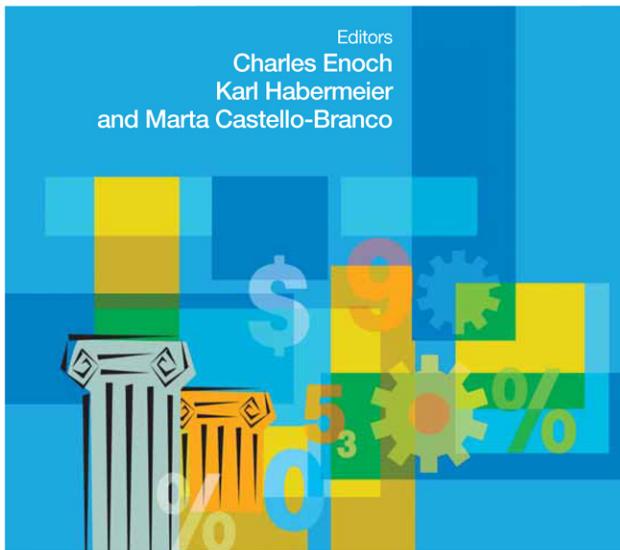


# Building Monetary and Financial Systems

Case Studies in Technical Assistance

Editors  
Charles Enoch  
Karl Habermeier  
and Marta Castello-Branco



I N T E R N A T I O N A L M O N E T A R Y F U N D

# **Building** **Monetary and** **Financial Systems**

Case Studies in Technical Assistance

Editors

Charles Enoch

Karl Habermeier

and Marta Castello-Branco

I N T E R N A T I O N A L M O N E T A R Y F U N D

©International Monetary Fund. Not for Redistribution

© 2007 International Monetary Fund

Typesetting: Lilly Siblesz and Claudia Cohen

Production: IMF Multimedia Services

Cover Design: Lai Oy Louie

The views expressed in this publication are those of the authors  
and should not be interpreted as the views  
of the International Monetary Fund.

### **Cataloging-in-Publication Data**

Building monetary and financial systems : case studies in technical assistance / edited by Charles Enoch, Karl Habermeier, and Marta Castello-Branco – [Washington, D.C.] : International Monetary Fund, 2007.

p. cm.

Includes bibliographical references.

ISBN 978-58906-615-1

1. Financial institutions – Developing countries. 2. Monetary policy – Developing countries. 3. Technical assistance – Developing countries. 4. Developing countries – Economic policy. I. Enoch, Charles. II. Habermeier, Karl Friedrich. III. Castello Branco, Marta de. IV. International Monetary Fund.

HG195.B855 2007

Price: \$29.00

Please send orders to:

International Monetary Fund, Publication Services

700 Nineteenth Street, N.W., Washington, DC 20431, U.S.A.

Telephone: (202) 623-7430; Fax: (202) 623-7201

E-mail: [publications@imf.org](mailto:publications@imf.org)

Internet: <http://www.imf.org/publications>

## Contents

Preface.....	<a href="#">vii</a>
--------------	---------------------

### Introduction

<i>Charles Enoch</i> .....	<a href="#">ix</a>
----------------------------	--------------------

## I. Starting to Build Institutions

### 1. Building the National Bank of Rwanda's Monetary and Supervisory Functions

<i>Gillian Nkhata</i> .....	<a href="#">3</a>
-----------------------------	-------------------

### 2. Modernizing the Central Bank of Congo

<i>Jean-Claude Nascimento</i> .....	<a href="#">16</a>
-------------------------------------	--------------------

### 3. The Kyrgyz Republic: Challenges of Financial Sector Reforms

<i>Obert Nyawata and Judit Vadasz</i> .....	<a href="#">32</a>
---	--------------------

### 4. Mongolia: Toward Risk-Based Bank Supervision in a Transition Economy

<i>Tokio Morita</i> .....	<a href="#">53</a>
---------------------------	--------------------

### 5. Reconstructing Central Banking in War-Torn Liberia

<i>Philip Bartholomew</i> .....	<a href="#">66</a>
---------------------------------	--------------------

### 6. Kosovo: Establishing Institutions from Scratch

<i>Julia Majaha-Jartby</i> .....	<a href="#">82</a>
----------------------------------	--------------------

### 7. Banking Supervision in an Ongoing Conflict: The Case of Iraq

<i>Olivier Frecaut</i> .....	<a href="#">93</a>
------------------------------	--------------------

## II. Implementing Monetary and Financial Policies

### 8. Surveillance and Technical Assistance Working Together: Modernizing Monetary and Financial Policies in Guatemala

<i>Luis Jácome</i> .....	<a href="#">105</a>
--------------------------	---------------------

### 9. Achieving Exchange Rate Flexibility: The Challenges of Egypt's Ongoing Experience

<i>Mohammed El Qorchi</i> .....	<a href="#">116</a>
---------------------------------	---------------------



10. From Fixed to Float in Bangladesh <i>John Dalton</i> .....	<a href="#"><u>135</u></a>
11. Establishing and Managing a Petroleum Fund in Timor-Leste <i>Obert Nyawata and Wilson Varghese</i> .....	<a href="#"><u>156</u></a>
12. Enhancing Financial Stability Through Consolidated Supervision: The Case of the Philippines <i>Barbara Baldwin</i> .....	<a href="#"><u>173</u></a>
13. Albania: Stress Testing for Banking Supervisors <i>Karl Driessen</i> .....	<a href="#"><u>193</u></a>
14. Resolving the Banking Crisis in Uruguay <i>Steven Seelig</i> .....	<a href="#"><u>209</u></a>
15. Preparing Financial Systems for a Human Influenza Pandemic <i>David Hoelscher and Charles R. Blitzer</i> .....	<a href="#"><u>233</u></a>
16. Supervising Nonbank Financial Institutions <i>Marc Quintyn</i> .....	<a href="#"><u>243</u></a>
17. IMF Technical Assistance in the Economic and Monetary Community of Central Africa (CEMAC) <i>Christian Durand and Amadou Sy</i> .....	<a href="#"><u>259</u></a>
<b>III. Advanced Topics in Technical Assistance</b>	
18. Supervising Public Funding to the Financial Sector in Colombia and Mexico <i>Alain Ize</i> .....	<a href="#"><u>275</u></a>
19. Indonesia: From Monetary Program to Inflation Targeting <i>Karl Habermeier</i> .....	<a href="#"><u>296</u></a>
20. Turkey: Moving Toward Full-Fledged Inflation Targeting <i>Marta Castello-Branco</i> .....	<a href="#"><u>317</u></a>
21. Communications Strategies in Central Banking: The 2005 Mumbai Regional Seminar <i>Charles Enoch</i> .....	<a href="#"><u>329</u></a>

