mixed. In a severe crisis—with run-off rates of up to 40 percent for large deposits and haircuts of 30 percent on public securities—58 banks (out of 91) would be unable to handle the withdrawal of deposits (Figure 9). Overall, liquidity gaps appear manageable on a system-wide basis, however, amounting to CFAF 2.2 trillion over three months. The inability to offset liquidity risk is stronger among smaller banks, as well as among banks in some member countries, particularly Benin and Burkina Faso (Figure 10). Overall, the majority of banks in the region would have a liquidity coverage ratio of less than 100 percent (Figure 11), which requires careful contingency planning by banks, including a broader adoption of liquidity stress testing.

Figure 10. Liquidity Gaps under Unfavorable Conditions

Figure 10. Liquidity Gaps under Unfavorable Conditions (concluded)

Sources: BCEAO and IMF staff calculations.

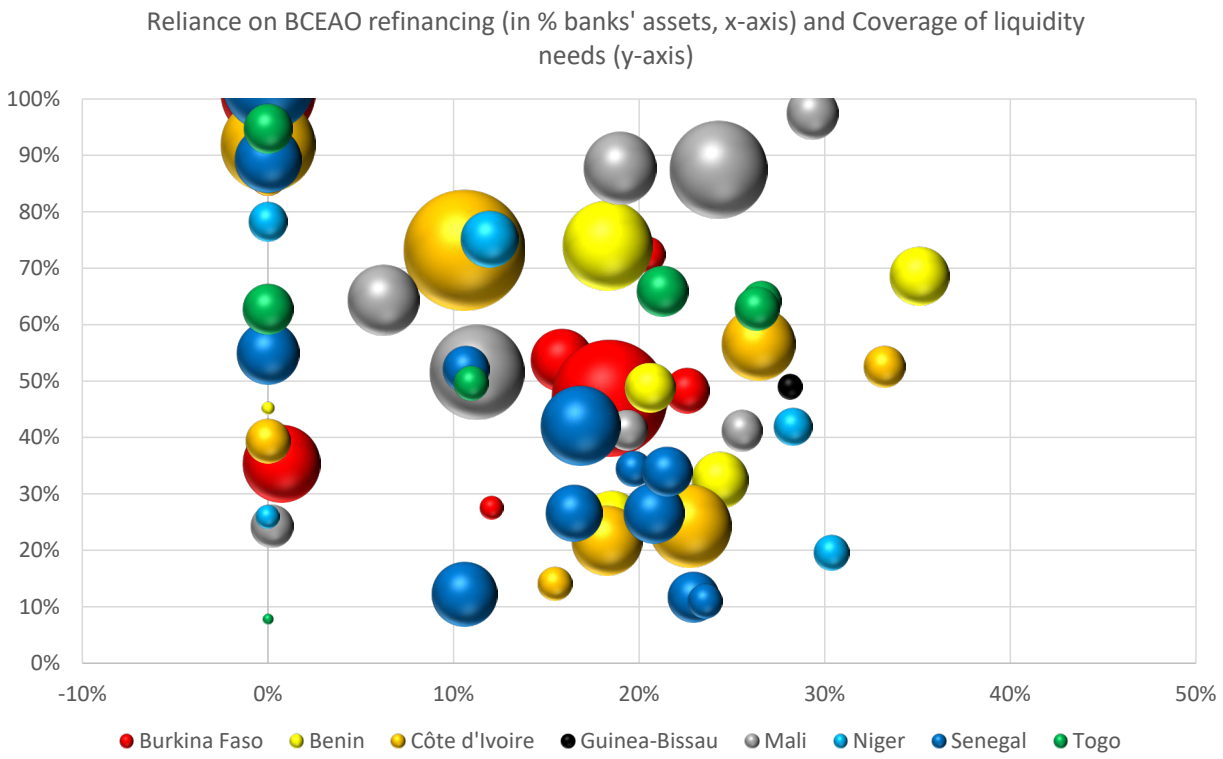
Figure 11. Distributions of Liquidity Coverage Ratios



Sources: BCEAO, and IMF staff calculations.

35. Vulnerability to liquidity shocks, as assessed by this stress test, appears to have little correlation with the level of refinancing from the central bank (Figure 12). This suggests that stress tests, the introduction of the LCR, and the implementation (recommended by this note) of funding plans for banks most dependent on BCEAO refinancing have complementary, rather than interchangeable, roles in managing liquidity risk in the WAEMU banking system.

Figure 12. Coverage Rate of Liquidity Gaps with BCEAO Refinancing



Sources: BCEAO, and IMF staff calculations.

Note: The level of refinancing with the BCEAO (measured as a percentage of each bank's total assets) is on the x axis. The coverage rate under scenario 2B is on the y axis. The size of the bubbles represents the size of each bank (in total asse

ts).

MEASURES TO INTERNALIZE LIQUIDITY RISK

36. The BCEAO can take two regulatory measures to reduce the exposure to liquidity risk. The first is the reserve requirement, through which the BCEAO can influence the share of central bank reserves in bank assets. The second is the prudential liquidity regulation, which includes a liquidity ratio and a transformation ratio.[11] It is expected that the BCEAO will soon introduce short-term liquidity ratios and the structural ratio, which would allow more accurate monitoring and targeting of risk.

[11] The liquidity ratio represents the ratio between, on the one hand, in the numerator, the available assets that can be realized or mobilized in the short term (three months maximum) and, on the other hand, in the denominator, the liabilities due in the short term or the commitments by signature that could be fulfilled at any moment. The standard to be met is a minimum of 75 percent. The coverage ratio of medium- and long-term assets by stable resources requires that at least 50 percent of fixed assets be covered by stable resources.

