African Department

13/06

West African Economic and Monetary Union

Financial Depth and Macrostability

Patrick A. Imam and Christina Kolerus,
with Contributions by Raymond Bernard and Alexei Kireyev

INTERNATIONAL MONETARY FUND

African Department

13/06

West African Economic and Monetary Union

Financial Depth and Macrostability

Patrick A. Imam and Christina Kolerus,
with Contributions by Raymond Bernard and Alexei Kireyev

INTERNATIONAL MONETARY FUND

Cataloging-in-Publication Data

Joint Bank-Fund Library

Imam, Patrick.
West African Economic and Monetary Union (WAEMU) : financial depth and microstability / Patrick Imam and Christina Kolerus. —Washington, D.C. : International Monetary Fund, c2013.

p. : col. ill. ; cm.

Includes bibliographical references.
Series: African departmental paper

1. Union économique et monétaire ouest africaine - Evaluation. 2. Finance Africa, West—Evaluation. 3. Financial institutions—Africa, West—Evaluation. 4. Banks and banking—Africa, West—Evaluation. 5. Microfinance—Africa, West—Evaluation. I. Kolerus, Christina. II. International Monetary Fund.

HC1000.I42 2013
ISBN: 978-1-48434-822-2

Please send orders to:
International Monetary Fund, Publication Services
P.O. Box 92780, Washington, DC 20090, U.S.A.
Tel.: (202) 623-7430 Fax: (202) 623-7201
E-mail: publications@imf.org
Internet: www.elibrary.imf.org
www.imfbookstore.org

Contents

Tables

Introduction

This enhanced review of West African Economic and Monetary Union's (WAEMU's) financial sector is one of several pilot reviews called for by the Executive Board in May 2012. The purpose of the reviews is to go beyond the traditional surveillance focus on banking system soundness and solvency by analyzing in more depth the interplay between financial development, macroeconomic and financial stability, and effectiveness of macroeconomic policies in low-income countries. As the WAEMU is a monetary union composed of eight countries, a number of key macroeconomic and financial policies—including monetary policy and supervision—are designed and implemented at the union level, whereas responsibility for others rests with national authorities. This study focuses therefore on WAEMU-specific issues. This follows and complements the two previous pilots on Benin and Senegal.

The financial system in the WAEMU is dominated by the banking sector, but it is evolving rapidly with the emergence of new transnational banking groups and microfinance institutions. The regional securities and equity market is a marginal source of funding, except for governments. The interbank market remains shallow. The banking system in the region is highly heterogeneous. Although most banks are adequately capitalized and profitable, pockets of vulnerability, including public banks, were identified. Compliance with prudential norms remains low for a number of ratios, suggesting a degree of regulatory forbearance, and some of these norms are not in line with international standards. Stress tests and financial soundness indicators show that concentration of lending and asset quality are significant risks. The rising sovereign-bank linkage requires close monitoring.

Although financial development broadly reflects the region's structural characteristics, there is scope for further deepening and broadening. This would facilitate the financing of growth, improve financial inclusion and the ability of firms and households to cope with a volatile environment, and increase the effectiveness of macroeconomic policies. Financial development will bring new challenges.

A significant strengthening of the regulatory and supervisory framework is necessary to address existing and new risks. The emergence of regional banking groups requires the development of supervision on a consolidated basis and strengthening of cooperation with banking supervisors in countries where these groups operate. The increasing exposure of banks to sovereigns is also a risk that needs to be recognized, including through a nonzero weight on government paper in capital adequacy calculations. Microprudential regulation should be revised to bring certain prudential standards closer to international best practice—for example, on risk concentration, classification of claims, and provisioning—while taking into account the regional context. The move to Basel II will be a good opportunity to address many of these issues.

The financial crisis prevention and management framework could also be strengthened. Crisis prevention requires greater transparency, including through the regular and timely compilation and publication of financial soundness indicators for all member countries. Regular stress tests would be a welcome step toward the introduction of an early warning system. There is scope for improving the bank resolution framework, which would reduce the budgetary cost of government intervention. Swift action in this area, including by giving broader powers to the supervisor and close collaboration with other supervisors in the case of cross-border groups, is necessary.

Chapter

1 Financial Systems in the WAEMU: Structure, Performance, and Risks

Overview of the Structure of the Financial System[1]

The financial system in the West African Economic and Monetary Union (WAEMU) remains largely bank-based. The banking sector comprises 106 banks and 13 financial institutions, which together hold more than 90 percent of the financial system's assets (about 54 percent of GDP end-2011). Five banks account for 50 percent of banking assets (see Figure 1). The ownership structure of the sector is changing fast with the rapid rise of foreign-owned (pan-African) banks. This contributes to higher competition but also rising heterogeneity in the banking system, with large and profitable cross-country groups competing with often weaker country-based (and sometime government-owned) banks. Nonbank financial institutions are developing quickly, notably insurance companies, but remain overall small. More detailed analysis on the banking system is presented in the section entitled "The Banking Sector."

Microfinance institutions (MFIs) represent a small but rising share of the financial system and contribute strongly to improving access to finance[2] by lower-income households and small and medium-sized enterprises. The WAEMU has 759 registered MFIs. Sixty-one entities are classified as large institutions with assets or deposits above CFAF 2 billion and are supervised by the Banking Commission. These account for 90 percent of the MFI sector's assets. Although significantly smaller than the banking system—MFIs' total loans amount to about 8 percent of total bank credit—more people, particularly in rural areas, have accounts at MFIs than at banks, which helps raise overall access to the financial system from 5 to about 15 percent of the

[1] This section describes mostly aggregate results at the WAEMU level. They may mask significant heterogeneity across countries.

[2] Access to finance refers to the possibility that individuals or enterprises can access financial services, including credit, deposit, payment, insurance, and other risk management services (Demirgüç-Kunt, Beck, and Honohan, 2008).

population. In countries such as Benin, Senegal, and Togo, MFIs have helped lift the overall access ratio to more than 20 percent of the population (see Benin and Senegal pilots[3]). Most MFIs are operated as mutuals or by civil society organizations and have a social mandate, such as lending to farmers in remote regions. Overall, the sector is profitable, but many of the smaller networks are loss-making and rely heavily on donor financing. More detailed analysis on MFIs is presented in the section entitled "Microfinance."

The regional financial markets remain a marginal source of funding except for the governments. The regional stock market, based in Abidjan, has 37 quoted companies as of end-2012. Only 11 initial public offerings took place between 1998 and 2011. Its capitalization is small (about 12 percent of the WAEMU GDP in 2012). Companies listed are mostly in the financial and industrial sectors; Sonatel (a Senegalese telecom company) and Ecobank (a regional bank, headquartered in Togo) are the largest two companies, accounting for close to 50 percent of market capitalization. The debt market consists mostly of government paper and is small (about 10 percent of the WAEMU GDP in 2012). There is no significant secondary debt market, including for government paper. More detailed analysis on the regional financial markets is presented in the section entitled "Regional Markets."

The Banking Sector

The banking sector has expanded in recent years. Bank credit to the economy has increased substantially in most countries since the mid-2000s (Figure 1). This trend continued in 2012, taking the ratio to GDP to about 20 percent, from 14 percent in 2010 (with an average credit growth rate of 6 percent annually). The number of bank branches and bank accounts also increased significantly in recent years. Credit is largely short-term and goes mostly to manufacturing and the service sector (particularly trade, hotels, and restaurants). Clients vary substantially across banks, with some dealing mostly with bigger firms (including subsidiaries of multinationals in the case of foreign-owned banks) and others are more focused on domestic retail clients. In some countries, increased competition from MFIs and new business strategies from entrants have led to diversification of the banks' traditional customer base and higher competition. Most banks are significantly exposed to government securities and more generally to the public sectors.

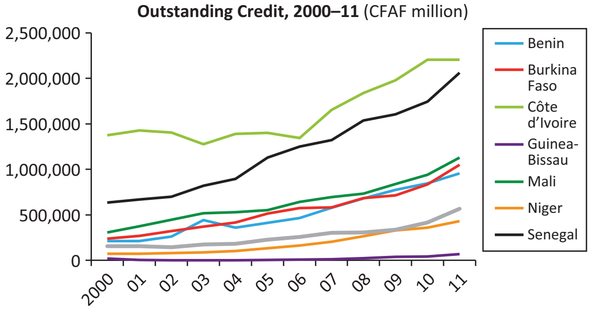
An important recent development has been the emergence in the WAEMU of cross-border (pan-African) banking groups. This has often occurred

[3] Benin: 2012 Article IV Consultation and Fourth Review under the Extended Credit Facility Arrangement—Staff Report and Staff Supplements, IMF Country Report No. 13/9. Senegal: Staff Report for the 2012 Article IV Consultation, Fourth Review under the Policy Support Instrument, and Request for Modification of an Assessment Criterion—Staff Report and Supplements, IMF Country Report No. 12/337.

Figure 1. WAEMU: Evolution of the Banking Sector

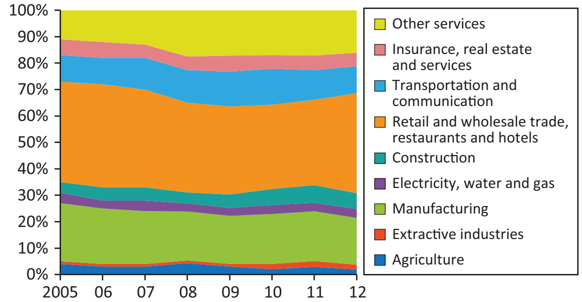
Outstanding credit by the banking system has grown steadily in all WAEMU countries...

Outstanding Credit, 2000–11 (CFAF million)



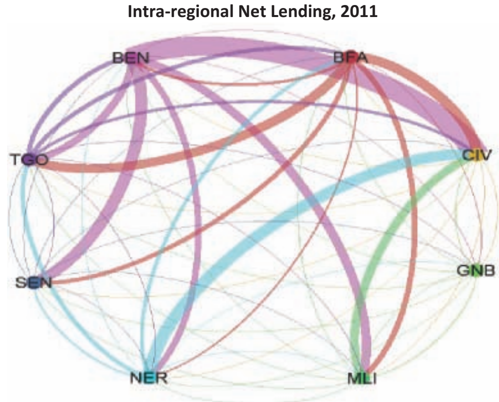
...with the largest share allocated to retail and whole sale trade.

Sectoral Distribution of Credit



Inter-regional cross-border banking liabilities, however, remained small, with lending flows mainly to Senegal and Côte d'Ivoire...

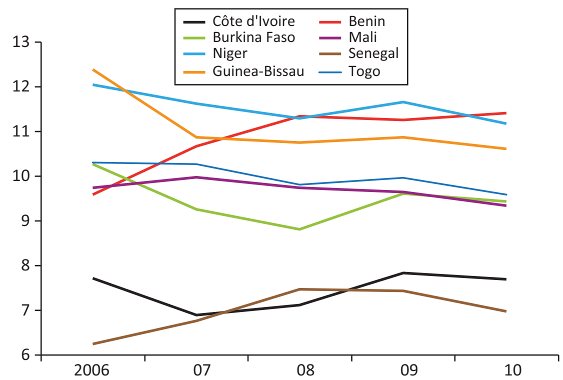
Intra-regional Net Lending, 2011



Note: The links indicate net lending flows originating from the country with the same-color node.

...and limited convergence of cross-country lending rates implying limited integration.

Lending Rates by Country, 2006–10



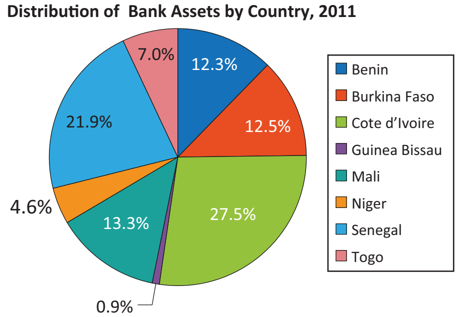
Banking groups have evolved in the region and are expanding rapidly.

Main Banking Groups in the WAEMU

Group	Presence in countries	Market share (%)	Number of agencies	Number of accounts
Ecobank (ETI)	8	15.3	225	1,131,339
Société Général	4	11.2	129	524,584
Bank of Africa Group	6	10.1	145	573,827
Attijariwafa Bank	4	8.7	210	571,078
BNP Paribas	7	7	176	362,658
ABI (Ex-AFG)	4	6.2	81	442,144
United Bank for Africa	4	3.3	59	212,941
BSIC	7	2.4	73	68,649
Total		63.9	1,098	3,887,220

Côte d'Ivoire remains the largest market in terms of bank assets, closely followed by Senegal.