Glossary.....	<a href="#">341</a>
---------------	---------------------

## Boxes

3.1. Kyrgyz Republic: Guiding Principles for Banking Resolution...	<a href="#">44</a>
10.1. Bangladesh: Foreign Exchange Arrangements and Market Characteristics Prior to the Float .....	<a href="#">140</a>
10.2. Operational Requirements for a Market-Determined Foreign Exchange Regime .....	<a href="#">143</a>
10.3. Establishing an Effective Interface with Markets: Modalities for Intervention.....	<a href="#">147</a>
13.1. Stress Test Exercises—General.....	<a href="#">195</a>
13.2. Stress Testing and Basel II.....	<a href="#">199</a>
13.3. Stress Testing at the Bank of Albania—Market Risk.....	<a href="#">204</a>
13.4. Credit Risk Stress Testing—An Example from the Bank of England.....	<a href="#">206</a>
17.1. SYSCO Rating.....	<a href="#">267</a>
18.1. Sociedad Hipotecaria Federal.....	<a href="#">279</a>
18.2. FINAGRO.....	<a href="#">282</a>
18.3. Fondo Agropecuario de Garantías.....	<a href="#">283</a>
20.1. Turkey: The IT Framework at a Glance.....	<a href="#">322</a>

## Tables

2.1. Congo (Dem. Rep.): Economic and Financial Indicators: 1998–2005.....	<a href="#">18</a>
6.1. Total Assets, Loans, and Deposits of Commercial Banks.....	<a href="#">89</a>
11.1. Timor-Leste Petroleum Fund: Chronology of Developments..	<a href="#">160</a>
13.1. Banks’ Exposure to Different Risks.....	<a href="#">201</a>
14.1. Uruguay: Banking Soundness Indicators, 2001.....	<a href="#">210</a>
14.2. Uruguay: Total Government Assistance to Banks as of August 2002.....	<a href="#">221</a>
16.1 Overview of IMF Technical Assistance Involvement in NBFIs Supervision.....	<a href="#">247</a>
17.1. CEMAC: Compliance with Convergence Criteria.....	<a href="#">260</a>

17.2. CFA Franc Zone: Interbank Market Transaction Volumes, 1997–2005.....	<a href="#">266</a>
--	---------------------

## Figures

1.1. Rwanda: The BNR's Interest Rate Corridor.....	<a href="#">8</a>
3.1. Kyrgyz Republic: IMF Technical Assistance Delivery by Topic, 1992–2006.....	<a href="#">35</a>
3.2. Kyrgyz Republic: IMF Technical Assistance Topics, 1992–2006 .....	<a href="#">35</a>
8.1. Guatemala: Legal Central Bank Independence.....	<a href="#">112</a>
8.2. Integration of Short-Term and Structural Forecasting Models..	<a href="#">114</a>
9.1. Egypt: Official and Parallel Market Prices.....	<a href="#">122</a>
9.2. Monthly Average Turnover of the Interbank Foreign Exchange Market in Egypt, September 2004–March 2006.....	<a href="#">132</a>
9.3. Egypt: Pounds per US\$1, November 2004–May 2006 .....	<a href="#">133</a>
10.1. Bangladesh: Selected Indicators.....	<a href="#">152</a>
13.1. Origins of Shocks to the Banking System.....	<a href="#">200</a>
13.2. Exchange Regimes for Central and Eastern European Countries, 1999–2003.....	<a href="#">202</a>
13.3. Share of Foreign Exchange Loans and Deposits, End-2003.....	<a href="#">202</a>
14.1. Reserve Coverage.....	<a href="#">214</a>
17.1. CEMAC: GDP Per Capita and Domestic Credit, 2003.....	<a href="#">261</a>
20.1. Turkey: Inflation Targets and Outcomes.....	<a href="#">320</a>

## Preface

The work of the International Monetary Fund (IMF) can be divided into three broad areas: surveillance, lending (use of IMF resources), and technical assistance (TA), also referred to as capacity building. This book surveys the range of capacity-building activities in the monetary and financial areas by the IMF in recent years, focusing both on the substance of the issues covered and on the modalities of technical support. This is done through brief descriptions and analyses of several examples of the TA provided by IMF staff in the monetary and financial areas.<sup>1</sup> This technical support was delivered to member countries of the IMF by Fund staff together with outside experts from central banks, regulatory and other agencies, and independent consultants.

The book would not have been possible without the contributions from the various authors, as well as from many other colleagues who reviewed the papers. We are especially grateful to Lilly Siblesz for high-quality assistance throughout various stages of the book, as well as Claudia Cohen, Harald Anderson, and Sandra Otero de Solares for excellent assistance; to Paul Gleason for invaluable advice; and to Erik Churchill for helpful editorial work.

---

<sup>1</sup> During the period under examination, responsibility for managing—and in part delivering—this TA rested with staff in the Technical Assistance Wing of the Monetary and Financial Systems Department of the IMF. This wing worked closely with other parts of the department, which also were heavily involved in TA delivery and have contributed several of the chapters of this book.

*This page intentionally left blank*

# Introduction

CHARLES ENOCH

**S**trong institutions and operational skills are essential for monetary and financial stability, and hence for economic growth. Even where there is full commitment to sound policies, a country may not succeed in achieving its objectives if the right institutions are not in place, or if the necessary skills are not available to implement the policies. In short, in order to achieve their stability objective, central banks and regulatory agencies need to have comprehensive and up-to-date operational and institutional capacity.

There is substantial literature on what constitutes an appropriate monetary policy to best foster economic growth, as well as on what institutional structures best provide the conditions for appropriate policies to be chosen. Once determined, however, policies still need to be properly implemented, and this is by no means always straightforward. To give one single example, a country may decide to adopt a floating exchange rate while remaining uncertain about how to ensure that the foreign exchange market functions smoothly in the process. Often, country authorities find it useful to share experiences and review the way other countries have addressed this type of issue. In this regard, TA can play a critical role. It is a principal purpose of this volume to provide examples where such assistance has been brought into play.

Globalization, diversification of markets, and greater understanding of monetary and financial risks and vulnerabilities, all have complicated the implementation of monetary and financial policies. Also, views on the key elements of the monetary and financial infrastructure (for instance, on independence, accountability, and governance of the responsible institutions) have continued to evolve. Likewise, the concept of “best practices” in the operation of monetary and financial policies has changed rapidly in recent years. While many countries have implemented the necessary institutional and policy reforms on their own, others may seek outside assistance. The IMF

has contributed to this process—and thus to countries' institutional and capacity building—through its TA programs.