A. Reserve Requirement

37. The reserve requirement plays a role in ex ante risk control. The reserve requirement in the WAEMU has a role primarily in the implementation of monetary policy. In addition, the LCR will, in the future, play the microprudential role that the reserve requirement has played in the past. The reserve requirement does, however, retain a number of macroprudential benefits: (i) it allows for the internalization of aggregate liquidity risk by requiring each bank to hold a minimum amount of reserves that may exceed what they would otherwise have held[12] (Ferrara et al. 2019); and (ii) it allows for the smoothing of liquidity shocks over time based on averaging and a sufficiently long maintenance period.

B. Liquidity Ratios

38. As part of the convergence of prudential standards toward Basel III, the authorities will introduce an LCR and a long-term structural ratio. The mission supports the authorities' decision because of the risks posed by the lack of stability in customer funding, the absence of long-term market funding, the widening maturity mismatch between assets and liabilities, and limited market liquidity. These risks have so far been managed through refinancing by the BCEAO (see next section), but it would be appropriate to strengthen prudential measures and reduce banks' dependence on the BCEAO.

39. The haircuts applicable to government securities for the liquidity ratio should reflect their market liquidity. Liquidity ratios gauge the resilience of banks to liquidity shocks without recourse to the central bank. Accordingly, the assets in the numerator of the ratio and the haircuts applied should reflect market liquidity. Consequently, the mission recommends that haircuts be calibrated according to the actual liquidity of the various issues, as reflected by liquidity indicators (paragraph 11). If the regulator does not wish to apply different haircuts for different sovereign issuers, a uniform haircut commensurate with the overall liquidity risk of the market should at least be introduced.

40. Ultimately, differences in deposit stability should be allowed for when determining LCR requirements that consider liquidity risk profiles in the context of Pillar II of Basel III. Given the limitations in terms of available data by bank, both with regard to the depth of time series and the granularity of information, the Basel III illustrative benchmarks for withdrawal rates can be used and the liquidity requirement can be uniform initially.[13] Ultimately, the regulator should improve its tracking of the historical distribution of monthly changes in each bank's different funding sources in order to impose a higher Basel III Pillar II requirement on banks that have experienced significantly larger withdrawals than others.

[12] Ferrara, G., S. Langfield, Z. Liu, and others. 2019. "Systemic Illiquidity in the Interbank Network," *Quantitative Finance,* 19 (11), 1779–95.

[13] *Basel III: The Liquidity Coverage Ratio and Liquidity Risk Monitoring Tools,* Annex 4, "Illustrative Summary of the LCR." January 2013. Publication available on the Bank for International Settlements (BIS) website (www.bis.org).

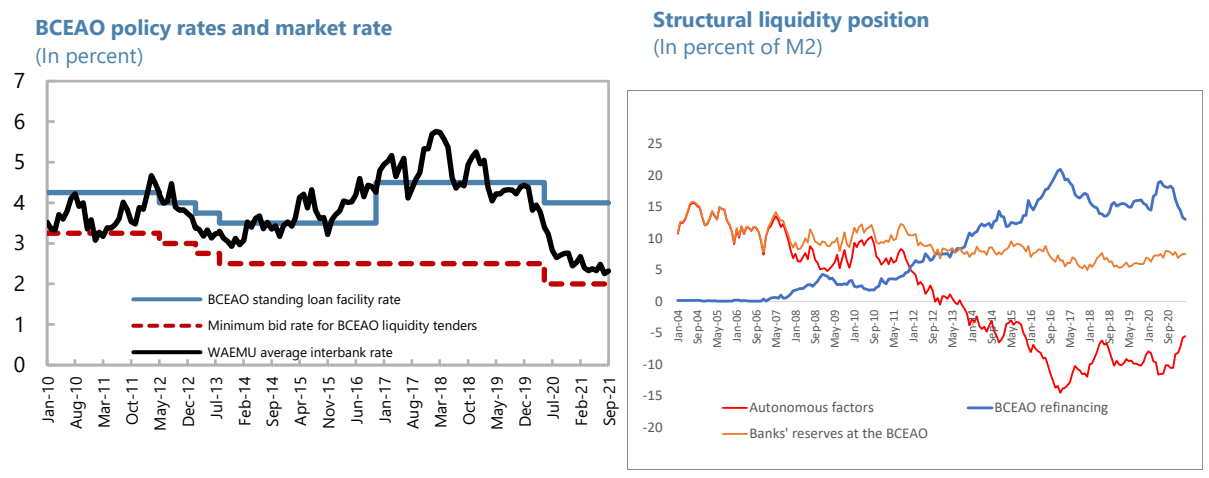
41. The mission supports the gradual approach adopted by the BCEAO for the introduction of liquidity ratios. According to BCEAO studies, the transition to the new liquidity standards will require an effort on the part of a number of institutions. Accordingly, the gradual increase in the requirement to 100 percent by 2028 is appropriate. The inclusion of the required reserve and excess reserves, instead of just excess reserves, in the numerator of the ratio should partially offset the increase in haircuts applied to government securities recommended by the mission.

CENTRAL BANK LIQUIDITY INTERVENTIONS

A. Monetary Policy Operations

42. Liquidity management is also subject to the constraints of the fixed exchange rate regime and has implications for financial stability. The BCEAO buys and sells CFA francs for euros at a fixed rate, at the request of operators, to finance current transactions (capital transactions are controlled). The impact of these transactions on banks' reserves at the BCEAO is difficult to predict and, therefore, to manage. The structural position of banks at the BCEAO[14] is therefore volatile. Since 2004, it has gone from a surplus to a (relatively large) deficit, due to the end of direct financing of public deficits by the BCEAO (Figure 13).