Distribution of Bank Assets by Country, 2011



Source: Banking Commission of the WAEMU, Central Bank of West African States, and IMF staff calculations.
Note: WAEMU = West African Economic and Monetary Union.

through the purchase of domestic banks, in particular by Moroccan and Nigerian groups seeking to expand out of their home markets. Twenty large groups, accounting for most of the banking system, are involved in cross-border activities within the WAEMU (Figure 1). These groups, which are mostly incorporated as subsidiaries, are funded through local deposits. This funding model, coupled with their domestic orientation, explains why the direct impact of the global crisis was rather mild on these banks. European banks have remained engaged in the region, whereas pan-African banking groups have taken the opportunity to expand.

At this juncture, however, banking in the WAEMU is still conducted within national borders. Cross-border flows to households or corporations within the region are largely in the form of syndicated loans involving a sister bank located in the country of the client; in the recent period, Côte d'Ivoire and Senegal were net recipients of these flows, whereas most other countries were net exporters. The flows are still relatively small, at about 1.6 percent of total lending in 2012. Limited integration is also attested by large differences in lending and deposit rates for households and enterprises across countries. Limited banking integration reflects a number of factors, such as the still limited economic integration, but also the importance of local knowledge for lending activities. The main cross-border financial flows in the WAEMU involve bank purchases of government paper.

On average, the banking system is liquid and well capitalized, although the situation varies substantially across banks and countries (Box 1, Figure 2, and Table 1). As mentioned earlier, banks are very heterogeneous with regard to business models, size, geographical coverage, profitability, and vulnerabilities. Aggregate information hides this diversity and therefore needs to be complemented by a more granular approach. The analysis of financial soundness indicators (which are highly aggregated, available with long lags, and backward-looking; Table 2) and the results of the stress tests (which rely on bank-by-bank data) confirm the need for a dual approach. Both lending concentration, which is high in all countries of the region, and quality of assets, as reflected in high gross nonperforming loans, represent the main risks. Lack of data regrettably did not allow assessing risks related to the exposure of banks to WAEMU sovereigns, but this exposure is clearly increasing, raising new (possibly systemic) risks.[4] The broader exposure of banks to the public sectors (e.g., through public enterprises) is even more substantial. The emergence of cross-border banking groups also brings new risks; for instance, cross-border banks may propagate foreign shocks into the domestic economy. Another potential risk arises when large banking groups have similar portfolios making them susceptible to similar shocks; in this case, although the diversification of the banking portfolio

[4] The Senegal pilot study showed that smaller banks in Senegal were highly exposed to sovereign risk (Imam and Koleras, 2013).

reduces the probability of an idiosyncratic failure, it increases the probability of a systemic crisis. Some of these banking groups are large enough to be considered domestic systemically important financial institutions.

Compliance with prudential norms remains low for a number of ratios. As shown in Figure 1, compliance varies across countries and across ratios. Also, there are banks in all countries breaching the capital adequacy ratio (lack of granular data did not permit scaling the compliance of prudential ratio by banks' assets). Compliance improved in late 2012, but this reflected changes made to two ratios (the transformation ratio, which was lowered from 75 to 50 percent, and the ratio on portfolio structure, which was abolished). Progress over the last few years has been limited, which suggests a degree of regulatory forbearance. In addition, some of these norms are not in line with international standards. Low compliance is particularly problematic for ratios that are less demanding than international standards, such as the one on risk division (see ahead). As discussed in the last section, there are other important issues to address with regard to the supervision of regional groups and the crisis prevention and resolution frameworks.

Box 1. Banking System Soundness: Findings from the Stress Tests

In collaboration with the authorities, stress tests were performed on the banking systems of seven of the eight West African Economic and Monetary Union (WAEMU) countries. Data for Guinea Bissau were not available. The stress tests were based on end-2011 data; for two countries, granular data were available only for end-2010. The stress tests covered all banks—public, private, and foreign-owned—and tested for market risk, credit risk, and interest rate risk. Stress tests were not performed for exchange rate risks, given the credible peg to the euro, and for sovereign risks because of insufficient data. The lack of recent and comprehensive data is an important limitation to the use of stress tests for crisis prevention purposes. The tests performed did not incorporate macroeconomic feedbacks and other second-round effects, and assumed no policy response. The stress tests calibrated a series of large but plausible shocks, which comprised sectoral risks, including default by the largest individual borrower, interest rate spikes of 500 bps, and liquidity shocks—deposit runs with losses of 5 percent of deposits per day for 10 days.

The Results Illustrated some of the Known Strengths and Vulnerabilities of the System.

- **Limited interest rate risk.** As the asset side of banks' portfolio is typically short-term in nature—reducing maturity mismatches—and bonds are typically held until maturity, banks in most countries are resistant to large changes in interest rates.
- **Limited liquidity risk.** With large liquidity buffers in most banks, only smaller ones face liquidity risks.

- **Severe sectoral/company concentration.** The lack of economic diversification and the large informal sector lead banks to concentrate lending on only a few sectors and corporations. In the WAEMU, the 50 largest companies account for one-third of total bank credit. This is a major vulnerability for banks, and the risk can be systemic if banks are substantially exposed to the same large borrower (like ICS in Senegal a few years ago).

- **Weak asset quality.** Although varying across banks, the generally weak quality of assets is reflected in large nonperforming loan (NPL) ratios (even after accounting for provisioning). Local accounting rules take longer to write off NPLs compared to most jurisdictions, with some of these NPLs likely to be old and potentially reflecting difficulties in exercising guarantees through the judicial system. Data on NPL flows were not available to assess recent trends.

Other Vulnerabilities, Known but not Explored in the Stress Tests, Include the Following:

- **Political instability.** This risk is high in the region, as shown by the crises in Côte d'Ivoire, Mali, and Guinea-Bissau in the past two to three years.

- **Weather-related risks.** Given the still important role of the agricultural sector in the economy, climate hazards (floods, droughts, etc.) subject the system to large, exogenous shocks.

- **Sovereign-bank relationship:** WAEMU banks hold over 70 percent of public debt issued by WAEMU sovereigns, and cross-border holdings are sometimes large. In the case of Côte d'Ivoire in late 2010 (when the crisis started), more than half of the debt was held by residents of other WAEMU countries, generally banks. A default on this debt could have created a systemic bank crisis in the region.

Table 1. WAEMU: Financial System Structure, end-2011

	Number of		Total assets		Deposits outstanding	Loans outstanding
	Institutions as of end-2011	Branches as of end-2011	Amount (bn CFAF)	(% of GDP)	Amount (bn CFAF)	Amount (bn CFAF)
Private depository institutions						
Banks	107	1,853	19,725	53.8	11,173	8 ,465
Microfinance institutions[1]	880	3,179			517	501
Nondepository financial institutions	14	N/A			N/A	N/A
Public financial institutions	N/A	N/A			N/A	N/A
Total financial system (excl. Central Bank of West African States)						

Source: Central Bank of West African States.

[1] Data for end-2010.

Table 2. WAEMU: Financial Soundness Indicators 2005–12

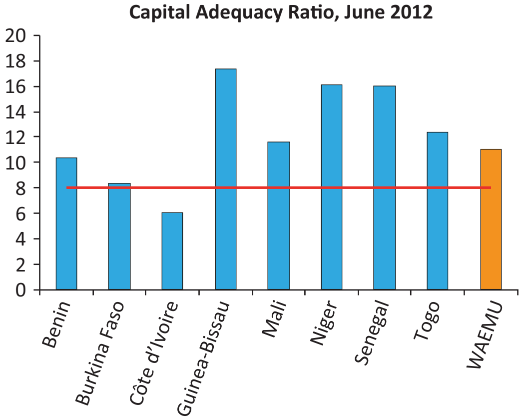
	2005 Dec.	2006 Dec.	2007 Dec.	2008 Dec.	2009 Dec.	2010 Dec.	2011 Dec.	2012 Jun.[1]
	(in percent, unless otherwise indicated)							
Solvency ratios								
Regulatory capital to risk-weighted assets	9.17	8.36	6.75	9.79	10.16	11.09	10.72	10.99
Tier I capital to risk-weighted assets	8.78	7.98	6.01	9.37	9.80	10.55	10.08	10.59
Provisions to risk-weighted assets	14.98	14.17	12.75	12.24	10.96	12.05	10.40	12.49
Capital to total assets	5.82	5.45	4.29	6.07	6.20	6.41	6.48	5.71
Composition and quality of assets								
Total loans to total assets	63.44	61.91	59.06	59.41	57.56	55.27	55.17	55.29
Gross NPLs to total loans	19.90	20.50	18.90	19.20	17.20	17.58	15.92	16.17
Provisioning rate	66.88	66.17	65.74	68.05	61.45	63.68	64.23	64.96
Net NPLs to total loans	7.60	8.00	7.40	7.10	7.40	7.19	6.35	6.33
Net NPLs to capital	82.74	91.17	90.85	69.00	68.54	61.99	54.07	61.33
Earnings and profitability								
Average cost of borrowed funds	2.10	2.20	2.40	2.60	2.50	2.90	2.40	. . .
Average interest rate on loans	9.70	8.80	9.90	10.60	10.10	10.90	9.60	. . .
Average interest margin[2]	7.60	6.60	7.50	8.00	7.60	8.00	7.20	. . .
After-tax return on average assets						1.11	1.19	. . .
After-tax return on average equity	5.20	4.80	4.80	1.90	14.80	12.63	13.67	. . .
Noninterest expenses/net banking income	57.90	60.75	62.64	60.91	63.79	64.75	61.63	. . .
Salaries and wages/net banking income	26.50	27.75	27.57	26.50	27.09	27.11	26.37	. . .
Liquidity								
Liquid assets to total assets	41.79	40.89	38.13	36.64	33.93	33.27	33.59	33.25
Liquid assets to total deposits	55.15	54.41	50.95	50.43	46.04	45.12	46.07	46.61
Total loans to total deposits	83.76	82.38	78.89	81.76	78.45	83.97	84.29	86.59
Total deposits to total liabilities	75.74	75.15	74.87	72.66	73.37	74.12	72.91	71.35
Sight deposits to total liabilities[3]	38.17	37.89	38.41	36.90	36.07	36.66	37.79	36.72
Term deposits to total liabilities	37.57	37.26	36.45	35.76	37.30	37.46	35.11	34.63

Sources: Central Bank of West African States. Simple average.
Note: Simple averages of country indicators. NPL = nonperforming loan.
[1] The 2012 number is driven by Guinea Bissau where banks engaged in a very large loan to the hydrocarbon sector.
[2] Excluding tax on bank operations.
[3] Including saving accounts.

Figure 2. WAEMU: Financial Soundness

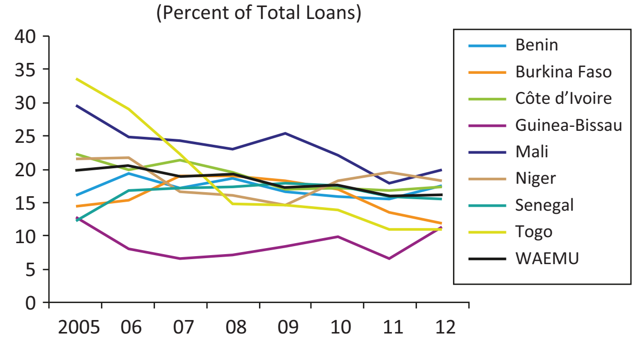
Although the banking sector appears well capitalized overall, banks in Côte d'Ivoire are significantly undercapitalized on average.

Capital Adequacy Ratio, June 2012



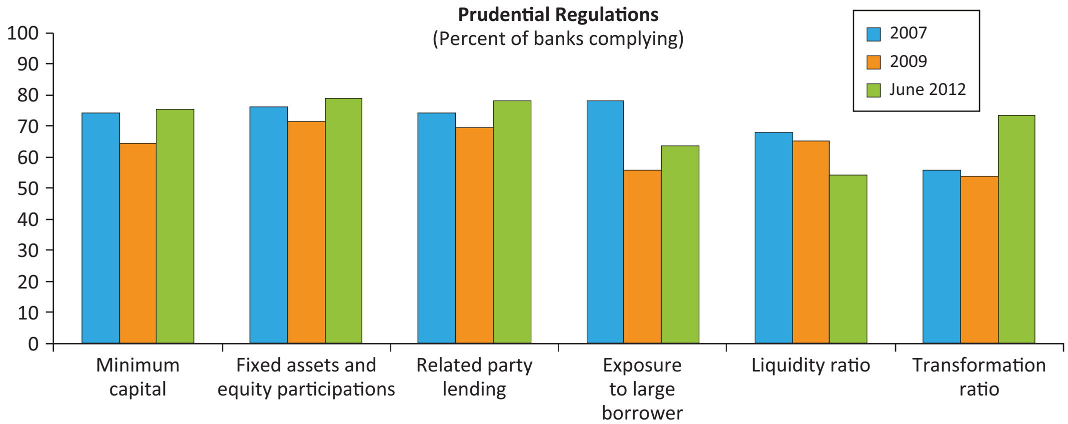
Nonperforming loans are high albeit trending downwards for some countries...

Nonperforming Loans, 2005–12
(Percent of Total Loans)



...and progress in compliance with prudential regulation has been limited.