IMF involvement in TA derives from several of its mandates. First, it has a global responsibility regarding macroeconomic policies and developments, including those pertaining to monetary and financial stability. This mandate is exercised through IMF surveillance, extended to all member countries. TA is a natural concomitant to surveillance for those member countries unsure about introducing recommended policy measures on their own, or wishing to draw on wider international experience before they implement their reforms. Second, the IMF's lending role often requires technical support. For instance, lending to low-income countries directly ties a country's economic program to the achievement of growth, and hence is contingent on the development of institutions and capacity to implement policies to deliver growth. Thirdly, the IMF has additional mandates that underpin its involvement in TA. These include its role as assessor of international standards;<sup>2</sup> as provider of finance for countries in temporary payments difficulties; and as a cooperative institution providing mutual support across the membership. Overall, the strength of the IMF's role in delivering TA, and a reason why it is frequently recipient countries' preferred provider, is that TA is set as part of a comprehensive economic relationship with the recipient country, ensuring that the TA is consistent with the country's economic policies and programs as a whole. Against this background, in his report on the implementation of the IMF's Medium-term Strategy, the Managing Director defined capacity building as one of the core responsibilities of the IMF.<sup>3</sup>

---

<sup>2</sup> The IMF and World Bank Executive Boards have endorsed 12 international standards and codes, including nine relating to the financial sector.

<sup>3</sup> See the Managing Director's Report on the IMF's Medium-term Strategy (September 15, 2005) on the IMF website:  
<http://www.imf.org/external/np/omd/2005/eng/091505.pdf>

The nature of the IMF's TA varies across the membership.<sup>4</sup> It is very broad for those countries that still need to develop basic infrastructure, or where infrastructure has been destroyed by conflict. It is more focused when the monetary and financial infrastructure is largely in place, but there are problems in implementation. For instance, particular issues may arise from the regular surveillance process or from the country's participation in the IMF/World Bank Financial Sector Assessment Program (FSAP).<sup>5</sup> Finally, it can be very specific and collaborative where cutting-edge topics or conjunctural issues are on the table.

Originally, technical support in the monetary and financial areas frequently placed the IMF in the role of confidential advisor to the central bank governor. More recently, there is much greater emphasis on transparency, on disseminating the nature and the results of the assistance in order to better assess what worked and what did not, and on using past experience to provide useful lessons for other countries. This volume is a reflection of this trend. The studies presented here should help disseminate more widely—to other countries, other providers, and, more generally, the international community—the lessons from these experiences.

Demand for IMF TA is far greater than the available resources. Responses to country requests are therefore carefully prioritized, on the basis of a range of criteria, including that the request relates to a subject at the core of the IMF's responsibilities, that it is appropriate for the country at its existing stage of economic development, and that there is a high expectation of implementation of staff recommendations.

---

<sup>4</sup> The IMF provides assistance across the range of its responsibilities, most significantly on monetary and financial issues (about 40 percent of total assistance in the year to April 2006); fiscal issues (29 percent); and statistical issues (17 percent). This volume focuses on TA on monetary and financial issues. In some contexts, TA is known rather as "technical consultation" or "technical cooperation."

<sup>5</sup> The FSAP is a voluntary program under which a member country invites the IMF and the World Bank to undertake a comprehensive assessment of the strengths and vulnerabilities of the country's financial system.



This volume provides a series of case studies that seek to illustrate the wide range of IMF involvement in assistance/cooperation with its member countries on monetary and financial issues. The first part, “Starting to Build Institutions,” provides examples where IMF assistance has focused on building basic capacity in countries where capacity is limited or has been destroyed. The second part, “Implementing Monetary and Financial Policies,” covers some cases where the assistance related to particular policy changes, such as the adoption of inflation targeting, the move from fixed to floating exchange rates, or the creation of a modern bank supervisory regime. Finally, the last part, “Advanced Topics in Technical Assistance,” deals with cases where IMF assistance has been sought on more advanced, and more specific, issues or where IMF staff has identified critical issues for discussion.

This volume is intended to contribute to an understanding of the interrelationships between policy formulation, operational implementation, and the achievement of monetary and financial stability. The case study approach aims at providing insights on how, by focusing on developing the institutional infrastructure and ensuring the sound implementation of policies, a country can achieve its policy objectives. Although country experiences are highly diverse, a common thread is that increased technical interaction with the international community—whether through TA or collaboration—can help a country move toward monetary and financial stability and thus enhance its overall economic prospects.

The book covers both the substance of the issues under discussion (for instance, the design of an inflation target framework) and the modalities for delivering the technical support underlying the implementation of the required changes. The case studies illustrate the variety of ways (for instance, TA “missions”, expert visits, workshops, seminars, or in-house reviews of draft legislation) through which the IMF has delivered technical advice.

# **Section I**

## **Starting to Build Institutions**

*This page intentionally left blank*

**Building the National Bank of  
Rwanda's Monetary and Supervisory  
Functions**

GILLIAN NKHATA

Following the 1994 genocide, Rwanda's economy and its financial sector all but collapsed. The Rwandese government was quick to embark on far-reaching reforms, which have resulted in sustained high growth, with Gross Domestic Product (GDP) rising each year between 0.9 and 13.8 percent between 1996 and 2005, despite continuing instability in the sub-region. This chapter will focus on how the National Bank of Rwanda (BNR) has nurtured this recovery, from post-conflict stabilization to reconstruction, while transforming itself into an effective central bank, through persistent efforts to upgrade capacity. The chapter will highlight the wide range of reforms undertaken by the BNR, including the overhaul of monetary policy, the refining of monetary policy instruments, its internal reorganization, and the strengthening of the regulatory and supervision framework for banking. The BNR—the main regulator and supervisor of the financial sector—has managed to restore all its core functions, but still faces formidable challenges, including the shallowness of the financial sector, a shortage of human capital, and inadequate institutional, legal, and judicial frameworks.

**Serious Social Deterioration and Macroeconomic  
Imbalances in the Immediate Aftermath of the Genocide**

Following decades of ethnic tensions, peppered with episodes of armed confrontations, Rwanda's political situation disintegrated into a civil war in the early 1990s. In 1994, the conflicts culminated in a massive genocide, with devastating consequences for the small, densely populated, landlocked country. An estimated 800,000 to one million people, out of a total population of 7.9 million, lost their lives, while over 2 million fled into exile. Another one million were displaced internally, ending up in camps in the southwest of the country. The country's administrative system collapsed, and many

institutions, including the central bank, closed. Public services were cut back to a bare minimum.

The economic fallout was overwhelming. GDP dropped to an estimated half of its level in the previous year, with manufacturing and construction sectors producing only half of their pre-conflict levels. Cash crop farms were abandoned by their owners and, in many cases, transformed into subsistence farms, with disastrous consequences given the country's heavy dependence on coffee and tea export proceeds. Export volumes dropped by 60 percent, while import volumes rose by nearly 30 percent. Large humanitarian aid inflows, amounting to over 140 percent of GDP in 1994, combined with output shortages to put pressure on demand and consumer price inflation, which picked up sharply from 12 percent in 1993 to 64 percent at end-1994. In the prevailing context of administered interest rates, real interest rates became strongly negative. International reserves dropped to less than two months of imports.