Figure 13. Systemic Liquidity and Interest Rates



Sources: BCEAO, and IMF staff calculations.

43. During the COVID-19 crisis, the BCEAO introduced a fixed-rate, full allotment method. The new allotment method has significantly reduced the liquidity premium by reducing uncertainty about access to BCEAO refinancing. It also has the advantage of not requiring an exact projection of

[14] Position vis-à-vis the central bank after the reserve requirement but before monetary operations. Banks have either a surplus position, in which case they seek to invest their surplus, or a deficit position, which they must finance. Because the WAEMU market is segmented, some banks may have a deficit position that they seek to finance with the BCEAO, while others have a surplus position.

liquidity, which is always difficult under the fixed exchange rate regime, because of the unpredictability of external assets.

B. Emergency Liquidity: Instrument and Risk Control Measures

44. The absence of an emergency liquidity assistance framework undermines the BCEAO's operational framework for monetary policy. ELA is the provision of liquidity, as a last resort, to a solvent, viable bank facing temporary liquidity stress—with the objective of preserving financial stability. A need for ELA can result from two types of situations: (i) an exhaustion of the collateral eligible for regular central bank refinancing; or (ii) a loss of eligibility as a central bank counterparty in monetary policy operations. In the absence of a dedicated ELA framework, the credibility of the BCEAO's operational framework is uncertain, as an outright suspension of a systemically important bank from monetary policy operations, in the absence of a safety net, could jeopardize financial stability. Some systemically important banks could therefore view their suspension as unlikely—a perception that would give rise to moral hazard.

45. In addition to the introduction of an ELA framework, the counterparty eligibility framework for monetary policy operations should be reformed. According to the current framework (Article 4 of Decision No. 397/12/2010), the BCEAO, through the tendering process, "may exclude from one or more auction sessions bidders who are not in compliance with banking regulations, prudential regulations, or the regulations governing the external financial relations of WAEMU member states." It would be preferable to: (i) apply the same eligibility rules to all monetary policy operations, that is, both tenders and the marginal lending facility; and (ii) define more clearly the eligibility criteria (for example, prudential solvency ratio), while retaining the possibility for the BCEAO to suspend a counterparty on the basis of a "prudence principle."

46. Violation of an eligibility criterion (for example, the solvency ratio) would lead to the suspension of the counterparty only after the expiration of a grace period (typically three to six months), if the BCEAO considers that the bank in question can re-establish a satisfactory position with respect to the given eligibility criterion within that time frame. This prevents a shock (idiosyncratic or systemic) to bank asset quality from resulting immediately in the suspension of one or more banks from monetary policy operations, with potential risks to financial stability. This grace period allows for a reasonable balance between the necessary compliance with prudential ratios (especially solvency) and a reduction in risks to financial stability.

47. ELA should be considered only as a last resort, to address a temporary liquidity squeeze. This condition for ELA requires verification by the central bank that the bank requesting ELA has indeed exhausted all alternative sources of funding, including the interbank market (a mere increase in the cost of interbank refinancing is not a sufficient reason to receive ELA). Banks should make full use of the repo mechanism to optimize their access to interbank refinancing, as the collateral can meet the risk constraints of lenders. Moreover, the liquidity squeeze must be temporary in nature: if, on the contrary, it appears that the liquidity problem is structural, then ELA cannot be the solution. A resolution scenario should be envisaged in this case, with, if necessary, liquidity support from the central bank, subject to a clear timetable allowing for a short-term exit

(less than six months) and the provision of government guarantees protecting the central bank against any risk of loss.

48. The establishment of an ELA framework in the WAEMU requires close collaboration between the BCEAO (which has primary responsibility) and the Banking Commission (whose input is crucial)—which should be formalized in a framework agreement. ELA is a financial stability measure—not a banking supervision measure—and is therefore the responsibility of the BCEAO. Nevertheless, ELA decisions regularly require assessments by the Banking Commission—which should not be duplicated at the central bank. Given the often-tight deadlines for ELA decisions (as banks often wait until the last minute to request assistance), it is crucial to define in advance, in detail, the collaboration between the two institutions in a framework agreement. This agreement should define in particular the exchange of information between the two institutions and the technical inputs expected from the Banking Commission, such as an assessment of the solvency and viability of the bank requesting the ELA, an assessment of its funding plan, and possibly data on the loans provided as collateral for the ELA. The framework agreement should also include a mutual commitment by both institutions to inform each other as soon as possible if there are indications that a bank may soon be requesting ELA.

49. The interest rate applied to the ELA must be higher than the BCEAO's marginal lending facility rate. It is crucial that a high rate be applied to any ELA operation to ensure that ELA is actually used only as a last resort. A high rate also reduces moral hazard, providing an incentive for any recipient bank to repay the ELA as soon as possible. A range of 100 to 300 basis points above the marginal lending rate seems a priori appropriate in the case of the WAEMU. The interest rate on ELA should be applied uniformly to all counterparties—because differentiating ELA rates according to the perceived risks of different counterparties would expose the central bank to reputational and even legal risks, as well as to a financial stability risk in the event that ELA rates become public. A higher rate for a given counterparty could be interpreted by the public as a sign of a lack of confidence on the part of the central bank, with effects contrary to the desired objective of preserving financial stability.