Prudential Regulations
(Percent of banks complying)



Respect of Prudential Norms by Country, end-June 2012

	Solvency Ratios		Other Prudential Ratios				
Number of banks per country	Capital ratio	Fixed assets and equity participations	Exposure to large borrower	Concentration risk	Related party lending	Transformation ratio > 50%	Liquidity ratio
Benin (12)	10	9	5	10	9	5	7
Burkina (12)	9	10	6	10	11	10	7
Côte d'Ivoire (23)	13	16	12	16	16	11	18
Guinea Bissau (4)	3	3	3	3	3	2	1
Mali (13)	12	11	9	12	10	7	5
Niger (10)	7	8	8	8	8	5	3
Senegal (19)	16	18	14	18	16	8	10
Togo (12)	9	8	10	9	9	4	6
WAEMU (105)	79	86	65	87	82	52	57

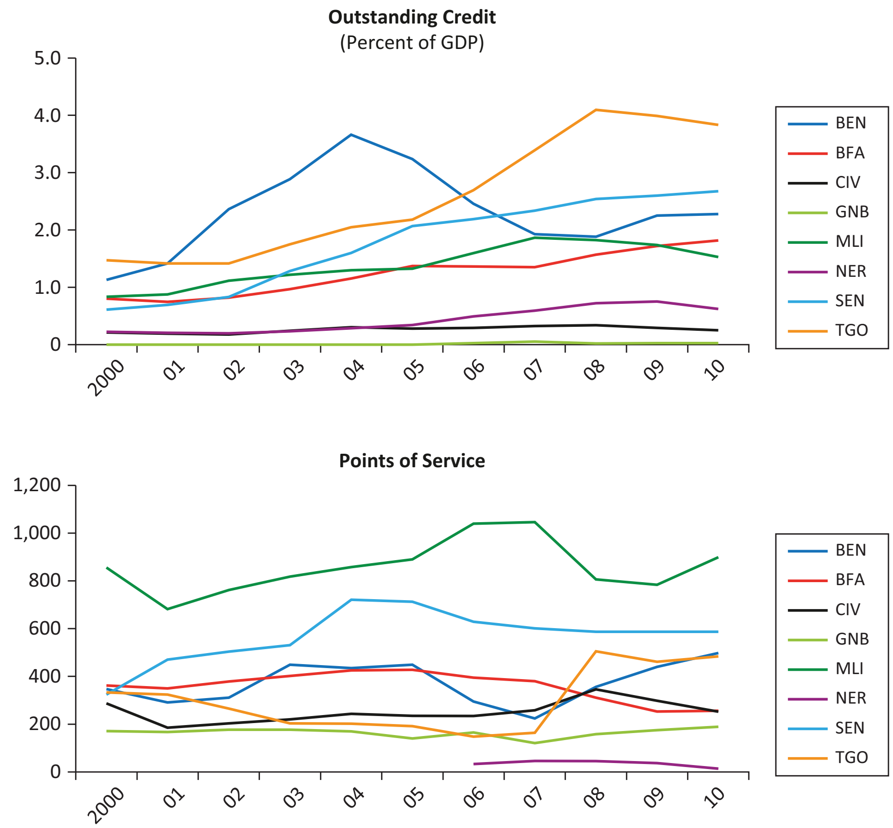
Sources: Central Bank of West African States, IMF, African Department database, and Regional Economic Outlook database.

Note: The transformation ratio (stable resources/medium- and long-term loans) was lowered from 75 percent to 50 percent in early 2013; the data reported for 2012 takes the 50 percent into account.

Microfinance

Following a rapid expansion, the microfinance sector is consolidating in many countries. The quick expansion of microfinance networks in the early 2000s was welcome from the perspective of access to finance.[5] However, it led to a proliferation of often small and unprofitable MFIs, which have partially operated out of the authorities' control. Consolidation is ongoing in most countries both through mergers and acquisitions among MFIs and at the initiative of the authorities. Some countries are well advanced in the consolidation process—more than 100 institutions have been closed in Senegal—whereas others are still registering existing networks. A survey conducted in Benin in 2011, for example, revealed that 721 MFIs were operating then in the country but only 226 were licensed. Overall, the number of branches or points of service in the WAEMU has remained broadly constant since 2004. Outstanding credit, however, has increased significantly in most countries (Figure 3). Microfinance is particularly developed in Senegal (see Imam and Kolerus, 2013, for a more detailed description).

Figure 3. WAEMU: Microfinance



Sources: Central Bank of West African States and IMF staff estimates.

Notes: Country abbreviations are as follows: BEN = Benin; BFA = Burkina Faso; CIV = Côte d'Ivoire; GNB = Guinea-Bissau; MLI = Mali; NER = Niger; SEN = Senegal; TGO = Togo.

[5] For example, in Benin, authorized MFIs serve 1.5 million customers in a total active population of 4.5 million.

The authorities have started to address governance and profitability problems of the sector. The MFI sector is profitable overall, but the situation varies greatly depending on the size of the institutions, with the largest being the most profitable; NPLs are on an increasing trend, and governance problems are frequent due to a lack of accountability.[6] A regulatory reform initiated in 2008–09 has led to a reorganization of supervisory responsibilities, with the larger institutions holding assets and/or deposits of more than CFAF 2 billion now supervised by the WAEMU Banking Commission. Smaller institutions remain supervised by national authorities, typically ministries of finance, and countries have started to build up their capacity in this area. Many MFIs report access to refinancing as a major issue given their relatively high transformation ratio, short-term resources (cash deposits), and an increasing demand for longer-term financing. Larger MFIs are able to get refinancing from banks, and these loans have recently become eligible for refinancing at the Central Bank of West African States (BCEAO); however, smaller MFIs cannot avail themselves of this option. The BCEAO is also considering how to include MFIs in the payment system as the current MFI license does not allow for money transfer. Mobile banking is just starting in the WAEMU (Box 2).

Regional Markets

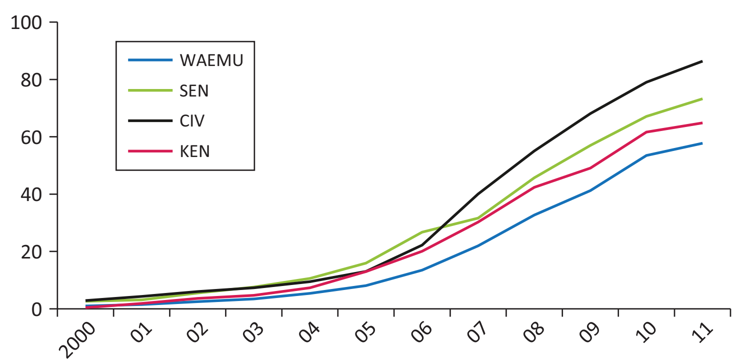
Despite signs of development, interbank market activity remains limited. Interbank loans have amounted to less than 2 percent of total bank loans in the past five years. Loan maturity has tended to increase in recent years, and the slope of the implicit, yet imperfect, yield curve has become positive; it was virtually flat a decade ago. Moreover, the interbank rate has remained broadly within the policy rate corridor since 2009 (Figure 4). However, the interbank market does not yet perform a major role in the reallocation of liquidity. Despite excess reserves at the banking system level, the BCEAO still needs to inject massive amounts of liquidity to a large number of banks that cannot get this liquidity from the market. This phenomenon is another illustration that the banking system is highly heterogeneous and segmented. In the absence of collateralized operations, highly liquid banks—in general, though not exclusively the subsidiaries of large foreign banks, which also happen to be the more profitable ones—are reluctant to lend to others. As a result, most interbank loans take place within banking groups to avoid any counterparty risk. Because access to the BCEAO's standing facility for liquidity provision is not yet fully electronic and therefore entails significant transaction costs, some operations on the interbank market still take place at rates greater than the

[6] This follows from the mutual structure, which raises collective action problems, particularly for institutions with a large number of members. Also management skills and training seem less developed than in the banking system.

Box 2. Mobile Banking in the WAEMU

Mobile banking has not picked up significantly in the West African Economic and Monetary Union (WAEMU). Mobile banking in East Africa has greatly improved access to finance, in particular in remote rural areas. Whereas the number of mobile phone subscriptions in the WAEMU is comparable to that in East Africa—with Côte d'Ivoire and Senegal even outperforming Kenya—mobile banking services in the WAEMU have not followed a similar trajectory. Despite the regional consultation organized by the Central Bank of West African States (BCEAO) on mobile banking in 2011—after which the BCEAO created the legal framework and set up an action plan—there appears to be limited interest by the private sector in engaging this market. Only one bank has acquired a mobile banking license, and a second license is held by a telephone company. According to the BCEAO, microfinance institutions (which lack a license for money transfer) have not shown interest in participating in the distribution process either. This is a conundrum as this activity could be very profitable.

Figure B1. Mobile Cellular Subscriptions (per 100 people)



Sources: International Telecommunication Union and World Bank estimates.
Note: Country abbreviations are as follows: CIV = Côte d'Ivoire; KEN = Kenya; SEN = Senegal.

Mobile banking costs are generally higher for clients in the WAEMU, and services are more limited. Although amounts below USD$10 can be transferred at lower costs in selected West African countries than in Kenya, costs are higher for transfers above USD$50. Fees diverge significantly for (relatively) large transfers: mobile banking clients in Senegal pay 10 times more than clients in Kenya (using M-Pesa) for a transfer equivalent to USD$200. The fee for withdrawing funds is much higher for larger amounts in the WAEMU. Interestingly, the payment schedule adopted by Orange Kenya is closer to M-Pesa's than that of its West African sister companies. Also, whereas Kenya's M-Pesa allows for sending money to outside its network (at a surcharge), this option is not offered in the WAEMU.

Box 2. (*continued*)

Kenya and WAEMU: Mobile Banking Fees, 2013

	Kenya		WAEMU	
	M-Pesa	Orange	Orange Senegal (in USD)	Orange Côte d'Ivoire
Transaction amount (USD)[1]				
0.15	0.03	N/A	N/A	0.21
1	0.06	N/A	0.03	0.21
5	0.29	0.34	0.15	0.21
10	0.34	0.34	0.30	0.21
100	0.57	0.34	3.00	1.03
200[2]	0.57	0.34	6.00	2.07
800[3]	1.14	0.46	N/A	3.10
Withdrawal amount (USD)				
0.15	N/A	N/A	0.01	0.31
1	0.11	N/A	0.04	0.31
5	0.29	0.29	0.20	0.31
10	0.29	0.29	0.40	0.31
100	1.14	0.86	4.00	2.07
200[2]	1.83	1.66	8.00	4.13
800[3]	3.43	2.57	32.00	16.53

Sources: Companies' websites, IMF staff calculations.

[1] Transaction to subscribed user of the same telecommunication company. Only M-Pesa and Orange Money Kenya allow for transfer to non-registered users at a surcharge.

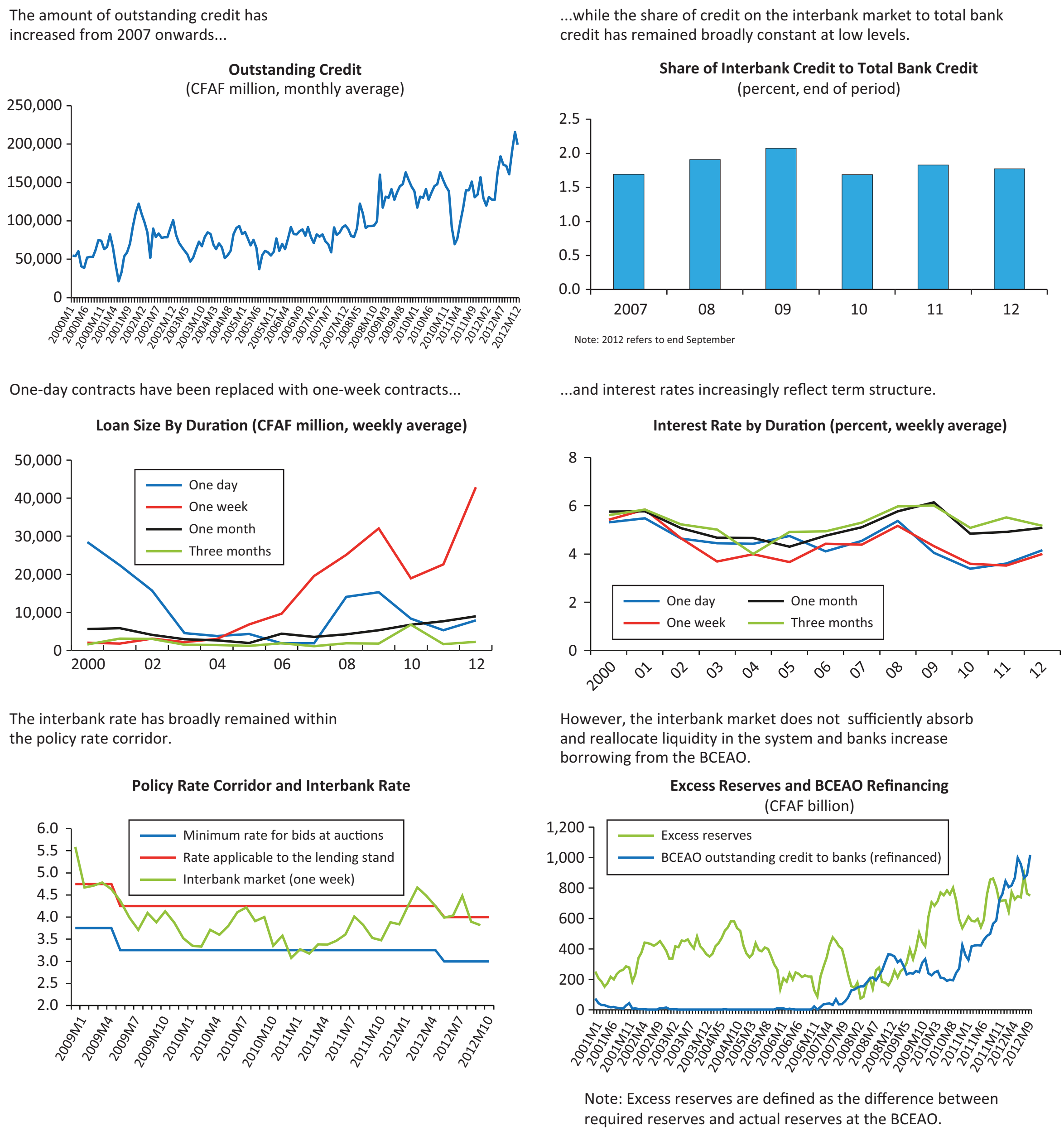
[2] Maximum amount of Orange Money Senegal.