### **Redressing Post-Conflict Macroeconomic Imbalances and Launching Much-Needed Structural Reforms**

In July 1994, after the conflict, a new transitional government was formed, comprising representatives of all political parties, except for that of the former government. The design was based on the power-sharing priorities agreed under the 1993 Arusha peace agreement.<sup>1</sup>

There were a number of pressing issues on the agenda. First, the government needed to work quickly to reestablish social order and suppress still latent tensions. Refugees needed to be repatriated, displaced persons had to be resettled, ex-combatants needed to be demobilized. A comprehensive national reconciliation strategy was needed, which covered not only assistance to refugees, displaced persons, and other people hurt by the war, but also restoration of internal security and reinforcement of the justice system.

---

<sup>1</sup> This transitional Government of National Unity led the country until August 2003, when the country held its first multi-candidate national elections since independence; President Paul Kagame was elected to a seven-year term.

Equally urgent was the need to rebuild the productive capacity—a gargantuan task given the post-genocide realities. Most businesses had lost virtually all of their equipment, supplies, and records, while buildings and other assets were severely damaged. Qualified workers had lost their lives or fled. The government also needed to rapidly restore the capacity for economic management, regain macroeconomic stability, and initiate key structural reforms. It immediately embarked on a comprehensive recovery plan, embracing not only an economic agenda, but also capacity and institution building, and measures for the demobilization of ex-combatants, the resolution of charges against the genocide-accused and the establishment of a permanent political framework. By end-1994, many ministries, the central bank, two commercial banks, and over 1,500 primary schools had reopened, though with greatly reduced staff. Around one million of those that had left the country earlier in the year and during previous conflicts had also returned.

### **From Emergency Assistance to Reconstruction (1995–2004)**

Over the following decade, Rwanda continued to make remarkable progress on both economic and social fronts, with the support of the international community, including the IMF. The production of food crops improved significantly in 1995, mainly owing to favorable weather conditions. By 1996, about 60 percent of the industrial enterprises had resumed operations. Some basic social and physical infrastructure had been restored, while key economic institutions, such as the central bank and the Ministry of Finance and Economic Planning, had been largely rehabilitated. Many of the internally displaced persons and returning refugees had been resettled.

As for GDP growth, following the initial rebound of 35 percent in 1995, it remained at an average of 13 percent a year over the next two years, driven mainly by the recovery in subsistence agriculture and construction. The annual rate of inflation (as measured by the consumer price index for Kigali) fell from about 64 percent in 1994 to 9 percent in 1996. Gross international reserves recovered to about four months of imports in 1997, mainly because of financial support from donors, concessional borrowing for balance of payments support, and the partial recovery of the export base. By 1998, real per capita GDP

surpassed its prewar level for the first time. The focus of the government's policy was now shifting from emergency and humanitarian issues to rehabilitation and development.

To strengthen the recovery, the government also took bold steps to liberalize the economy. Recognizing the much reduced scope for government participation in productive activities, it immediately set out to create an economic environment that was conducive to the development of the private sector. It removed price controls, liberalized domestic marketing, and reduced tariffs on imports (quantitative restrictions had been eliminated in 1992). It liberalized the coffee sector, authorizing competition from collection through to exporting, adopted a new tariff code, with fewer rates, and lowered the maximum rate from 100 percent to 25 percent over the period 1995–99. The export surrender requirement for coffee and tea was reduced in stages and eliminated by end-1997.

In the monetary and financial areas, the most significant changes were the introduction of a market-determined exchange rate and the liberalization of interest rates, the reconstruction of the central bank, the revival of the commercial banking sector, the strengthening of the regulatory and supervisory environment, and the modernization of the payments system. The IMF provided intensive technical assistance to the BNR's efforts in these areas.

### **Monetary and Exchange Reforms**

On March 6, 1995, the BNR adopted a more flexible exchange system, which could be characterized as a managed float, with no predetermined path for the exchange rate. The BNR ceased to announce official exchange rates for the Rwanda franc, and commercial banks were free to set the exchange rate for the Rwanda franc against foreign currencies. The BNR limited its role to the daily calculation and publication of an average market exchange rate applied in transactions, for reference purposes. In addition, residents were free to acquire foreign exchange through commercial banks and exchange bureaus, and to make payments abroad for all current international transactions. For nonresidents, a change was the ability to transfer abroad the proceeds received from their international transactions, while exporters were allowed to sell their foreign export

earnings freely on the domestic foreign exchange market, or to retain them in accounts with domestic banks. Seven exchange bureaus were licensed during the first day of operation of the new system.

The adoption of the flexible exchange rate regime in Rwanda was achieved expeditiously and with limited ensuing instability in the exchange rate. However, the BNR was faced with new risks for monetary management. Right before the introduction of the new exchange rate regime, reserve money had increased substantially, with banks' free reserves at very high levels. Large amounts of foreign aid were flowing into the country, and there were few profitable lending opportunities for the banks. The BNR did not have adequate instruments to sterilize the excess reserves held by the banks, while the Ministry of Finance had insufficient revenues to pay interest on its debt. Arrears on outstanding government obligations were making it difficult to issue Treasury Bills (T-Bills) for monetary policy purposes, and the BNR's financial situation too was weak, ruling out the use of central bank bills or remunerated deposits as monetary instruments. The BNR was therefore left with having to work with its existing instruments, which at the time comprised interest rate regulations, reserve requirements, and refinance instruments.<sup>2</sup>

In order to continue the downward pressure on inflation, the liberalization of the exchange system and introduction of closer control over banks' free reserves needed to be accompanied by greater flexibility in interest rates. Despite the concern that significant increases in interest rates could threaten private sector recovery, the BNR reviewed its instruments, and eventually allowed interest rates to be determined freely. The BNR focused its attention on controlling the free reserves of the banking system. In that context, interest rates were expected to rise as credit demand recovered and banks began to feel the need to attract new deposits. By 2002, the BNR had redefined its monetary policy framework, with a whole set of indirect instruments