50. ELA should be granted for a period of up to two weeks, with the possibility of renewing this loan every two weeks, accompanied by a recalibration of the ELA envelope if necessary. The rationale for this short maturity of ELA loans is the need to reduce the risk to the central bank by fine-tuning the ELA envelope. There is often a great deal of uncertainty about the liquidity needs of a bank under liquidity stress. This justifies a fairly short liquidity projection period (two weeks) to estimate the bank's liquidity needs and calibrate the ELA envelope accordingly. Moreover, from the standpoint of reducing moral hazard and the need for the central bank and the supervisor to support the beneficiary bank, it is important to reassess the bank's situation regularly (every two weeks), particularly the progress made in actions committed to by the bank to restore a more sustainable liquidity situation.

51. The BCEAO should put in place the legal and technical architecture for an effective ELA framework. This includes: (i) a public circular defining the main conditions and parameters of ELA; (ii) internal procedures at the BCEAO and the Banking Commission defining the details of the

technical parameters (for example, risk control measures for collateral); (iii) a framework agreement between the BCEAO and the Banking Commission defining the arrangements for their collaboration in the context of ELA; (iv) a model framework agreement between the BCEAO and a bank receiving ELA defining the conditionality framework; (v) a model funding plan; and (vi) a framework agreement between the BCEAO and WAEMU member states defining the procedures for exchanging information on ELA and the conditions requiring the provision of government guarantees in certain situations (for example, ongoing resolution, uncertainty about solvency, and lack of collateral). Technical assistance from the IMF's Monetary and Capital Markets Department is available to support the BCEAO and the Banking Commission in the implementation of this mechanism, as needed.

BCEAO RISK CONTROL MEASURES

A. Funding Plans

52. The BCEAO currently applies three quantitative limits to the refinancing of its counterparties:

- A limit of 35 percent of bank assets applies to the total central bank refinancing (through all instruments) of each counterparty.
- An additional limit of two times the bank's capital applies for each counterparty on its financing through marginal lending facilities and the special refinancing facility.
- A limit of 35 percent of the tax revenues of each WAEMU member state on the total amount of its financing backed by the government securities of that member state and the government securities it holds in its own account.

53. Although historically justified, these limits are not optimal and should be revised. Their application can be problematic, particularly in the absence of a lender of last resort framework. For example, a significant shock to the quality of assets of a bank (or group of banks) can substantially reduce the bank's capital, and therefore (given the additional limit of twice a bank's capital) the bank's ability to access refinancing from the BCEAO. As major shocks to bank asset quality typically occur during periods of economic crisis, this limit could reduce the countercyclical smoothing capacity of the BCEAO and even (if applied without exception, and in the absence of a lender of last resort framework) jeopardize financial stability. The limit of 35 percent of bank assets seems justified in view of the crucial objective of reducing banks' dependence on central bank refinancing, but its definition effectively introduces a bias among the BCEAO's counterparties to the disadvantage of banks that have to refinance large volumes of nonbank assets (for example, fixed assets and intragroup holdings.

54. The current limits do not allow for adequate support for banks that are overly dependent on refinancing from the BCEAO. Individual limits on the refinancing of each counterparty are applied on the basis of their verification at the time any request is made through

the marginal lending facility. A bank may use the marginal lending facility only if its total refinancing with the BCEAO has not reached one of the two limits in place. It must, then, seek the necessary funding in the money market. In the absence of an ELA framework, there is no individualized and close monitoring of banks that are overly dependent on BCEAO refinancing.

55. The current quantitative limits, which are suboptimal and difficult to implement, should be gradually replaced by a funding plan mechanism. A funding plan is a projection of a bank's balance sheet (in analytical form), with a horizon of typically one to three years and quarterly projection points, which allows the bank to project its needs for refinancing from the central bank over this medium-term horizon (Table 6). A funding plan is prepared by each bank that is overly dependent on central bank refinancing, at the request of the central bank, and it is evaluated by the banking supervisor and the central bank. A funding plan, thus, makes it possible to provide each bank with close, personalized support to achieve a more sustainable liquidity situation (that is, without excessive dependence on central bank refinancing).

Table 6. WAEMU: Funding Plans: Key Parameters

Projection horizon	Typically, 1 to 3 years. If the liquidity problem is "benign," the bank must return to a sustainable situation in the near future (e.g., 3 to 6 months). If the liquidity problem is more serious, the adjustment horizon can be extended, but not too far, to avoid moral hazard.
Frequency of projection points	Typically, quarterly. Monthly projection points may be considered for close monitoring of short-term measures, but they increase the complexity of the projection exercise.
Trigger point	Typically defined as a percentage of each bank's total assets: 5% (Portugal 2012), 10% (Bank of Central African States 2019), 20% (proposal for BCEAO 2021).
Target for refinancing from the central bank	Typically, identical to the trigger point for funding plans. The central bank determines the deadline by which the bank must meet this target.
Frequency of updates	Typically, quarterly. Monthly frequency is excessive and does not allow for the development and evaluation of high-quality funding plans.
Validation	After submission of a preliminary funding plan by the bank to the banking supervisor, an iterative process should result in a funding plan of acceptable quality.
Assessment	The banking supervisor provides its assessment of the funding plan to the central bank, including whether the funding plan: (i) is based on reasonable assumptions and measures; (ii) reflects the bank's best effort to achieve the target as soon as possible; and (iii) whether deviations between actual and projected outcomes are due to exogenous or endogenous factors.