[3] Maximum amount of M-Pesa. The maximum amount of Orange Kenya is USD$1,140 and of Orange CIV USD$1,000.

higher policy rate of the BCEAO. These operations may also reflect implicit profit transfers between banks belonging to the same group.

The regional debt market has developed rapidly in the past years, mostly for government paper (Figure 5). Securities can be issued by private companies and governments on the regional stock exchange (referred to as BRVM, its French acronym). The BRVM has 46 bond lines, of which 28 are from private issuers and the rest from four sovereigns. Government bond issues represented 75 percent of all issuance by syndication in 2011, with Côte d'Ivoire and Senegal the most active issuers. The average interest rate on sovereign bonds was at 6.7 percent in 2011 (average duration 5.5 years), whereas the average interest rate on listed bonds issued by private corporations was 6.8 percent (at similar duration). Interest rates, however, do not provide a full account of differences in the cost of financing between the public and

Figure 4. WAEMU: Interbank Market



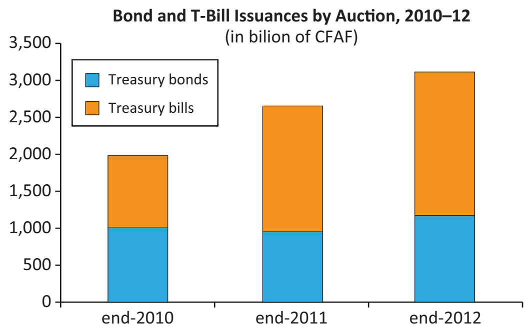
Sources: BCEAO, IMF staff calculations.

Note: BCEAO = Central Bank of West African States.

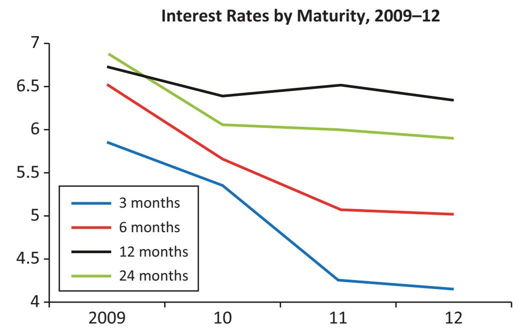
private sector. Private sector issuance required until recently a 100 percent guarantee by a certified institution (e.g., the West African Development Bank), which added the equivalent of 1–2 percentage points to issuance costs. Overall, the BRVM debt market remains small. Its total capitalization stood at about 2 percent of GDP at end-2012. It is not a significant source of financing for the private sector. There is no significant secondary market.

Figure 5. WAEMU: Debt Markets

The stock of longer term debt is on the rise...



...with the average cost of borrowing on the decline.



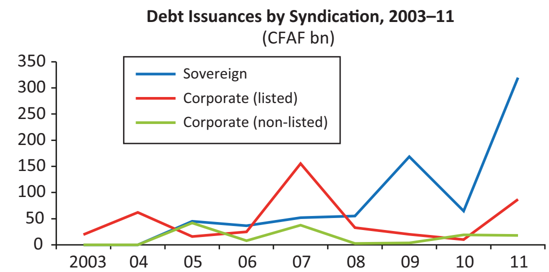
Côte d'Ivoire dominates the few issuances by syndication...

Sovereign Issuances by Syndication, 2003–11

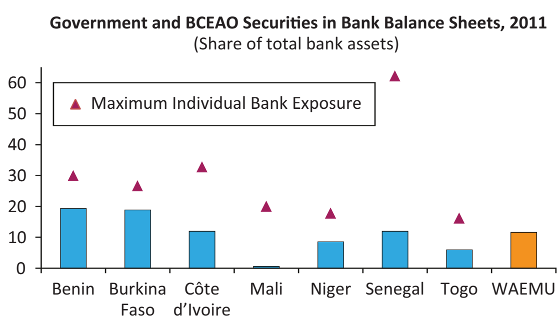
Country	Interest Rate (in percent)	Amount (CFAF bn)	Duration (years)	Year of Subscription
Senegal	5.50	45.0	5	2005
Togo	6.50	36.3	5	2006
Côte d'Ivoire	6.00	51.7	3	2007
Senegal	5.50	55.2	5	2008
Côte d'Ivoire	6.25	61.2	4	2009
Côte d'Ivoire	6.95	107.3	5	2009
Côte d'Ivoire	6.25	64.8	3	2010
Senegal	6.75	76.8	5	2011
Côte d'Ivoire	7.00	22.9	7	2011
Togo	6.50	60.0	5	2011
Côte d'Ivoire	6.50	160.2	5	2011
Average	*6.34*	*67.4*	*4.7*	

Source: BRVM.

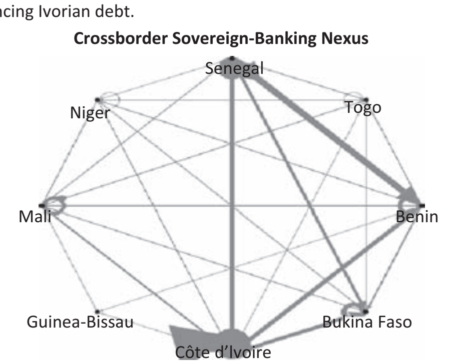
...but corporate issuances risk being crowded out by sovereign activity.



Exposure of the banking sector to sovereign debt is significant...



...and extends across borders, with banks from Benin and Senegal financing Ivorian debt.



Note: Dots represent the sovereign, and links to dots are purchases of banks from other countries.

Sources: BCEAO, BRVM, IMF staff calculations.

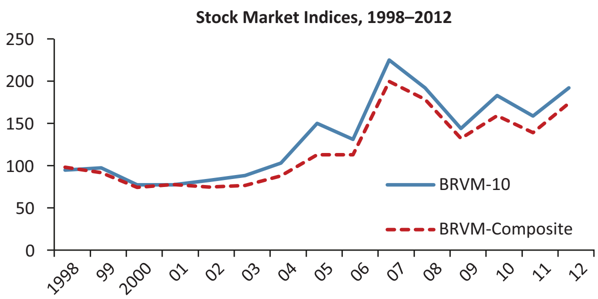
Note: BCEAO = Central Bank of West African States; BRVM = Bourse Régionale des Valeurs Mobilières; WAEMU = West African Economic and Monetary Union.

Most government debt, however, is still issued to banks through auctions organized by the BCEAO. This segment has been very dynamic in recent years, and outstanding government debt issued on this market is about 10 times larger than that issued at the BRVM. Debt issued this way is mostly in the form of Treasury bills; it has a relatively short average maturity and can be used for refinancing at the BCEAO. There is no significant secondary market for this type of government debt.

The regional equity market remains shallow (Figure 6). Launched in 1998, the BRVM started off with 36 listed companies carried over from the previous stock exchange in Abidjan. The number of companies listed has remained broadly stable, with 37 in early 2013, as new listings broadly offset

Figure 6. WAEMU: The BRVM-Stock Market

While trending upward both BRVM indices experienced downturns during the global financial crisis and the 2011 Ivorian crisis.



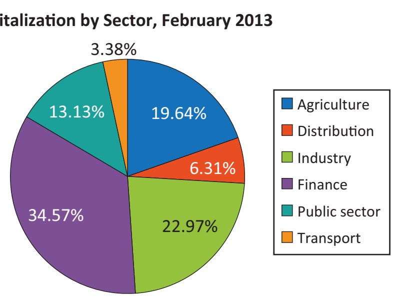
Note: Indices = 100 on September 16, 1998.

From 1998 to 2012, eleven companies entered the market, mainly in finance and telecommunications...

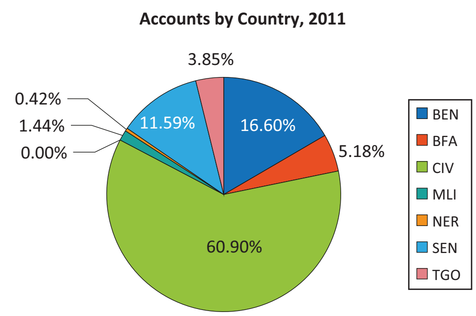
Corporations	Admission to BRVM	Sector
SONATEL	Oct-98	Telecommunication
SIVOA	Apr-99	Industry
PALM CI	Oct-99	Agriculture
SERVAIR Abidjan	Mar-00	Distribution
NEI	Apr-00	Industry
BOA-BENIN	Nov-00	Finance
BOA-NIGER	Dec-03	Finance
ETI	Sep-06	Finance
ONATEL	Apr-09	Telecommunication
BOA-COTE D'IVOIRE	Apr-10	Finance
BOA-BURKINA FASO	Dec-10	Finance

Source: BRVM.

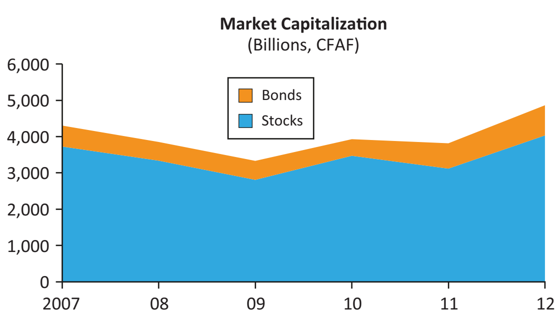
...which leaves capitalization dominated by companies from finance and industry titles, closely followed by agriculture.



The big majority of investors' accounts is located in Côte d'Ivoire.

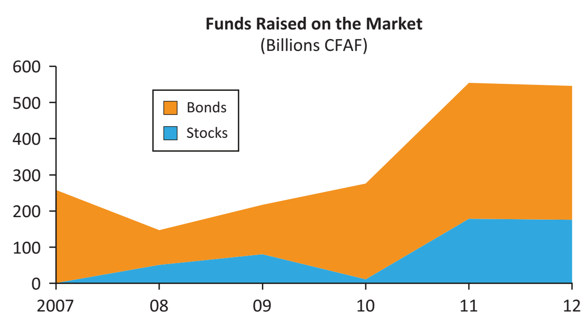


Capitalization has increased again in 2012...



2012 total is official; stocks and bonds are estimates.

...but activity is concentrated on bond issuances, mostly by governments.



Sources: BRVM, CREPMF.

Note: BRVM = Bourse Régionale des Valeurs Mobilières. Country abbreviations are as follows: BEN = Benin; BFA = Burkina Faso; CIV = Côte d'Ivoire; GNB = Guinea-Bissau; MLI = Mali; NER = Niger; SEN = Senegal; TGO = Togo.

the number of companies taken off the list. Market capitalization increased from 4.3 percent of GDP in 2002 to 10.1 percent of GDP in 2012. Foreign investors are allowed in, and their stakes in Sonatel and ETI (Ecobank) are reportedly fairly large. The average market return in 2011 was 8.6 percent in local currency, and 27 companies paid dividends. BRVM is supervised by the regional council for public savings and financial markets (referred to as CREPMF, its French acronym).