---

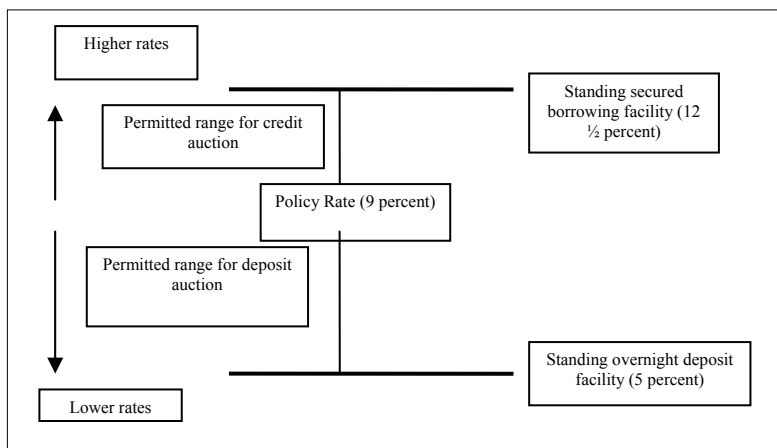
<sup>2</sup> The BNR also had a rediscount window against government securities (T-bills and development bonds) and prime quality private paper. The posted refinance rate was 11 percent. However, the window was rarely used, given the excess reserves in the banking system.



of monetary policy, including cash auctions, restructured treasury bill issues, and an improved reserve requirement system. Base money had replaced the net domestic assets of the central bank as an intermediate target for monetary policy.

The BNR continues to use a base-money-control framework, with three policy instruments: credit or deposit auctions, treasury bill auctions (for monetary policy purposes), and foreign exchange auctions. In August 2005, the BNR introduced a corridor for money market rates and policy interventions (Figure 1.1). It now also sets and communicates to the market a central bank policy interest rate (the “taux directeur,” which was set at 9 percent as of late 2006).

Figure 1.1. Rwanda: The BNR's Interest Rate Corridor



## Reconstruction of the National Bank of Rwanda

The BNR reopened on October 31, 1994, after the detailed inventory of remaining stocks of bank notes was completed and access to the BNR's computer system and vaults had been restored. However, it was faced with quite a different situation from the one prevailing before the genocide: a large number of senior positions were now held by new staff and the organization needed to adapt to the new responsibilities and functions of managing a liberal exchange

and monetary system. The BNR had to recreate itself entirely. Immediate priorities included: (a) drafting and enacting new central bank and commercial banking laws; (b) reorganizing in line with the new functions; and (c) getting the new staff up to speed as quickly as possible. The BNR quickly rose to the challenge, transforming itself into one of the most effective central banks in the region:

- **Central bank law:** The BNR drafted a central bank law that would underpin its independence in conducting monetary policy. Work is still ongoing in this area because, while the new law adopted in mid-1997 contains most of the essential elements for the efficient functioning of a central bank, it falls short in a number of regards, including the independence of the BNR and the members of its decision-making bodies.
- **Reorganization of the BNR:** In 1995, while good progress had been achieved in terms of restaffing, the organization was hardly conducive to the implementation of more flexible monetary and exchange rate policies, and still reflected its previous paradigm of centralized control, in particular of credit and foreign exchange. The BNR launched a major reorganization, which emphasized its new functional responsibilities. Six main departments were designed around strategic functions. In addition, a separate internal audit unit was created reporting directly to the Governor.
- **Internal audit:** The BNR has worked to improve its internal audit mechanisms, particularly since the IMF's 2003 Safeguards Assessment.<sup>3</sup> The Internal Audit Department has made significant progress, and operates as an independent audit function, with its roles and responsibilities defined in an Audit Charter. It also has a governor-approved audit plan, and risk-based auditing is applied. Work is ongoing to complete the agenda to ensure consistency with international audit standards.

## Restoration of the Commercial Banking Sector

In parallel to making efforts to restore its own basic functions, the BNR needed urgently to address the poor health of the banking sector. Commercial banks were plagued even before the conflict by a wide

---

<sup>3</sup> When the IMF provides a loan to a country, money is usually transferred to the country's central bank. Before doing so, however, the IMF assesses the central bank's financial control systems, to ensure it is able to manage the resources adequately and provide reliable information. All countries that request a loan from the IMF must undergo such a "safeguards assessment."

range of weaknesses, including undercapitalization, low-yielding assets, lack of long-term resources, high levels of nonperforming loans (NPLs), and weak management. These problems were exacerbated by the conflict, which affected banks both directly, through loss of skilled personnel and damage to property (ransacked premises, loss of cash and equipment), and indirectly, through difficulties experienced by their clients. The proportion of NPLs increased significantly. Some debtors disappeared, while some of the new clients were foreigners, without verifiable collateral, and others clamored for additional loans to restore their capital and rebuild their businesses. Legal disputes, especially over withdrawals made during the conflict, were widespread.

The government launched steps to reconstruct the financial sector, starting with the reopening of commercial banks. The Banque de Kigali (BK) was the first to reopen, on October 12, 1994, and the Banque Commerciale du Rwanda (BCR) followed in December. The other commercial bank operating before the genocide—the Banque Continentale Africaine du Rwanda (BACAR)—did not reopen until the following year. In addition, two new banks were licensed in May 1995, bringing the total of commercial banks to five: the Banque pour le Commerce, le Développement et l'Industrie (BCDI) (established by Rwandese shareholders), and Gold Trust Bank of Rwanda Limited (BANCOR, a subsidiary of Gold Trust Bank of Uganda).

The focus shifted to efforts to lay the foundation for a sounder and more efficient system, including recapitalization and provisioning. In 1996, audits of the commercial banks and the Rwanda Development Bank (BDR) confirmed the poor shape of the banks' loan portfolios and the generally unhealthy condition of the banking sector. The audits led to the drafting of three-year (1996–1999) restructuring plans. The results of these first reconstruction plans were satisfactory, and the two largest commercial banks (BK and BCR) and the BDR improved their financial positions during 1996–97. However, the level of NPLs sector-wide continued to be a problem. In addition, the real estate boom of the late 1990s, led by post-genocide reconstruction and relief activities, was coming to an abrupt end as non-governmental organizations (NGOs) started pulling out of the country. New audits commissioned in 1998 revealed the precarious financial situation of

two banks, for which another restructuring plan (2000–2002) was prepared.

However, the new plans and the capital injections did not fully address the weaknesses in the banking system, and commercial banks continued to suffer from poor asset quality, risk concentration, and governance problems. The ratio of NPLs to total credit to the private sector rose from 10 percent in 1993, to 20 percent at end-1997 and to over 50 percent by end-2003.

The government has, until recently, continued to play a significant role in the financial sector. Although it did not take an active part in their management, the government had important minority shares in the two largest commercial banks, the BK and the BCR, as well as a modest share in BACAR. It also owned a majority share and took an active part in the management of the BRD. A significant step forward was the privatization in 2004 of the BCR and the BACAR.