56. A trigger point for funding plans of 20 percent of each bank's total assets should allow for effective support for banks that are overly dependent on BCEAO refinancing. Currently, 26 BCEAO counterparties have a dependence on BCEAO refinancing exceeding 20 percent of their total assets, and four counterparties are over the 30 percent threshold. Given the need to fully collateralize this refinancing with sufficient amounts of eligible instruments, after applying prudent risk control measures, these banks are in a perilous liquidity situation, as their high-quality assets are largely pledged to the BCEAO, and are therefore unavailable to other creditors, as well as to depositors, in a resolution scenario. This does not create the best conditions for building the confidence of depositors, investors, and creditors in these banks. It is, therefore, important to assist these banks in achieving a more sustainable liquidity situation. A trigger point for funding plans set at 20 percent of total assets is lower than the current "strict" limit of 35 percent of bank assets, but higher than the trigger points adopted by other central banks.

57. The obligation to submit funding plans should reduce liquidity risks in the banking system and help stimulate the interbank market. The current situation, characterized by a clear preference on the part of banks for central bank refinancing and the use of the interbank market only as a last resort, is not conducive either to the development of the WAEMU money market or to minimizing the financial risks on the BCEAO balance sheet. Consequently, one of the key objectives of the funding plans will be to encourage banks to use interbank refinancing as much as possible, in particular through the implementation of repurchase agreements with counterparties. Accompanying banks in a funding plan could indeed include technical support to implement interbank credit lines (for example, information sharing with counterparties, establishing conventions, and other support measures).

58. The trigger point for funding plans should be adjusted according to the macroeconomic and monetary environment. In the same way as the quantitative limits currently imposed by the BCEAO on the refinancing of its counterparties, a trigger point for funding plans could, if it became too low in a changing macroeconomic and monetary environment, reduce the incentives for banks to resort to the BCEAO's unconventional monetary policy operations in times of economic crisis, and thus potentially reduce the effectiveness of these measures. Therefore, it is important that this trigger point for funding plans be reassessed on a regular basis (for example, every two years), and on an ad hoc basis in the event of a significant deterioration in the macroeconomic environment. On the other hand, the steady development of the WAEMU interbank market should make it possible to reduce this threshold gradually (for example, to 15 percent of total assets, then to 10 percent) in normal times. Thus, the trigger point for funding plans should be a parameter of the BCEAO's macroprudential policy.

B. Collateral Framework

59. The current collateral framework offers a low level of protection to the BCEAO from a liquidation point of view. The BCEAO applies a uniform haircut of 10 percent to all assets eligible as collateral for its refinancing operations. The eligible assets framework should allow for full protection of the central bank (that is, no financial losses) in a counterparty failure scenario resulting

in the seizure and liquidation of collateral by the central bank. Given the level of liquidity of these assets—low and heterogenous across issuances in the case of government securities, and even lower in the case of bank loans—it is clear that this uniform haircut of 10 percent potentially exposes the BCEAO to significant financial losses in the event of a counterparty default. The calibration of risk control measures regarding eligible assets, in particular haircuts, should be based on a collateral liquidation approach, with a short-term horizon, as the central bank should generally avoid carrying for too long significant risk on eligible assets seized in the event of a counterparty failure.

60. The uniform 10 percent haircut applied by the BCEAO to all eligible assets does not comply with the key principle of risk equivalence. According to the principle of risk equivalence, the central bank should apply risk control measures to individual eligible assets that are commensurate with their respective risks, in order to achieve an equivalent level of risk (from the central bank's standpoint) across all such assets after implementation of these measures. If risk equivalence is not respected, the structure of eligible assets is unbalanced and creates structural incentives for banks to offer the "worst" eligible assets to the central bank as much as possible (that is, the riskiest assets, from their standpoint, the least liquid, the least usable as collateral on the interbank market). This adverse selection of eligible assets leads to significant financial risks for the central bank, through the over-concentration of the riskiest eligible assets, as well as to dangerous biases in banks' investment policies (since the central bank's collateral framework effectively "rewards" the holding of assets of uncertain quality).

61. Some banks could take advantage of imbalances in the structure of eligible assets. The aggregate figures on assets offered to the BCEAO do not seem to indicate, a priori, a strong adverse selection by banks. Some banks are, however, actively offering bank loans (rather than government instruments) on a pre-emptive basis through the rating agreement mechanism—particularly loans to large companies (whose accounts are more likely to be certified) and to individuals (listings). Other banks give priority to illiquid sovereign securities, in order to keep the most liquid securities in their portfolios or as collateral for interbank repo transactions.

62. The haircuts on public instruments should be differentiated through a system of additional haircuts ("haircut add-ons") reflecting the different sources of risk:

- **Maturity risk** should be covered by an additional haircut ranging from 0 percent for securities with a residual maturity of less than two years to 5 percent for securities with a residual maturity of more than five years.

- **Liquidity risk** should be reflected by an additional haircut ranging from 0 percent for securities with secondary market turnover in excess of 15 percent during the past calendar year to 5 percent for securities with no secondary market transactions.

- **Credit risk** should be reflected by an additional haircut ranging from 5 percent for the highest quality sovereign bonds to 20 percent for the lowest quality sovereign bonds, for WAEMU member states. A 50 percent haircut will be applied to bonds whose latest rating is more than two years old.

- An additional haircut of 5 to 15 percent should be applied to reflect the **risk associated with the characteristics of the securities,** particularly the existence of a grace period. This additional haircut could be adjusted depending on the length of the grace period.

- An additional haircut of 0 percent or 10 percent should be applied to **securities issued by entities of WAEMU member states,** depending on whether they benefit from an explicit government guarantee.