Systemic Risk and Surveillance of the Financial System

Systemic risk is defined as any threat of disruption to financial services that is caused by an impairment of all or parts of the financial system and that has the potential to have serious negative consequences for the real economy. It is a form of negative externality that occurs when a bank failure, market seizure, or breakdown of the infrastructure can have serious adverse implications for market participants. Systemic risk can be decomposed into time-series and cross-sectional risk. In the time-series dimension, the buildup of risk over time interacts with the macroeconomic cycle. Financial institutions and borrowers may take on excessive amounts of leverage in the upswing of an economic cycle only to become overly risk-averse in a downswing. This amplifies the boom and bust cycle in the supply of credit and liquidity—and by extension in asset prices—which can be damaging to the real economy. In the cross-sectional dimension, the growing size and complexity of the financial system are raising interconnectedness and common exposures that may increase contagion when problems arise. As a result, the failure of one institution—particularly, one of significant size or with strong interconnections—can threaten the system as a whole.

The Senegal pilot suggests that time-series systemic risk might be limited at this juncture in the WAEMU, though some cross-section risks are present. No sector seems highly leveraged in Senegal. Banks tend to finance mostly prime borrowers with short-term credit such as trade finance, implying that risks to the financial system, besides those from exogenous shocks, are likely to be low, except for concentration risk. Capital inflows and outflows are limited. Many of these features likely apply to other WAEMU countries.

However, some systemic linkages are evolving rapidly that could change this assessment in the near future:

- **Cross-sector linkages**—those that exist between the financial and nonfinancial sectors—are on the rise as banks are increasingly lending to sovereigns through the regional market.

- **Cross-border linkages**—those between the financial system of the WAEMU and the world economy, but also those within the WAEMU—

are intensifying as large WAEMU banks and foreign banks, especially from Morocco and Nigeria, seek opportunities within the WAEMU and the region.

- **Cross-institution linkages**—those that exist between bank and nonbank financial institutions. The Senegal pilot showed the increasing linkages between banks and insurance companies and MFIs, whether through equity ownership, debt holdings, or deposits.

Financial stability in the WAEMU also faces particular challenges. In a heterogeneous monetary union, business cycle synchronization is limited, as is the case in the WAEMU. In such circumstances, monetary policy may not necessarily act as a stabilizing force to all the national financial systems, as a focus on average regional inflation might imply that monetary policy is too accommodative in some parts of the union that have high inflation levels and too tight in others that have low inflation levels. Limited financial development also means that the scope for countercyclical fiscal policy is reduced, as it may be difficult to issue large amounts of government paper in a shallow market during a downturn (see Imam and Koleras, 2013), although such policy should play a critical role in absorbing asymmetric shocks (and even symmetric ones given the limited effectiveness of monetary policy). With limited shock absorption mechanisms, a robust financial crisis prevention and resolution framework is even more critical.

As indicated in the case of Senegal (Imam and Koleras, 2013), there is in principle a clear division of labor between national and regional authorities on the supervision of the financial system. The banking sector and MFIs with more than CFAF 2 billion in deposits or loans are supervised by the WAEMU Banking Commission. Smaller MFIs are supervised by national authorities. The regional financial market is under the supervision of CREPMF. Ministries of Finance, together with the regional regulator (CIMA), supervise the insurance sector. Finally, the Financial Stability Committee is responsible for macroprudential supervision and to guarantee the stability of the overall financial system at the regional level. As banking licenses are provided by the BCEAO—after a qualified opinion is issued by the WAEMU Banking Commission—following request from the national governments, there is an understanding that banks and subsidiaries that are in trouble will have to be supported by the governments of the countries in which they are located, and not of the country of the parent company.

Chapter 2

Intra-WAEMU and International Comparisons of Financial Sector Development

Methodology

The benchmarking exercise allows an assessment of the zone's financial sector performance with respect to depth, breadth, and access.[7] For each country and each key financial sector indicator, a structural benchmark is estimated based on the country's economic and structural characteristics.[8] The difference between the observed value and the benchmark then needs to be interpreted. A negative difference suggests scope for policy action, whereas a positive difference could reflect successful reforms. A positive difference, however, should not be construed as absence of scope for further development; the benchmarks are not optimal levels, but rather an indication of where countries with similar characteristics stand with regard to financial development. The analysis was carried out using data from 1995 onward, where available, and the tool developed by the World Bank for this purpose.

Comparisons are also made with selected countries outside the West African Economic and Monetary Union (WAEMU)—namely, Ghana and Kenya—as well as the average and median for sub-Saharan Africa (SSA). The eight financial sectors of the WAEMU were assessed according to their depth, breadth, and access to financial services.

Ghana is a natural comparator for many WAEMU countries given its characteristics and geographic proximity. Kenya is an example of an SSA economy with a rapidly developing financial sector. The mean and median for SSA (including South Africa) reflect the development of the rest of the continent.

7 This exercise considers only the banking market, debt and equity markets, and some nonbank financial institutions. Due to limitations in the dataset, microfinance could not be benchmarked against the statistical median.

8 The structural benchmarks are calculated based on Beck, Demirgüç-Kunt, and Levine (Beck, Thorsten, Aslı Demirgüç-Kunt, and Ross Levine, 2010, "Financial Institutions and Markets across Countries and over Time: The Updated Financial Development and Structure Database," World Bank Economic Review, Vol. 24(1), pp. 77–92) and FinStats from the World Bank. Using a large dataset of countries, each financial indicator was regressed on a set of structural characteristics, such as GDP per capita and its square, population size and density, the age dependency ratio and country-specific dummies, and year fixed effects. These regressions are expected to be updated regularly.

Financial Sector Development in the WAEMU and Countries' Structural Characteristics

Banking systems have significantly deepened in all WAEMU countries in recent years, and most of them meet or exceed the main statistical benchmarks for depth. Togo, Senegal, and Benin have the deepest banking systems in the region (in absolute terms, not relative to benchmarks), whereas Guinea-Bissau and Niger have the shallowest ones. Depth of the nonbank financial sectors is very heterogeneous across countries. The equity market is clearly underdeveloped relative to structural characteristics. Figure 7 provides more detail by country and over time.

Breadth of the banking sector—assessed through the range of products, markets, and providers—is generally limited in the WAEMU. Competition in the banking system, proxied by the asset concentration of the three largest banks, appears relatively low in all countries and seems to have decreased in recent years. Credit to the public sector as a share of GDP has increased substantially, a trend that is usually not interpreted positively in terms of breadth, but that reflects in the WAEMU the end of central bank advances to governments and the development of the regional market. Life insurance is more developed than indicated by the benchmarks, suggesting diversification of the range of financial products. The number of companies whose stock is listed at the BRVM is very low compared to the benchmark. In addition, active trading is limited to a few of them. Figure 8 provides more detail by country and over time.

Access to finance has increased substantially in all countries and is in line or exceeds structural benchmarks in most of them. Both banks and MFIs contributed to this development, with MFIs playing an important role in Benin, Togo, and Senegal. Figure 8 provides more detail by country and over time.

Scope for Further Deepening

Although statistical benchmarking shows that the WAEMU is not lagging in terms of financial sector depth and access, direct comparison to selected peer countries suggests substantial scope for further development. An agenda for further research would be to understand what drives differences with comparators, and in particular whether certain reforms could be replicated in the WAEMU (Figure 9).

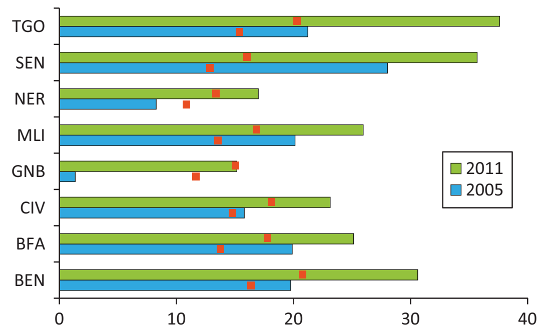
- **Depth.** Private credit to GDP in the WAEMU is on average comparable to the SSA average. It is larger than in Ghana, but significantly lower than in Kenya; in the latter, the increase has also been faster than in the WAEMU.

Figure 7. WAEMU: Selected Indicators on Financial Sector Depth

Median statistical benchmark

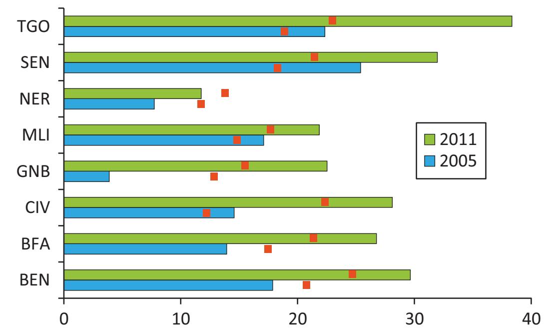
Despite large heterogeneity, all countries outperform the median statistical benchmark for credit to GDP in 2011...

Private Credit to GDP
(Percent of GDP)



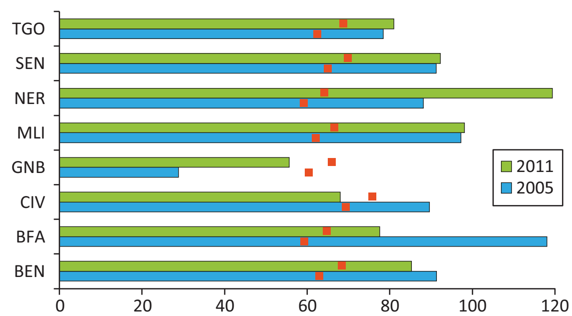
....and all but Niger for the deposit to GDP benchmark.

Domestic Bank Deposits to GDP
(Percent of GDP)



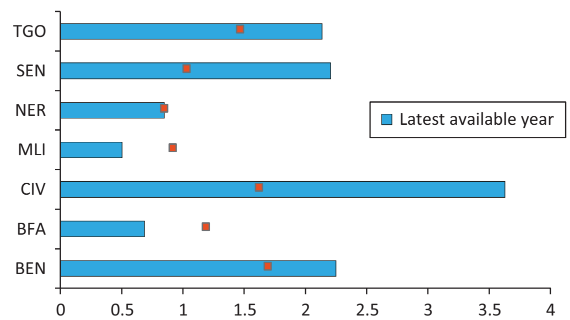
Bank intermediation is below benchmark in Côte d'Ivoire and Guinea.

Private Credit to Deposits
(Percent of Deposits)



The Ivorian insurance sector is significantly more developed than its peers and the statistical benchmark.

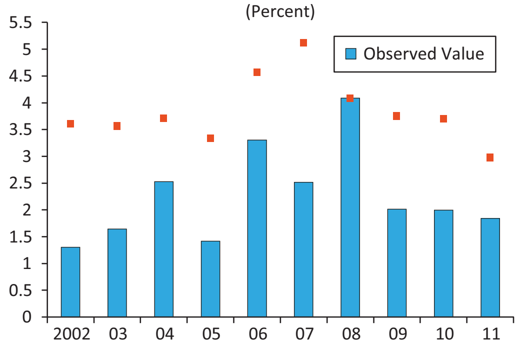
Insurance Company Assets to GDP
(Percent of GDP)



Latest available year was 2010 for Benin, 2009 for Burkina Faso, Côte d'Ivoire, Mali, Niger, and Togo, 2008 for Senegal. Guinea-Bissau ommitted due to missing data.

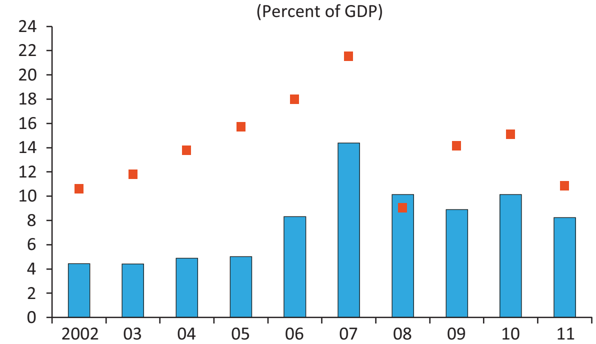
Stock market performance is substantially below the turnover benchmark...

Stock Market Turnover Ratio
(Percent)



...as well as the market capitalization benchmark.

Stock Market Capitalization
(Percent of GDP)



Sources: FinStats database, IMF staff calculations.

Note: Country abbreviations are as follows: BEN = Benin; BFA = Burkina Faso; CIV = Côte d'Ivoire; GNB = Guinea-Bissau; MLI = Mali; NER = Niger; SEN = Senegal; TGO = Togo.

Figure 8. WAEMU: Selected Indicators on Breadth and Access in WAEMU

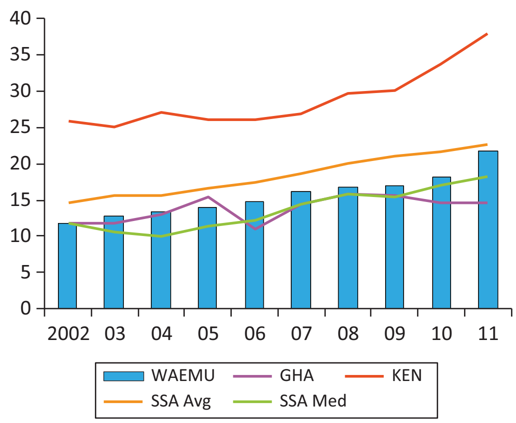
Sources: BCEAO, FinStats database, IMF staff calculations.