### **Strengthening the Regulatory and Supervisory Environment**

The BNR has also achieved significant progress in strengthening the supervisory and regulatory environment for banking, even while operating in a context of weak initial conditions for effective banking supervision. In particular:

- **Banking law:** As part of the modernization of the banking system, the Rwandan government enacted a banking law in 1999 that defined banks, distinguishing them from nonbank financial institutions, and laid out the activities that they may engage in and the process for creating them. It also gave the BNR explicit authority to determine capital requirements and associated accounting requirements, and to enforce the banking law, including through the issuance of instructions to clarify the law and through the authority to impose penalties. In addition, it required the BNR to create a deposit insurance system. The BNR submitted to parliament a draft new banking law, which is to provide a comprehensive, modern, and adequate framework for banking supervision. Improvements include clarification and strengthening of the licensing process, the framework for lending to bank-related parties, and corrective measures. In addition, the BNR would replace the courts as the main body responsible for supervising the forced liquidation of banks.

- **Strengthening of prudential rules:** Following the passing of the 1999 banking law, the BNR adopted a set of prudential rules, some of which had an immediate positive effect in strengthening the banks (regulations on the capital adequacy ratio, foreign exchange positions, classification and provisioning of assets, and risk diversification and the introduction of International Financial Reporting Standards (IFRS)-based accounting standards for the banking sector). Compliance with these regulations has been improving despite continuing problems related to poor asset quality, risk concentration, and governance issues. Nevertheless, breaches of the rules are frequent and occasionally substantial.
- **Strengthening of banking supervision:** To address shortcomings in the organization of banking supervision, the BNR prepared an action plan in 2001 for gradual strengthening of the operational aspects of banking supervision, which has largely been implemented.

### **Modernization of the Payments System**

For most of the post-genocide decade, Rwanda's payments system underwent few changes. The system continued to be dominated by cash payments (80 percent of the operations), and the population had little confidence in checks. In addition, scant use was made of the opportunities for efficiency gains offered by computers and telecommunication, and activities related to the receipt, transportation, and security of banknotes absorbed substantial resources. In 2002, however, the government launched a far-reaching plan for the modernization of the payments system, including plans to allow domestic banks to issue debit and credit cards, restore the credibility of checks, and introduce automated clearing. The BNR and six commercial banks, as well as the Union des Banques Populaires du Rwanda and the Office Nationale de Poste, agreed to create SIMTEL (Societe Interbancaire de Monétique et de Télécompensation—an interbank electronic payment initiative), which is intended to be the center of the payments system modernization efforts in Rwanda.

### **The IMF's Support for Rwanda's Reconstruction**

The efforts of the Rwandese government were accompanied by strong support from the international community. This was viewed as essential not only in ensuring a smooth transition to sustainable growth, but also to prop up national reconciliation efforts and consolidate stability in the rest of the sub-region. As part of its

response, the IMF prepared, in coordination with other donors, a comprehensive technical assistance program, to support Rwanda's efforts to rebuild its capacity for economic management and for the compilation of economic and financial statistics.

In that framework, the IMF worked with the BNR to help it restore its basic functions, introduce a flexible exchange-rate regime, introduce indirect instruments of monetary policy, and strengthen the financial sector legal and regulatory framework—including through the drafting of a new banking law and new banking supervision regulations. Assistance has also been provided in assessing the desirability of a deposit insurance scheme. Rwanda has benefited from assistance in monetary operations, foreign reserve management and banking supervision through the regional technical assistance center (AFRITAC-East)<sup>4</sup> and under the Enhanced Heavily Indebted Poor Country Initiative (HIPC) and the Multilateral Debt Relief Initiative (MDRI). In 2004-2005, the country underwent a Financial Sector Assessment Program (FSAP), which noted the progress made, but also highlighted some vulnerabilities and some priority structural reforms for financial sector development.

The IMF has also provided financial support under successive arrangements, with the focus moving gradually from post-conflict assistance, to sustainable growth and poverty reduction.

### **The Challenges Ahead**

Rwanda has made significant progress since the genocide of 1994. In a context of subdued inflation, real GDP growth has been robust, and has remained at an average of 6 percent for the past few years, led by a recovery in agriculture, and an expansion in the manufacturing, financial, and communications sectors. The government has worked steadily with its international partners to achieve economic progress,

---

<sup>4</sup> The IMF is increasingly adopting a regional approach to provide technical assistance to groups of countries confronted with similar economic problems. It has established six regional technical assistance centers—in the Pacific, the Caribbean, Central, East and West Africa, and the Middle East—to help countries strengthen their human and institutional capacity to design and enact policies that promote growth and reduce poverty.

and to rebuild its institutions, particularly the BNR, which is well managed, with a sound strategic approach.

In parallel to its own reconstruction, the BNR has managed to maintain the momentum for policy and structural reform in the areas of its competency. In the monetary area, the policy framework has been adapted significantly from the administrative controls of the post-colonial era, to a system of indirect monetary control and market-determined prices. An interest rate corridor was successfully introduced in August 2005, and the present mix of instruments has successfully helped to contain inflation over time. A more flexible exchange rate regime is in place and the parallel market has been absorbed. Marked improvements have also been achieved in the financial sector, many of them initiated by the BNR, including the privatization of state-owned banks, the restructuring and recapitalization of delinquent banks, and significant improvements in banking supervision and the regulatory environment. The BNR has also launched efforts to develop the country's framework for anti-money laundering and combating the financing of terrorism (AML/CFT).

Nevertheless, as the focus shifts from reconstruction to sustainable development, the BNR will be grappling with a number of difficult challenges. Specifically:

- **In the monetary area**, increases in donor assistance will continue to complicate the sterilization of excess liquidity. The central bank is concerned by the continuous exchange rate appreciation and the consequences on external competitiveness and exporters' ability to repay their bank loans. It is also concerned about the cost of issuing government bills and the risk of crowding out private investment. Another major challenge will be to move from day-to-day monetary management allowing further play to the markets, which in turn requires increasing the capacity to understand underlying monetary trends and their policy implications, in a context of still serious capacity constraints.
- **Regarding foreign exchange**, attention is likely to focus on the development of an interbank market, which remains underdeveloped despite a benign regulatory environment.

- **In the financial sector**, the FSAP completed in 2005 highlighted a number of important challenges.<sup>5</sup> The financial system remains shallow, especially outside the banking sector, while access to credit is limited. Banking operations continue to be concentrated in the capital, Kigali, and most bank credit goes to a small number of corporations in the trade, tourism, property development, and manufacturing sectors. Despite ongoing efforts, financial deepening is still hindered by weaknesses in the legal and institutional infrastructure for banking and finance, and shortcomings also persist in the accounting and auditing systems. Moreover, while the recapitalization and privatization of banks since 1994 has strengthened their short-term resilience, some structural weaknesses still need to be addressed.