63. The assessment of credit risk on sovereign issuers should be based on objective evaluations from outside the central bank. Rating agencies are a priori the preferred option, as they offer an external and specialized solution, while giving the central bank the opportunity to evaluate and validate the methodology. For the BCEAO, this would involve: (i) defining a (limited) list of rating agencies recognized by the BCEAO within its eligible assets framework (possibly including rating agencies based in the WAEMU, to the extent that their methodology for assessing sovereign credit risk is in line with international best practices); (ii) applying the best available rating, in order to encourage WAEMU member states to obtain as many ratings as possible (thus rewarding those states that demonstrate the greatest transparency in their public accounts); and (iii) setting a deadline far enough away to allow member states currently without a rating to obtain one (or more). States whose debt has not been rated will have the highest haircut applied.

64. The BCEAO should gradually incorporate the market values of government securities into its collateral framework. At present, the BCEAO applies the uniform 10 percent haircut to the face value of government securities, which introduces adverse biases in the selection of eligible assets by banks and exposes the BCEAO to significant financial risk. It is important that the haircuts be applied to the market values of government securities (even if they are estimated). To this end, the BCEAO could aggregate, for example at an initial monthly and then weekly frequency, the estimated market values of government securities, based on: (i) the conditions of issuance in the primary market (for new securities issues); (ii) the transactions observed in the secondary market over the past month (and then over the past week); and (iii) the quotations of the market makers, centralized on a single electronic platform.

65. The haircuts on private securities eligible for refinancing by the BCEAO could be differentiated according to the same principles as those for government securities. A system of additional haircuts (for maturity, liquidity, and credit risks) could be applied to these private securities, without imposing excessive haircuts on them, in order to encourage the issuance of these securities by a wide range of companies and investment in them, and thus the development of this market in the WAEMU.

66. Haircuts on bank loans (which have been pledged through rating agreements) should be increased in order to cover the BCEAO from a collateral liquidation standpoint. Bank loans are naturally illiquid. Moreover, it is complicated for a central bank to manage a portfolio of bank loans on a long-term basis—they depreciate rapidly if they are not managed by a bank. An arrangement providing for management by another bank, acting as an agent of the central bank, is conceivable, but as a matter of prudence, the calibration of haircuts should reflect a liquidation

scenario. The 10 percent haircut currently applied by the BCEAO to eligible bank loans greatly underestimates the liquidity risk on these assets, and appears to be much lower than the haircuts applied to this type of asset by other central banks. A significant increase in the haircuts applied to bank loans therefore seems necessary.

67. The haircuts on bank loans should be differentiated by introducing a system of additional haircuts, reflecting the different risks on these assets:

- As with government securities, the **maturity risk** should be covered by an additional haircut of 0 percent to 5 percent, depending on the residual maturity of the loans.
- The **liquidity risk,** which is high on bank loans, should be covered by a haircut equal to about twice the maximum haircut used to cover liquidity risk on government securities, that is, 10 percent.
- The assessment of **credit risk** should be based on a historical estimate of probabilities of default (PD) and recovery rates (1—loss-given-default, or LGD) in the WAEMU. In the potential absence of such historical data, comparisons with other central banks could provide guidance on the appropriate level for this additional haircut. The additional haircut for credit risk should be significantly higher than the one applied to sovereign issuers, since they have unlimited power to tax the companies and individuals under their jurisdiction. Therefore, an additional haircut in the range of 10 percent to 30 percent would seem appropriate.
- **The existence and availability, or lack thereof, of assets pledged by the borrower to the lending bank as collateral** for the central bank in the event of a bank default should be reflected in an additional haircut ranging from 0 percent to 20 percent (the maximum haircut applicable to an unsecured bank loan).

68. Loans to related parties present a correlation risk, which should lead to their exclusion from the rating agreement system. To be considered effective protection for the central bank, an eligible asset must be correlated as little as possible to the default risk of the counterparty pledging the asset. Loans to related parties do not meet this important principle for eligible assets for central bank operations, and should, therefore, be excluded from the definition of eligibility. In addition, this exclusion would strengthen prudential safeguards on related-party loans by encouraging banks to strictly limit the volume of such loans and to adopt more sound lending policies.

69. In addition to increased and differentiated haircuts, the BCEAO should consider establishing concentration limits to ensure diversity in the collateral pledged, both at the aggregate and individual levels. The following concentration limits could be considered and gradually implemented, considering the capacity of the BCEAO's counterparties to conform with the new norms:

- A 20 percent limit (as a proportion of the collateral pledged by each counterparty) should be applied to the listed credits, that is, **loans to individuals** pledged via listings through rating agreements, recognizing the risks specific to these assets.

- A limit set initially at 75 percent and ultimately at 50 percent (as a proportion of the collateral pledged by each counterparty) should be applied to all **bank loans** pledged through rating agreements. This would protect the BCEAO from the significant liquidity risk inherent in these assets, and from the significant uncertainty about their liquidation value, in the absence of sufficient historical information on default probabilities and recovery rates.

- A 75 percent limit (as a proportion of the collateral pledged by each counterparty) should be applied to government securities issued by a single WAEMU member state, to ensure diversification of the sovereign risk assumed by the BCEAO. This concentration limit on idiosyncratic sovereign risk would also encourage banks to reduce somewhat their preference for securities issued in their domestic market, in order to stimulate the securities market in the WAEMU as a whole.

70. The ongoing efforts by the BCEAO to make private instruments more attractive should be continued. In particular, the option of ex ante listing of nonfinancial corporations by the BCEAO constitutes a significant advance in this area. Under this arrangement, loans to companies rated A and B (subject to a sovereign guarantee) can be pledged as refinancing support. The measures proposed in this note regarding government securities (establishment of haircuts that better reflect risks, consideration of observed or estimated market values, and concentration limits) should encourage banks and other investors to better diversify their eligible instruments, thereby supporting the development of the private securities market in the WAEMU.