Note: MFI = microfinance institution. Country abbreviations are as follows: BEN = Benin; BFA = Burkina Faso; CIV = Côte d'Ivoire; GNB = Guinea-Bissau; MLI = Mali; NER = Niger; SEN = Senegal; TGO = Togo.

Figure 9. WAEMU: Comparing the WAEMU to Selected Benchmark Countries

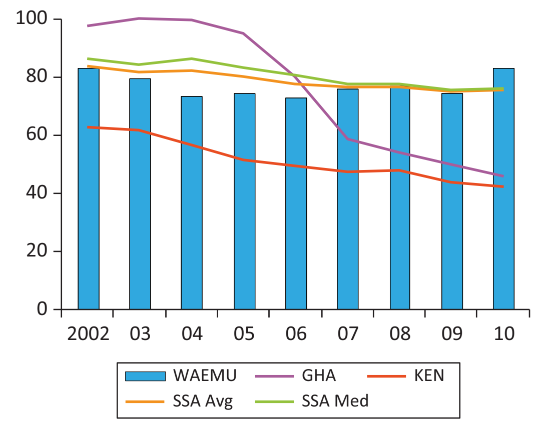
Private credit to GDP in the WAEMU is increasing along with the SSA average, but remains significantly below Kenya.

Private Credit to GDP, 2002–11 (Percent of GDP)



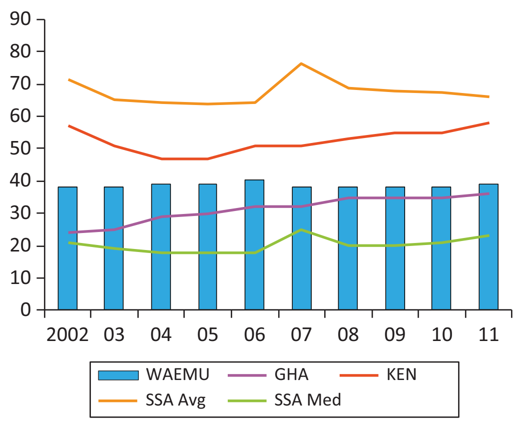
Asset concentration in the WAEMU remains high, while Ghana, for instance, managed to lower concentration to Kenya's levels.

Total Assets, Largest Three Banks (Percent of all commercial banking assets)



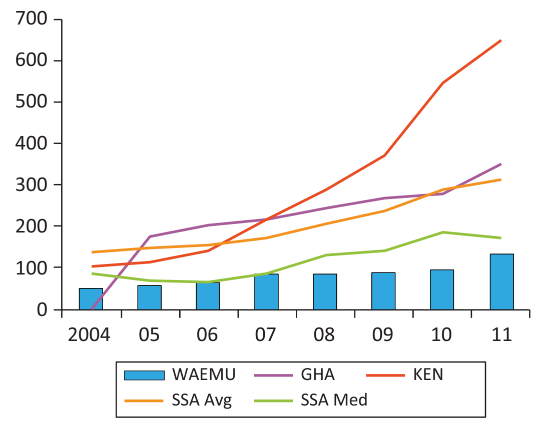
Kenya also has a more developed stock exchange.

Number of Listed Companies, 2002–11



In the WAEMU, access to finance is way below that of peers.

Accounts Per Thousand Adults, 2004–11



Sources: BCEAO, FinStats database, IMF staff calculations.

Note: WAEMU: simple average. Avg = average; GHA = Ghana; KEN = Kenya; Med = median; SSA = sub-Saharan Africa; WAEMU = West African Economic and Monetary Union.

- **Breadth.** Although Ghana has managed to reduce significantly asset concentration in the banking system and has reached a level comparable to Kenya's, concentration remains high in the WAEMU. The stock market is also broader in Kenya.

- **Access.** Access is an area where the WAEMU is lagging behind all comparators. Kenya and, to a lesser extent, Ghana have made impressive progress in this area in recent years.

Chapter

3 Constraints on Monetary Policy From Shallow Financial Markets

A shallow financial system has important implications for macroeconomic policies in the West African Economic and Monetary Union (WAEMU). First, it limits scope for countercyclical fiscal policies. Although the regional market has developed substantially, there are limits to the amounts governments can raise on it. This is a significant constraint because fiscal policy is the main instrument to address asymmetric shocks, which are frequent in the region. A shallow financial system also has an adverse impact on rollover risk, borrowing costs, and public investment financing.[9] Second, shallowness has implications for monetary policy (ahead). Third, it makes it more difficult for firms and households to access financial services, leading to higher consumption volatility, lower investment, and therefore lower growth. Despite overall excess liquidity in the banking system, banks that have excess liquidity may not want to purchase more government paper, as they may already be close to their existing sovereign exposure limits.

Under the current exchange rate arrangement, the Central Bank of West African States (BCEAO) has scope for an active monetary policy in the short to medium term. Empirical analysis conducted by Fund staff suggests that money supply changes have been mainly driven by changes in net domestic assets, not net foreign assets, and therefore that the BCEAO can control its balance sheet to some extent.[10] This likely reflects limited capital mobility partly due to capital controls on outward flows. In addition, the BCEAO has at its disposal a set of adequate instruments (policy interest rates, liquidity auctions and standing facilities, and reserve requirements) and has substantial weight in the banking system to allow for an active monetary policy, as its balance sheet represents about a third of the balance sheet of the banking

9 See Box 1 in the staff report and Imam and Koleras, 2013, for a more detailed discussion on these issues.
10 This could also reflect the fact that the BCEAO did not need to use intensively its foreign exchange reserves to defend the peg under the existing exchange rate arrangement.

system. Therefore, the BCEAO can, in principle, exercise significant influence on liquidity conditions in the zone.

The transmission of monetary policy signals largely depends on the depth, breadth, and reach of financial markets. The transmission mechanism of monetary policy can be presented as illustrated in Figure 10.[11] In the pursuit of its objectives, the central bank sets the policy rate or injects liquidity with a view to controlling certain financial market variables, which may be viewed as intermediate targets. These intermediate targets in turn need to be related to the ultimate objective, which in the case of the BCEAO is price stability and, to a lesser extent, economic and financial development. Four transmission channels are generally distinguished: the bank lending channel, the interest rate channel, the asset price channel, and the exchange rate channel. To be efficient, all channels require functioning financial markets.

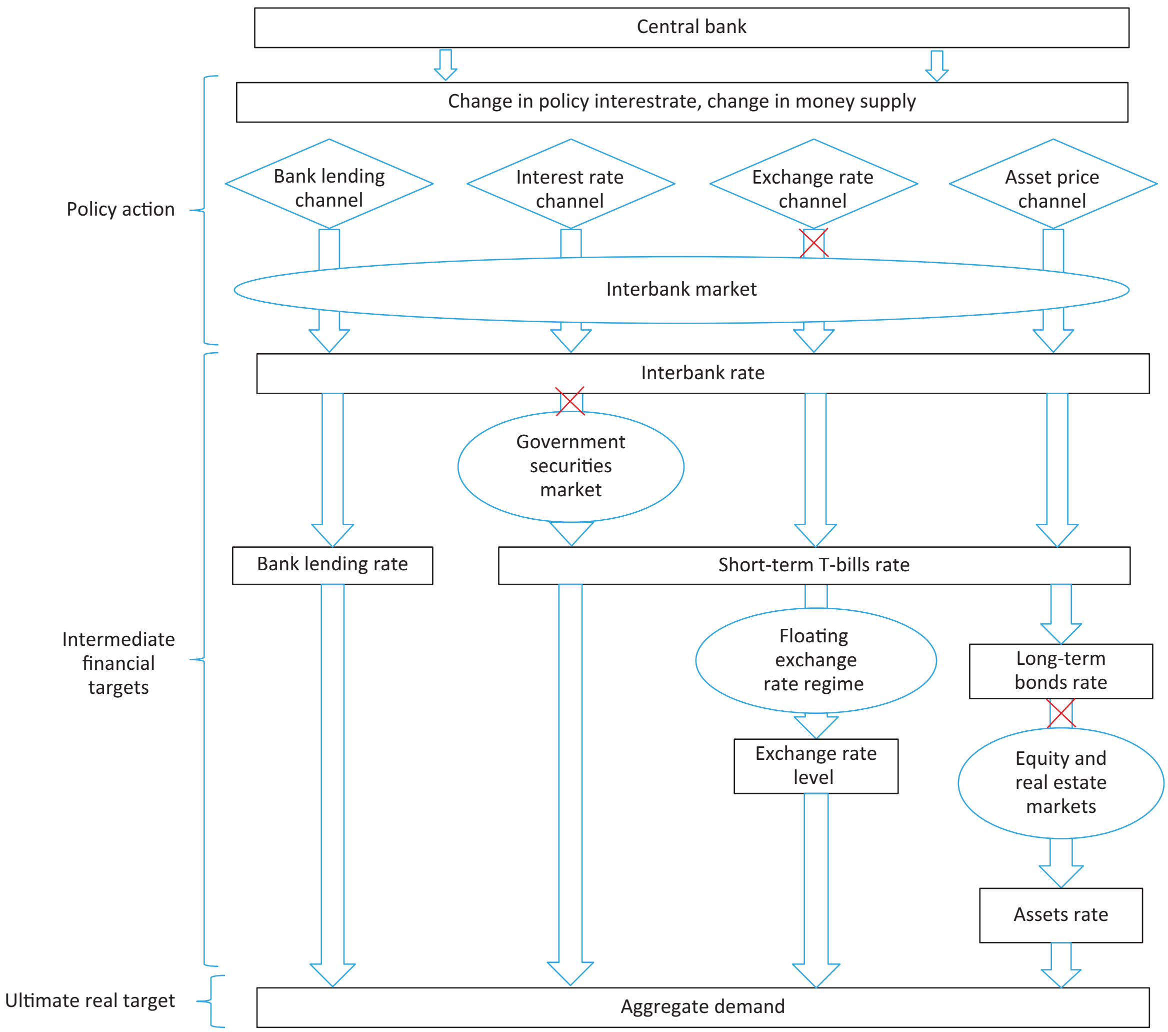
Only a few of the transmission channels are active in the WAEMU. Recent econometric work, including by the BCEAO, suggests that inflation is determined mostly by nonmonetary factors. This may reflect the fact that the channels of monetary policy transmission are either ineffective or simply not relevant in the WAEMU given the fixed exchange rate arrangement. The bank lending channel seems the most effective channel of transmission, as an increase of 100 basis points in the BCEAO's policy rate is found to reduce private credit growth by about 3 percentage points one quarter later and by 4 percentage points (cumulative) after one year. Changes in policy rates and liquidity injections should also affect the interbank market rate and eventually bank lending rates. However, whereas the correlation between policy rates and the interbank rate is about 0.5, the correlation between the money market rates and bank lending rates is small with respect to the WAEMU average, very heterogeneous, and even negative in some countries (Figure 11).[12] Other transmission channels, such as the interest rate and asset prices, do not seem fully effective, as there is little evidence of a statistically significant impact of policy rates changes on Treasury bill rates and asset prices.

Shallowness of financial markets and the absence of the exchange rate channel are the most likely reasons why the transmission mechanism of monetary policy is not fully effective in the WAEMU. Research on monetary transmission in low-income countries (Mishra, Montiel, and

[11] Based on a stylized presentation for low-income countries in Prachi Mishra, Peter J. Montiel, and Antonio Spilimbergo (2012), "Monetary Transmission in Low-Income Countries: Effectiveness and Policy Implications," *IMF Economic Review*, Vol. 60, pp. 270–302.

[12] Lending rates in Senegal and Benin, the two countries with negative correlations, are the lowest (Senegal) and the highest (Benin) in the region (see Figure 11), suggesting that factors other than policy rates have an important impact on interest rate formation. The lower level of lending rates in Senegal, for instance, can be partially explained by stronger competition in the Senegalese banking market (relative to the region). Benin experienced a crisis in the banking system and the breakdown of a Ponzi scheme in the late 2000s.

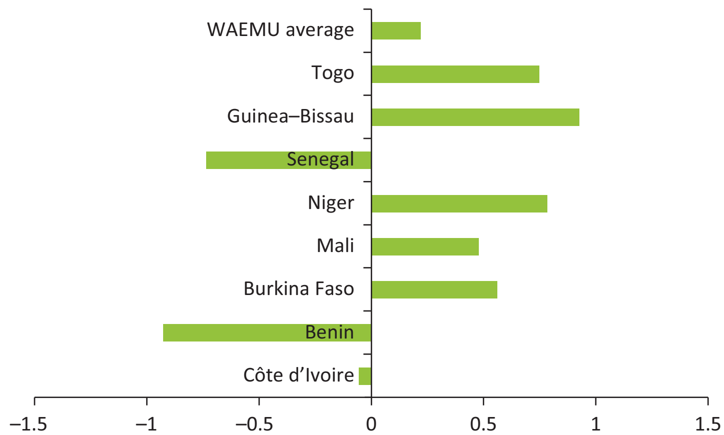
Figure 10. Monetary Transmission Mechanism in the WAEMU



Source: Kireyev (2013).