The Rwandan government is working with external partners to address the above challenges. The plan is complemented by several initiatives, in particular an IMF Poverty Reduction and Growth Facility (PRGF) and a Financial Sector Development Program (FSDP) supported by the World Bank, the IMF, and the FIRST Initiative.<sup>6</sup> The FSDP will address issues raised by the FSAP, in particular the monetary policy and foreign exchange operations framework, internal audit practices, and the legal and regulatory framework for banking supervision.

Beyond the monetary and financial issues outlined in this chapter, the country is faced with other daunting constraints in achieving the sustained high growth rates necessary to advance toward the Millennium Development Goals, while preserving macroeconomic stability. These include its continuing vulnerability to external shocks, its high dependence on external aid, and instability in the Great Lakes region. Clearly, continued strong government commitment, and international support will be essential. The achievements over the past decade augur well for the future.

---

<sup>5</sup> Rwanda, FSAP Report (2005) available on the Web at: <http://www.imf.org/external/pubs/ft/scr/2005/cr05309.pdf>.

<sup>6</sup> The Financial Sector Reform and Strengthening (FIRST) Initiative is a multi-donor program, supporting capacity building and policy development projects in the financial sector. It provides technical assistance grants for short and medium-term projects in the areas of financial sector regulation, supervision and development.



## CHAPTER

# 2

## Modernizing the Central Bank of Congo

JEAN-CLAUDE NASCIMENTO

In 2001, the Democratic Republic of the Congo's Central Bank of Congo (BCC) launched sweeping and comprehensive reforms. The main goal of these reforms was to build capacity in its key operations and support functions. These reforms, which were part of broader structural reforms underpinning IMF-supported programs, were carried out in a political context characterized by transitional arrangements among fighting factions. These arrangements ended with general elections on July 30, 2006, the first since independence.<sup>1</sup>

This chapter discusses the BCC's experience in formulating and implementing the reforms. It focuses on capacity building issues faced by the BCC in drawing up and carrying out the reform agenda and draws key lessons from this experience. Its main finding is that while the BCC has made substantial strides since 2001 in building up its operational capacity, the gains are fragile, and major reforms still lie ahead. These reforms will be challenging, and their full implementation will take time. However, the BCC's experience may well be of benefit to other post-conflict central banks. The rest of this chapter is organized as follows. The background section describes the macroeconomic and institutional setting of the reforms. The second section, titled "Central Banking Reforms," discusses key issues related to their implementation, notably the sequencing, timing and pace of implementation, and monitoring. The last section presents the main conclusions and lessons.

---

<sup>1</sup> These elections were originally scheduled to be held in June 2005 but were postponed several times. A constitutional referendum was held in December 2005.

## **Background**

### **Macroeconomic and Financial Trends**

In 2001, the Democratic Republic of Congo (DRC) embarked on far-reaching reforms to stabilize and rebuild the economy, which had been devastated by civil war, mismanagement, and poor governance. Indeed, during 2001 the economy suffered from triple-digit inflation fueled by central bank monetization of high budget deficits, continuous real GDP decline, a depletion of official foreign reserves, and a collapse of the banking system (Table 2.1).<sup>2</sup> To address these issues, the authorities adopted a program monitored by IMF staff spanning June 2001–March 2002. The program aimed at achieving price stability and laying the foundation for the resumption of economic growth and reconstruction. Supporting macroeconomic policies and structural reforms included a restrained budgetary policy centered on adherence to a strict monthly treasury cash flow plan, a prudent and credible monetary policy, a floating exchange rate, and numerous structural reforms, including in the monetary and financial areas. These objectives helped to establish the priorities for capacity building.

Reflecting implementation of the reforms, the economic and financial situation improved markedly during 2002–05. Real GDP growth, inflation, the exchange rate, and foreign reserves recorded a dramatic turnaround from 1998–2001 to 2002–2005. To illustrate, on an annual average basis, inflation was brought down to 12.6 percent compared to 275 percent, while real GDP grew by 5.6 percent annually compared to an annual average decline of about 4 percent during 1998–2001. Key financial indicators pointed to mixed results: on an annual average basis, financial intermediation improved—albeit from a very low level—as illustrated by the slight fall in the currency-to-broad money ratio during the period 2002–05 compared with 1998–2001; monetization of the economy increased.

---

<sup>2</sup> A major bank restructuring program was launched in 1999 with the assistance of the World Bank.

Table 2.1. Congo (Dem. Rep.): Key Economic and Financial Indicators: 1998–2005

	1998–2001	2002–2005
	(Annual average)	
Real GDP growth	–3.9	5.6
Inflation (end of period) <sup>1</sup>	316.3	12.6
Discount rate	100.5	16.0
Exchange rate (CDF/US\$)	366.4	25.5
Gross foreign reserves	3.1	3.2
Broad money/GDP	6.9	6.6
Currency in circulation (as percent of M2)	65.5	49.0
Foreign currency deposits (as percent of M2)	32.4	89.6
Cash in vault/bank reserves	22.5	49.2

Source: Congolese authorities.

<sup>1</sup>Annual percentage change in the consumer price index.

### The Institutional Setting in 2001

In early 2001, the BCC did not possess operational independence in monetary policy, full supervisory authority, or a mandate to fight money laundering and the financing of terrorism. To illustrate:

- Under Central Bank Decree-Law 187 of January 1999, the government played a key role in conducting monetary policy;<sup>3</sup>
- Under the banking law of 1972, the BCC had no authority over bank licensing and regulation and a shared responsibility with the government for bank restructuring;
- Under Decree Law 065/1998 of 1998, the Congolese Banking Restructuring Committee (COREBAC)—a body composed of two government representatives and seven BCC staff—managed the bank restructuring process, including the supervision of the World Bank-financed audits of failed banks.

However, Congo had initiated the liberalization of the foreign exchange system, and under Decree Law 004/2001 of February 2001, the U.S. dollar became legal tender in the DRC, alongside the Congolese franc.

<sup>3</sup> The BCC Board included five representatives of the government, including the Board's chairman.

## Issues and Challenges

Despite numerous reforms put in place before 2001, the effectiveness of the BCC's operations was severely limited by structural constraints and operational and administrative capacity weaknesses.<sup>4</sup> Indeed, during 1998–2000, the BCC launched several reforms to build up its capacity with the assistance of key development partners.<sup>5</sup> Priority reforms included: foreign exchange liberalization; restructuring of the internal audit function in 2000 (notably the creation of an internal audit directorate—DAI); the overhaul of BCC organization and human resource management (consolidation of BCC directorates from 22 to 10; reduction in total staff from 3,031 at end-1997 to 2,048 in mid-2004); computerization of the BCC (introduction of SWIFT, BCC website, and computer network); the buildup of the currency issuance function; and a bank restructuring program.