71. The BCEAO should conduct a detailed impact assessment, at the aggregate and individual levels, to define the timing of the proposed reforms for its eligible instrument framework. Banks need to be able to prepare for the phased implementation of the new eligibility and valuation rules and risk control measures regarding eligible instruments, in order to adjust their portfolios and liquidity management strategies accordingly. Banks facing potential constraints on their eligible instruments due to stricter risk control measures should be able to take advantage of the rating agreement framework pre-emptively before the new collateral rules are put in place. Finally, the establishment of appropriate safety nets, in particular the emergency liquidity assistance framework (for which the eligible collateral is much broader), should allow for appropriate support for the most fragile banks.

C. Risk Control Measures within the Emergency Liquidity Framework

72. ELA requires verification by the banking supervisor of the bank's solvency going forward. ELA should be reserved for banks deemed solvent by the supervisor, because the provision of liquidity to insolvent banks would inevitably result in artificial life support for entities unable to play their role as banks serving the economy and in losses for the central bank. Nevertheless, the definition of solvency in the context of ELA cannot be based solely on a one-time assessment of

prudential solvency ratios, as this definition would in some cases lead to the denial of ELA to banks that are temporarily in violation of the prudential solvency ratio, but have prospects of restoring their solvency to a satisfactory level in the short term—thus eliminating banks that are useful to the economy and raising risks to financial stability. Thus, within the ELA framework, a bank is considered solvent if the banking supervisor considers that it has a credible prospect of maintaining or restoring its solvency ratio above the prudential minimum within a short-term horizon (typically six months). This prospect must be credible—that is, the supervisor must be able to support its judgment with factual and objective considerations regarding the actions the bank plans to take to restore sufficient solvency (through asset sales, recapitalization, or other measures).

73. The banking supervisor's assessment of the solvency of a bank requesting ELA is not necessarily binary; it may be qualified according to the perceived chances of restoring sufficient solvency in the short term. The supervisor may use a "traffic light" system for assessing solvency (in the specific context of ELA): (i) in the case of a "red light" assigned by the supervisor (no credible prospect of restoring sufficient solvency within six months), the ELA must be refused by the central bank (except in the specific case of an ongoing resolution); (ii) in the case of a "green light" (positive assessment of the prospect of maintaining or restoring sufficient solvency within six months), the central bank may consider ELA (without being bound by the supervisor's positive assessment of solvency, as the ELA decision must also take into account other considerations); (iii) in the case of a "yellow light" assigned by the supervisor (risk expressed regarding the return to sufficient solvency within six months), the central bank may accept or reject the ELA request, and in the event of acceptance, must take strict measures to reduce the risks, for example via government guarantees if the supervisor considers that the risk to solvency is significant.

74. ELA should be reserved for viable banks, which also requires an assessment by the banking supervisor. ELA provided to nonviable banks would only weaken the banking system, burdening it with fragile entities on artificial life support, posing a constant risk to the stability of the entire system, and diverting resources that could be used by banks in a better position to make use of them. Thus, ELA should be reserved for viable banks, that is, those with a business model and the tools to achieve, on an ongoing basis, a minimum profitability that would allow them to survive without the need for repeated recapitalizations. This therefore also involves a forward-looking assessment by the supervisor, which can support its judgment with objective evidence about the bank's past profitability and competitive position.

75. The BCEAO is technically well positioned to quickly put in place a collateral framework for ELA through its rating agreement mechanism. To the extent that a bank under liquidity stress remains eligible for monetary policy operations, it can use its eligible instruments (in the WAEMU, mainly government securities and high-quality loans pledged through rating agreements) to obtain liquidity from the BCEAO through tenders and the marginal lending facility. Once this eligible collateral is exhausted, the bank must request ELA. Then, ELA must be fully collateralized, with the assets still available: in the case of the WAEMU, mainly bank loans that could not be pledged for monetary policy refinancing. Nevertheless, the BCEAO could apply the existing rating agreement framework to these lower-quality loans, with adjustments, in order to use them as collateral for ELA.

This is a considerable technical advantage for the BCEAO, which should encourage it to quickly put in place an ELA framework. The adjustment proposed for monetary policy rating agreements—including the introduction of a system of additional haircuts to provide for better differentiation of risk control measures—should be extended to ELA. Given the acceptance of much broader collateral for ELA, its implementation will require enhanced risk control measures, with appropriate calibration to significant risks on generally illiquid assets.

76. The lower quality of the bank loans pledged as collateral for ELA justifies high haircuts, in order to protect the BCEAO. The haircuts applied to bank loans selected to guarantee ELA should be higher than the highest haircuts applied to bank loans eligible for monetary policy operations. They should be calculated as the sum of additional haircuts covering the different sources of risk on the assets, as proposed for monetary policy rating agreements. There should be no upper limit on the haircuts applied for ELA—that is, haircuts of 90 percent or more may possibly be justified for low-quality bank loans, but their use will still provide better protection for the central bank in the event of a default by the ELA recipient.

77. With ELA, the selection of assets to be used as collateral is at the discretion of the central bank, it is not up to the bank receiving ELA. In monetary policy operations, counterparties are free to use the eligible assets of their choice—the central bank only defines the eligibility rules. On the other hand, for ELA, the principle of discretionary choice by the central bank applies: the central bank decides on the overall amount of collateral needed (based on the envisaged ELA envelope and an over-collateralization rate), and then selects the assets available on the bank's balance sheet. The bank must provide the central bank with complete and up-to-date information on its available assets, and must also be able to provide all available documentation on each asset that the central bank wishes to use as collateral.