Spilimbergo, 2012) showed that for all the channels to be effective, a country should have a strong institutional setup, an independent central bank, a high degree of capital mobility, a floating exchange rate, and a well-functioning interbank, government securities, equities, and real estate markets. Although some preconditions are met in the WAEMU (the institutional setup and central bank independence) and others are constrained by the institutional setup (limited capital mobility and a fixed exchange rate), the low level of development of financial markets is an impediment for monetary policy effectiveness in the WAEMU. As discussed earlier (Chapter 1, "Regional Markets"), the WAEMU interbank market is underdeveloped, which likely explains why the bank credit channel is not fully effective. At the same time, there is virtually no secondary market for government securities, which does

Figure 11. WAEMU: Correlation of Lending and Money Market Rate, 2006–10



Sources: Kolerus and Zdzienicka (2013).

not allow the interest rate channel to perform its transmission function. Finally, the stock exchange is also shallow, which impedes the functioning of the asset price channel. As a result, the chain of monetary policy transmission breaks at the links marked by crosses in Figure 10.

There are several additional factors hindering the effectiveness of the transmission mechanism of monetary policy:

- **Persistent excess liquidity:** The WAEMU banking system is highly heterogeneous and segmented, including with regard to the distribution of liquidity. The reluctance of banks to trade liquidity means that liquidity needs of illiquid banks have to be met by injections from the BCEAO. In addition, banks also tend to hold large precautionary excess reserves due to weaknesses with the payments system (e.g., remote branches may need to hold large cash balances due to transportation problems). Such a context makes it very hard for the BCEAO to focus on overall liquidity management. In turn, the BCEAO also gets very limited signals from the shallow interbank market. A change in liquidity injections or in the policy rates will have a large impact on liquidity-constrained banks but a very limited one on the banks that do not need liquidity from the BCEAO. Developing the interbank market and mopping up excess liquidity will be preconditions for a more effective credit channel.[13]

[13] Another reason for the high average liquidity in the banking system may have been the design of the transformation ratio, which constrained longer-term lending.

- **Credit rationing:** Imperfect information is an important issue in the WAEMU, in particular for smaller firms and the sizable informal sector. When a financial institution raises its lending rates following a change in policy rates, it may increase the riskiness of new lending due to adverse selection. If unwilling to accept higher risk, the bank may ultimately decide to keep its lending rates unchanged, muting the impact of monetary policy decisions.

- **Limited bank competition and the presence of state-owned banks:** A number of factors, such as high average interest and profit margins and segmentation, suggest that competition in the banking market may not be very strong. In such circumstances, monetary policy changes might be partly and temporarily absorbed by changes in profitability. The presence of state-owned banks may also blunt the transmission channel, as preferred lending practices are frequent with these institutions; these practices mean that certain customers will get credit at a given rate irrespective of the level of policy rates.

Chapter

4 Further Deepening with Stability: Obstacles and Recommendations

The development of the financial system should be pursued forcefully in a way that preserves financial stability. The previous sections showed that there is substantial scope to further develop the financial system in the West African Economic and Monetary Union (WAEMU). This section discusses obstacles to further financial development in the WAEMU and how to address them. It will also discuss how to strengthen crisis prevention and resolution frameworks as financial development will inevitably bring new risks.

Strong financial crisis prevention and management frameworks are critical in a region like the WAEMU. WAEMU countries are affected by frequent and often asymmetric shocks. As shock absorption mechanisms are limited, economic agents face substantial macroeconomic volatility, which can test the stability of the financial sector. Other issues, such as asymmetric information and weak judicial and business environments, impose extra risks for financial institutions. Such a context requires a strong microprudential framework, adapted to the risky environment, and strong bank supervision to enforce it and detect problems early. They should be completed by adequate macroprudential surveillance to address systemic risks.

Issues and Recommendations for Obstacles to Further Financial Development

The obstacles have been well identified by the authorities and described in detail in the pilot studies on Senegal and Benin. They include imperfect information on borrowers, due to limited availability of audited company statements and absence of credit bureaus, leading to adverse selection and moral hazard issues, and ultimately to credit rationing; weak business and judicial environments, including the absence of formalized property rights in large parts of the countries, which increases the difficulty of using land as collateral in lending; a tax regime that is not favorable to financial activities;

and insufficient financial skills and expertise. The responsibility for addressing many of these obstacles rests with the national authorities (e.g., improving judicial systems). The rest of this section will focus on obstacles where the responsibility rests to a large extent with the regional authorities.

The Central Bank of West African States (BCEAO) and staff agree that the development of key regional markets, such as the interbank market and the secondary government debt market, is a priority. The BCEAO expected major reforms in this area would be launched by mid-2013. These reforms include the introduction of collateralized operations (repos) to address the reluctance of liquid banks to lend to illiquid ones; the rollout of an electronic platform to auction and trade liquidity and government paper ("application Trésor"); and the introduction of primary dealers, which should accelerate the development of the secondary government debt market. A regional debt agency ("Agence UMOA-Titres") will also be launched, with the main mission to advise national treasuries on debt management, improve issuance coordination, and contribute to the development of the government debt market. It is expected to facilitate liquidity management. Broadening the investor base in the government debt market is highly desirable; governments will face lower rollover risks and interest rates and might be able to extend maturities.

Policies aimed at the development of the government debt market may have hampered that of the private debt market and led to mispricing of risks, two issues that will need to be addressed. Distortions include tax advantages for sovereign paper, zero risk weighting for government bonds, and eligibility for refinancing at the BCEAO. Now that the (primary) government debt market has taken off, a more balanced approach may need to be considered. At a minimum, governments should avoid providing new incentives/distortions in favor of government paper. A more level playing field with regard to taxation and riskiness would be desirable.

Recent reforms are expected to contribute to financial market development. The CREPMF recently introduced a set of measures to (i) improve the quality of financial information; (ii) develop skills and awareness toward equity finance of economic actors; and (iii) lower the high entry costs to the equity market. More specifically, reforms include the following:

- ***Introduction of ratings.*** Before 2012, corporations that wanted to issue bonds on the regional market were required to provide a 100 percent guarantee to investors. Those guarantees added about 1–2 percentage points to interest rate costs. The reform abolished the guarantee requirement if the company is rated investment grade or higher. For companies with lower ratings, the guarantee requirement remains but may be less than 100 percent. Currently, all private issuances are from companies that are rated lower than (local) investment grade.[14] As the problems with rating agencies during the subprime crisis have illustrated, ratings are no panacea, but they can help in other circumstances (in particular, to reduce information asymmetries); they have yet to be fully accepted in the region as companies are reluctant to disclose information and data.

- ***Enabling mortgage refinancing and securitization operations.*** Two financial agents[15] have been granted securitization licenses in early 2013. According to the BCEAO, the WAEMU member states are currently reviewing options in this area.

- ***More competitive pricing.*** Commissions and fees on equity issuance, which were previously at very high levels even in international comparison, have been significantly reduced to improve access to the market and attract new clients.

- ***Introduction of a new electronic data management system,*** including a surveillance mechanism of the secondary market.

- ***Promoting innovative forms of banking,*** including mobile banking (and products) that are adapted to the local environment.

Further reforms to improve market infrastructure and access are to be implemented in 2013, such as the shift to continuous trading and the introduction of a market for (small and) medium-sized enterprises with lower fees and less stringent rules (e.g., on accounting records). The supply of financial assets can also be increased if governments list public companies, and ensure that the 20 percent floating requirement—at least 20 percent of the company's stock must be listed—be strictly enforced. In addition, the BRVM is in talks with the stock exchange of Ghana and Nigeria for closer cooperation.

Information quality and dissemination are critical for the development of financial activities. From this perspective, ongoing work on the establishment of credit and guarantee bureaus is welcome and should be accelerated. Staff noted that the willingness of having a regional approach to this issue, although understandable, should not lead to excessive delays. Efforts at all levels to improve data quality, coverage, and timeliness should continue. The data should be widely shared at the national and regional levels between the authorities and with the public. Also market abuse regulations—such as against insider information—currently under discussion should be introduced as soon as possible.

[14] There are, however, a number of companies in the WAEMU that are rated above investment grade. These companies currently use their ratings to improve their credit conditions vis-à-vis banks rather than issuing on the securities market.

[15] One private institution based in Abidjan and BOAD, the region's development bank.

Close coordination between the national and regional levels is required to ensure that the regional policy framework is sufficiently responsive to new needs. As indicated in the Senegal report, these new needs are likely to emerge first at the national level. When a country is at the forefront of financial sector reform, the need to develop or amend the policy framework at the regional level may slow financial development in this country. Although there are positive externalities for other countries from a regional approach, the time needed for developing it should be limited to a minimum.

Issues and Recommendations for Microprudential Regulation and Supervision

Compliance with microprudential norms needs to increase through strengthened supervision. The persistence of a situation of partial compliance suggests enforcement weaknesses and poses a reputational risk to the Banking Commission. Part of the problem is insufficient resources, which, for instance, do not allow the Banking Commission to meet its objective of an on-site inspection for each bank every two years. The recent increase in staff resources should contribute to improving the situation, although it may not be sufficient. The Banking Commission will also need to have the power to impose sufficiently elevated pecuniary penalties that would deter inappropriate behavior of banks. The supervision of state-owned banks will also need to be reviewed and strengthened to eliminate any (even apparent) political interference. Finally, it is critical to improve reporting (ahead), including for supervision purposes.

A number of regulatory standards and practices will need to be introduced or brought closer over time to best international practice. More specifically, the following areas need to be covered:

- ***Concentration risk.*** The current ratio sets a limit to single risk exposure at 75 percent of capital, rather than the international norm of 25 percent. Stress tests clearly show that concentration risk is the main threat to the banking system. The 75 percent limit needs to be brought down progressively to international norms.

- ***Nonperforming loan (NPL) classification and provision.*** Whereas international norms classify a loan as nonperforming after 90 days of nonpayment, a looser definition of 180 days is used in the WAEMU. This suggests that the NPL situation could be even worse than implied by the current high ratios. Provisioning requirements may also need to be tightened, as currently no provisioning is needed for two years for NPLs when the initial credits were provided with guarantees. The authorities may want to take advantage of the planned changes in bank accounting and transition to IFRS standards to change these rules.

- ***Sovereign risk weighting in capital requirements.*** The recent crises in Côte d'Ivoire, Guinea-Bissau, and Mali clearly show that sovereign debt cannot be seen as riskless in the region.

- ***Broadening application of capital requirements.*** This would allow for the inclusion of other risk categories besides counterparty risks, such as market risks (even though still limited at this juncture) and operational risks, which seem to be relatively high in the WAEMU.

- ***Timeliness and transparency of information.*** The quality and timeliness of data collected for analytical and prudential purposes need to improve, and must be disseminated to the markets.

- ***Ensuring adequate regulatory perimeter.*** It will be important that the regulatory net be cast wide enough so that borrowers and lenders do not shift their activities to markets that are unregulated or insufficiently regulated. Pyramid schemes, such as those discussed in the Benin pilot, could thereby be more easily prevented.

The authorities intend to address many of these issues in the context of the transition to Basel II. They expect to launch this multiyear project shortly and expressed interest in technical assistance from the IMF in this area. Progress was made in reforming two prudential norms that were of questionable effectiveness ("The Banking Sector" section). With regard to the concentration risk, a concern is that it reflects the fact that the formal sector remains relatively narrow. Lowering the risk division ratio should therefore be done gradually in a way that does not affect the provision of financing to key economic sectors.

Risk will need to be monitored on a consolidated basis to capture the full spectrum of activities undertaken by large, complex financial groups. The Banking Commission currently has limited capacity to conduct prudential oversight of complex and rapidly expanding pan-African banking groups. Consolidated supervision is also hampered by the Banking Commission lacking powers to supervise financial holding companies. These shortcomings must be addressed forcefully. The authorities are aware of these issues, which have also been identified recently by the FSC. A study on how to move toward consolidated supervision is being prepared.