78. ELA must be accompanied by strict conditionality, the purpose of which is to limit moral hazard and to help the beneficiary bank return to a more solid footing. ELA by itself does not fundamentally solve any of the problems at the root of liquidity stress. ELA is only intended to give the bank facing these stresses time to take the necessary actions. Indeed, most of the measures to restore a sustainable liquidity situation—asset sales, recapitalizations, freezing or limiting new loans and investments, suspending dividends, restoring the confidence of depositors and counterparties in the interbank market, and other measures—are gradual and take some time to implement. ELA allows the bank time to take these actions—but it is crucial that ELA be accompanied by a clear framework of conditionality; otherwise, it may actually cripple the beneficiary bank's efforts, through moral hazard.

79. Conditionality should be defined in a legally binding ELA framework agreement, and its signature by the beneficiary counterparty is a prerequisite for the ELA. This framework agreement must be signed by the counterparty and by the BCEAO before any ELA operation. It essentially sets out a list of obligations for the beneficiary counterparty. These obligations are intended both to reduce moral hazard and to give the central bank sufficient information and power to effectively support the bank. They may include enhanced reporting requirements, the beneficiary bank's lending and investment policy, its operating costs, dividend distributions (which typically must

be suspended during the ELA period), interbank investments (since ELA must be strictly limited, there is no question of the bank investing any of it in the interbank market), loans to related parties (which must cease during the ELA period), and other obligations. Based on the ELA framework agreement, adjustments can be made to tailor the conditionality to the specific conditions of each counterparty.

80. Each bank receiving ELA is required to submit regularly (typically quarterly) a funding plan that quantitatively outlines the steps it plans to take to repay the ELA according to the schedule set by the central bank. A funding plan is a projection of the bank's balance sheet, with projection points typically quarterly. It allows the ELA beneficiary bank to demonstrate how it plans to reduce its reliance on central bank refinancing in the short to medium term, including how it plans to repay the ELA. This funding plan should be the subject of an iterative dialogue between the bank and the banking supervisor in its preparation phase, in order to ensure a minimum level of quality and credibility. Once the funding plan is prepared by the bank, it should be evaluated by the supervisor and then submitted by the bank to the central bank and the supervisor. Depending on whether it is deemed credible o and depending on whether the deviations between projections and implementation are the result of exogenous factors or of choices made by the bank's management, the central bank can then adjust its ELA decisions.

Appendix I. Considerations for the Establishment of an MMCG

Objective: To serve as a regular forum for discussion between the BCEAO and leading banks in the region of the functioning of the money market.

Meeting frequency: The MMCG could meet on a quarterly basis, with the possibility for the BCEAO to convene ad hoc meetings with the banks in the event of a particular need for discussion (for example, in the event of a serious dysfunction in the money market, a new monetary policy measure warranting a discussion with the banks, and so on).

Practical details: In order to reduce the costs (in terms of time and money), for the BCEAO and for the banks, of the MMCG meetings, only one physical meeting would be held at the BCEAO headquarters in Dakar, and the other meetings would be held virtually.

Composition: The chairmanship and secretariat of the MMCG would be provided by the BCEAO. Between 12 and 15 banks would be members, represented by their chief financial officers (CFOs) or treasurers (only one participant per bank). A given banking group could have only one representative. Limiting the number of banks to 15 is intended to facilitate frank and effective exchanges at MMCG meetings. The WAMU Securities Agency could be invited to attend the MMCG meetings as an observer, especially when the discussions concern the securities market.

Criteria for composition: The criteria used for the initial selection of MMCG members would be, in this order: (i) size of the banking group; (ii) regional nature of the banking group (number of WAEMU countries in which it has a significant presence, defined by a minimum market share); (iii) diversity of nationalities (each WAEMU member state should be represented in the MMCG by at least one bank); and (iv) personal competence of the CFOs or treasurers, including their ability to communicate with the BCEAO. The details of this assessment by the BCEAO should remain strictly confidential, although the BCEAO may disclose the selection criteria used.

Annual rotation: Every year (or every two years), the BCEAO would rotate the membership of the MMCG to a limited extent, for example, by removing two or three members and replacing them with an equivalent number of new members. This rotation should normally remain quantitatively limited, to provide for some stability in the representativeness of the MMCG membership.

Criteria for rotation: The main criterion for the annual rotation of MMCG members is their active participation in MMCG discussions (sharing of best practices, initiatives, proposals, articulation of positions, including possible criticism of the BCEAO).

Typical meeting agenda: The agenda for each meeting should be prepared by the MMCG Secretariat (BCEAO) after discussion among the members. Each meeting could last two to three hours, for example with two or three thematic presentations by members (including the BCEAO), followed by a frank and open discussion.

Possible topics for discussion: All topics related to the functioning of the WAEMU money market would be relevant to the MMCG, for example, interbank repo agreements, compliance requirements for the establishment of interbank lines of credit, liquidity and transparency of the WAEMU securities market, liquidity management by the BCEAO, and so on.

Topics to avoid: The MMCG should not deal with matters relating to the specific situation of one or a few banks, nor should it require the sharing of confidential information, but instead should focus on matters of general interest to all members and the development of the money market. The MMCG should also not serve as a preferred channel of communication on monetary policy for the BCEAO, as the central bank's communications on this subject should reach all banks, as well as the public, simultaneously, in accordance with a principle of transparency.

Equitable treatment of counterparties: To ensure equitable treatment of the BCEAO's monetary policy counterparties, the MMCG secretariat (provided by the BCEAO) should prepare detailed minutes of each meeting, which should be published on a dedicated page of the BCEAO website no later than one month after an MMCG meeting.