Adequate supervision of cross-border groups also requires a strengthening of collaboration with other supervisors. There are currently a few cross-border cooperation agreements (e.g., with France, Guinea, and Morocco), with several ones being worked out.[16] Such agreements are welcome. However, the

[16] Nigeria's recent decision to adopt a regulation forbidding its banks to support their subsidiaries in case the capital requirements of the subsidiaries are to be increased and/or when they are making losses casts doubt on the effectiveness of some of these arrangements.

effectiveness of such agreements is not assured in a crisis context, as illustrated in other regions during the international financial crisis. Improved collaboration with foreign supervisors would require (i) signing cooperation protocols with the full range of foreign supervisors of parent banks and subsidiaries of lending institutions located in the Union (at present only half a dozen protocols have been drawn up and signed); (ii) setting up a schedule of regular meetings with foreign supervisors structured according to types of risks; (iii) instituting a regular sharing of information between supervisors, in particular regarding the assessment and monitoring of risks and internal auditing within corporate entities; and (iv) in collaboration with foreign supervisors, clarifying the actual responsibilities of parent companies in recapitalizing their branches and subsidiaries, especially when problems arise. The authorities could therefore consider (i) taking the lead in proposing and organizing supervisory colleges for each of the pan-African banking groups; (ii) coordinating with the Nigeria supervisory authorities the formation of college groups for Ecobank and the United Bank for Africa; and (iii) heading a review of the legal obstacles that may hinder the sharing of information across different supervisory bodies. At the WAEMU level, the existing college of supervisors is essentially a working group that can share information and promote harmonization, but not a supervisory college with the mandate, power, organization, and capacity to monitor and inspect the activities of each banking group headquartered in the region.

Issues and Recommendations for Macroprudential Regulation

An important lesson from the global financial crisis is the need to supplement microprudential policies with macroprudential ones. Taken together, these policies help enhance the shock absorbers in the financial system in terms of capital and liquidity, place constraints on overall leverage, and extend the regulatory perimeter to all systemically important institutions, markets, and instruments (Table 3).

Table 3. WAEMU: Comparison between Macroprudential and Microprudential

	Macroprudential	Microprudential
Proximate objective	Limit financial system-wide distress	Limit distress of individual institutions (solvency risk)
Ultimate objective	Minimize output costs	Consumer (investor/depositor) protection
Model of risk	(In part) endogenous	Exogenous
Interconnectedness and substitutability	Important	Irrelevant
Calibration of prudential controls	In terms of system-wide distress; top-down	In terms of solvency risk; bottom-up

Sources: International Monetary Fund (2010).

Macroprudential surveillance is recent in the WAEMU and needs to be strengthened.

- ***Early warning systems.*** The BCEAO has initiated work on this issue, but is facing a number of data and methodological issues. Financial data are scarce and their informational content might be limited because of the shallowness of markets. In addition, the past might be a poor guide to estimate an early warning system, as a number of banking/financial crises in the region may have been caused by (exogenous) shocks difficult to foresee (e.g., political crisis, governance issues).

- ***Coverage.*** Sectoral balance sheets (household, corporate, financial institutions, and public sectors) are often critical for financial stability analysis but are not readily available in the WAEMU. This gap could be partially filled through the use of targeted surveys of firms, households, and corporations. Cross-border linkages also need to be monitored more closely and analyzed. Financial network risk analysis could be used for the map of risks in the financial sector that the authorities are currently designing. Finally, coverage of other nonbank financial institutions, such as insurance companies and pension funds, will need to expand.

- ***Disaggregation of information.*** The use of aggregated data can sometimes mask pockets of vulnerabilities. For that reason, financial stability analysis should also rely on disaggregated data to estimate the distribution of risks across sectors. For example, analyzing the breakdown of borrowing by industry and region can be informative. Analysis of disaggregated data on banks can also be critical given the heterogeneity of the banking system, and could be used actively by the Banking Commission to develop risk-based supervision.

- ***More active use of stress testing.*** The regional authorities have decided to develop their capacity in this area. Once they have become familiar with basic stress testing and improved the quality and timeliness of data, they could explore ways to refine the exercise, including by incorporating macroeconomic variables and developing a range of plausible scenarios.

- ***Publication of information.*** The FSC could consider producing and publishing a financial stability report to communicate and convey to economic agents the risks and challenges faced by the financial system. Consideration could be given to making disaggregated data publicly available.

The range of macroprudential instruments will need to be expanded. Reserve requirements are presently the only instrument available to the authorities.[17] The authorities will therefore need, at some point, to consider broadening their toolkit with other instruments. Given the limited correlation between macroeconomic variables and financial ones—business cycles in WAEMU countries are often driven by weather-related or political shocks that cannot be forecasted—introducing instruments to address these risks (such as countercyclical capital requirements) would not necessarily be effective at this juncture. In staff's view, although macroprudential could play a very useful role in a heterogeneous region, more urgent tasks for the authorities include (i) developing a monitoring system, which is a prerequisite; and (ii) improving microprudential regulation and supervision.

Issues and Recommendations for Crisis Management

In a financial crisis, emergency liquidity assistance (ELA) may need to be provided to illiquid but solvent institutions. ELA is distinguished from the normal provision of liquidity to individual institutions under the central bank's standing facilities. Although standing facilities are available on demand and the rules of access are clear "ex-ante," ELA is typically available only in exceptional circumstances at the discretion of the central bank, with adequate but unconventional collateral.

The BCEAO currently does not have an explicit mandate to provide ELA. The ambiguity arising from this situation may be a double-edged sword. Although the absence of a mandate protects in principle the BCEAO's balance sheet, historical evidence suggests that it is hard for a central bank to avoid getting involved in a systemic liquidity crisis. Once this happens, the risk to the central bank's balance sheet might actually be much more difficult to contain. To avoid such a situation, it would be desirable for the BCEAO and the national governments to discuss ex ante how the BCEAO could get involved in the provision of ELA and how it would be indemnified by the governments for this activity should losses arise.

Where a financial institution's problems extend beyond short-term liquidity and are more deep-seated, recourse to recovery or resolution strategies is needed. A recovery strategy is one in which regulators and management work together to address the underlying problems and so maintain the firm as a "going concern"; and, if this fails, a resolution strategy to close the firm, in a structured and orderly way. The objective in each case will be to minimize the impact on the rest of the financial system and by doing so help sustain the

[17] They have been harmonized a few years ago and therefore cannot be used to address asymmetric shocks.

provision of essential services to the economy. In both cases, the cost to the budget will also be an important consideration.

The Banking Commission needs to improve detection of early problems and to rely more on prompt and forceful corrective action. An effective supervisory framework requires that problems are detected early on and followed by early intervention in the form of prompt corrective action to restore an institution's health. As discussed earlier, the authorities need to use financial and prudential information from institutions much more actively so as to be able to better anticipate problems and move to risk-based supervision; this will also require better reporting. Their track record suggests that problems have been permitted to persist longer than desirable. Many banks in the WAEMU have indeed been insolvent for long periods without being resolved. These "zombie banks" have incentives to gamble for resurrection and can have an adverse impact on other banks. More forceful action would therefore be desirable in the future, including with a view to reducing intervention costs. Absent a robust and effective resolution regime, the WAEMU authorities have little choice but to bail out such banks at great public expense, which perpetuates moral hazard.

In case a bank cannot be recovered, it must be closed down, but the WAEMU resolution regime lacks key attributes recommended by the Financial Stability Board (FSB) (Table 4). Adopting some of the FSB recommendations would require strengthening the powers of the regulator. For instance, the Banking Commission, acting within a well-defined framework that protects the rights of depositors and creditors, would be able without undue delay to order the transfer of assets and liabilities, undertake mergers, and decide on changes in shareholders.

Some of the difficulties of resolving banks could reflect coordination failures between the regional and national authorities. The resolution of a bank involves the Banking Commission, which makes the decision, and the concerned national government, which needs to approve that decision. In case of a disagreement, the government can appeal to the WAEMU Council of Ministers to reverse the decision. Ex ante burden-sharing arrangements could be designed to overcome some of the issues of delaying bank resolution. The authorities should also pursue the explicit support from parent companies with respect to their branches or subsidiaries when a request for a banking license is examined, with a view to obtaining substantial resources for intervention from shareholders should the need arise. As public banks in some of the countries have often been a source of problems, privatization may also be worth considering.

To avoid moral hazard problems, a systematic investigation of the responsibilities of directors, shareholders, and auditors involved in a bankruptcy should be conducted. This should be particularly the case

Table 4. WAEMU: FSB Key Attributes of Effective Resolution Regimes for Financial Institutions: Which Ones Are Available?

Essential features for resolution regimes	Ensure continuity of systemically important financial services, and payment, clearing, and settlement functions	Protect, where applicable and in coordination with the relevant insurance schemes and arrangements, such depositors, insurance policy holders, and investors as are covered by such schemes and arrangements, and ensure the rapid return of segregated client assets	Allocate losses to firm owners (shareholders) and unsecured and uninsured creditors in a manner that respects the hierarchy of claims	Not rely on public solvency support and not create an expectation that such support will be available
WAEMU	Not clear	No	Yes	No
Essential features for resolution regimes	Avoid unnecessary destruction of value, and therefore seek to minimize the overall costs of resolution in home and host jurisdictions and, where consistent with the other objectives, losses for creditors	Provide for speed and transparency and as much predictability as possible through legal and procedural clarity and advanced planning for orderly resolution	Provide a mandate in law for cooperation, information exchange, and coordination domestically and with relevant foreign resolution authorities before and during a resolution	Ensure that nonviable firms can exit the market in an orderly way
WAEMU	No	No	No	Not clear
Essential features for resolution regimes	Be credible, and thereby enhance market discipline and provide incentives for market-based solutions	Stabilization options that achieve continuity of systemically important functions by way of a sale or transfer of the shares in the firm or of all or parts of the firm's business to a third party, either directly or through a bridge institution, and/or an officially mandated creditor-financed recapitalization of the entity that continues providing the critical functions	Liquidation options that provide for the orderly closure and wind-down of all or parts of the firm's business in a manner that protects insured depositors, insurance policy holders, and other retail customers	
	Not clear	No	Not applicable	

Sources: Financial Stability Board (2011).

in instances where public funds were engaged. Conclusions should be drawn from investigations with regard to the suitability of the concerned stakeholders for future jobs in the financial sector. Inappropriate behavior should be prosecuted to the full extent of the law.

Well-designed financial safety nets are critical to an effective crisis management system. Their mere existence may go a long way toward stabilizing financial systems in times of stress. Deposit insurance systems are an important part of financial safety nets, particularly to address smaller (idiosyncratic) banking crises if not systemic ones. Credible systems are those that have appropriate coverage, timely payouts, and adequate funding.

The authorities are working on a deposit insurance system.[18] They are still considering some aspects of coverage, payouts, and funding but expect the system to be launched in 2013. It would cover deposits with banks and microfinance institutions. Staff suggested that the authorities consider giving a role to the deposit insurance system in bank recovery, as is the case in a number of countries. This might allow reducing the final cost, as recovery is often less expensive than liquidation.

Finally, the authorities are working on a Financial Stability Fund (FSF), whose main goal would be to avoid possible debt payment incidents by sovereigns facing liquidity problems. Work is still ongoing on a number of key issues, such as financing of the FSF and terms of the FSF financing. Staff flagged a number of issues to be considered, such as the identification of the nature of shocks (temporary vs. permanent, which is, for instance, particularly difficult to assess in the case of political instability), how to address moral hazard (Is there a role of conditionality? Should financing be provided on market or concessional terms?), and the seniority of FSF financing (which could raise issues if a restructuring is eventually needed).

[18] The authorities are also working on an insurance fund to guarantee all payments made through the RTGS system.

References

Al-Hussainy, Ed, Andrew Coppola, E. Feyen, Alain Ize, Kate Kibunha, and Hao cong Ren, 2010, "FinStat 2010: A Ready-to-Use Tool to Benchmark Financial Sectors Across Countries and Over Time" (Washington: World Bank).

Demirgüç-Kunt, Asli, Thorsten Beck, and Patrick Honohan, 2008, "Finance for All?: Policies and Pitfalls in Expanding Access" (Washington: World Bank).

Financial Stability Board, 2011, "FSB Key Attributes of Effective Resolution Regimes for Financial Institutions" (Basel, Switzerland).

Hansen, Lars Peter, 2012, "Challenges in Identifying and Measuring Systemic Risk." Available via Internet: http://www.nber.org/papers/w18505

Imam, Patrick, and Christian Koleras, 2013, "Senegal: Financial Depth and Stability," African Department Paper (Washington: International Monetary Fund).

International Monetary Fund, 2010, "Macroprudential Policy: An Organizing Framework," Background Paper (Washington: International Monetary Fund).

Kireyev, Alexei, 2013, "Monetary Policy under a Fixed Exchange Rate Arrangement: The Case of WAEMU" (Washington: International Monetary Fund).

Kolerus, Christina, and Aleksandra Zdzienicka, 2013, "Shocks and Shocks Absorption in the WAEMU," African Department Papers (Washington: International Monetary Fund).

Schoenmaker, D., 2011, "The Financial Trilemma," *Economic Letters*, Vol. 111, pp. 57–59.

Wagner, W., 2010, "Diversification at Financial Institutions and Systemic Crises," *Journal of Financial Intermediation*, Vol. 19, pp. 96–111.