Major structural constraints to BCC operations, notably monetary management, included:

- **Fiscal dominance.** The overwhelming role of government in financial transactions, together with large budgetary deficits and the absence of coordination between monetary and government operations, severely limited the effectiveness of monetary management.
- **Almost nonexistent intermediation.** A lack of confidence in the domestic currency due to recurrent periods of hyperinflation followed by currency reforms, the collapse of the banking sector,<sup>6</sup> dollarization (in cash and bank assets and liabilities), and a deficient payments system constrained the BCC's ability to control monetary aggregates, including bank reserves.<sup>7</sup>

---

<sup>4</sup> See Banque Centrale du Congo (2004).

<sup>5</sup> The IMF, the World Bank, the African Development Bank, Belgium, Canada, and Sweden.

<sup>6</sup> In 2001, the financial system consisted of 14 banks, five nonbank financial institutions (NFBIs), and a myriad of savings and loans and micro finance institutions (MFIs). Only 10 banks operated, but their intermediation role was negligible: at end-2000, bank deposits and loans stood at 1.5 percent and 0.7 percent of GDP respectively.

<sup>7</sup> For more details on factors behind quasi-inexistent financial intermediation, see Laurens and Fontaine (2004).

- **An uncertain environment.** Regional insecurity, transitional political arrangements, and uncertainty about the holding of general elections complicated the conduct of central bank operations.

The BCC also had very limited operational capacity. It lacked an effective framework for monetary control; and its monetary tools were either inadequately designed (interest rate, reserve requirements) or poorly administered (bank-by-bank refinancing ceilings). Adjusting the required reserve ratio had little monetary effect, largely owing to the low deposit base in domestic currency (the required reserve base). Other factors accounting for the inefficacy of required reserves were the exclusion of foreign currency deposits (FCDs) from the reserve base, reserve holding at a single point in time rather than an average over a period, and a penalty rate for required reserve shortfalls below the BCC's benchmark rate.

A lack of financial autonomy, a decrepit financial infrastructure, and weak administrative capacity imposed further constraints on the BCC's operations. To illustrate, BCC continues to receive budgetary subsidies to cover its operating deficit, limiting its independence from the government. Also, a lack of accurate and timely central bank data was a major impediment to monetary management. This situation was rooted in weaknesses in the accounting framework and lapses in accounting procedures and transparency. Moreover, the organization of key operational directorates was inadequate (no separation among back-office, middle-office, and front-office functions in the foreign exchange department), and there was little coordination among them. In 2001, the BCC faced an acute shortage of skilled staff and did not have, and still does not have, a training center.

The immediate challenges are to consolidate the gains made thus far by the BCC in implementing monetary and financial reforms, and to restore BCC financial autonomy. Indeed, absent these further reforms, gains made thus far will remain fragile. For instance, while BCC foreign exchange operations have improved with its shift from an administrative to an auction-based mechanism for foreign exchange sales, the administrative, technical, and operational capacity of the Foreign Exchange Directorate of the BCC needs to be strengthened further.

## Central Banking Reforms

The BCC launched a second wave of reforms in 2001. These reforms, which are still ongoing, aimed at: (i) enhancing the BCC's institutional and operational capacity *inter alia* to implement an IMF program; (ii) building the BCC's financial infrastructure and support functions; and (iii) fostering financial reintermediation. In contrast with the earlier reforms initiated in 1998, the second wave was elaborated in the context of a broad and coherent macroeconomic and structural policy framework. The new reforms were also drawn up in a multi-year action plan under which implementation was monitored annually.

### Enhancing Institutional and Operational Capacity

The BCC decided in 2001 to focus on a narrow range of priority reforms to enhance institutional and operational capacity. These reforms included financial legislation, foreign exchange operations and reserve management, monetary management, and supervision, all of which are core areas of the IMF's work.

#### *Financial legislation*

Legal reforms provided the BCC with full authority over central bank policies. In 2002, Parliament passed several pieces of legislation to establish good practices, including:

- A new central bank law 005/2002 of May 7, 2002, which provided for BCC independence and gave the BCC the mandate to formulate and implement monetary policy (government representation on the Board was ended; and its five seats were given to the private sector). The law also set forth the main objective of monetary policy, notably to ensure general price stability;
- A new banking law that gave the BCC full responsibility for the supervision of all financial institutions;
- A new bank restructuring law that expanded the BCC's authority over the management of bank restructuring.

*Foreign exchange operations and reserve management*

The reforms enhanced the efficiency and transparency of the foreign exchange market. In 2002, the BCC's foreign exchange operations shifted from an administrative approach to an auction-based system. Thereafter, the BCC implemented several measures to improve exchange market operations: the range of policy objectives pursued was narrowed down to (i) official foreign reserve build-up to meet quarterly quantitative targets, and then (ii) smoothing operations. Intervention volumes were limited to avoid market disruption; a Dutch auction replaced the single rate auction; auction information was disseminated simultaneously to all foreign exchange dealers; information about intervention was restricted to very few high level staff; and an operational framework to guide BCC interventions was put in place on February 16, 2005 for BCC sales of foreign exchange, and in June 22, 2005 for BCC purchases of foreign exchange.

Important changes were also made in reserve management. The multiplicity of reserve accounts required consolidation: in 2001, 56 accounts were held with 33 correspondents abroad and locally. Between 2002 and end-2005, all but three accounts in local banks were closed; and the number of foreign correspondent accounts was also sharply curtailed. In addition, new investment guidelines were put in place to increase the safety of and the return on BCC financial placements. A procedures manual for foreign exchange trading was prepared and is now being used. Phase I of the project for computerization of foreign exchange operations, which started in 2003, was completed in March 2006. Moreover, the Foreign Exchange Department (FED) was reorganized: a Directorate of Operations was set up and structured along front- and back-office functions; and FED staff have been reassigned accordingly. Intensive training (for example in foreign exchange accounting) has been provided since 2003 by other central banks (including the National Bank of Belgium) and private firms.

The BCC now has adequate capacity to conduct foreign exchange operations, and is focusing its efforts on completing reforms in reserve

management. A key priority is the completion of the computerization of the FED's back-office operations (Phase II), which is being undertaken in the context of an accounting software project. These reforms are expected to contribute to reducing the operational risks that have plagued the FED. Computerization of the FED, combined with the recruitment in 2005 of highly skilled and young professional staff in 2005 has brought to the fore another difficult issue: the reassignment of redundant FED staff.

### *Monetary operations*

In 2001, a framework for currency management was in place to forecast and monitor factors affecting currency flows and guide the BCC's decisions on currency issuance. However, the use of currency rationing as a tool of monetary control led to the exchange of bank deposits at the BCC for cash at a discount (*décote*), contributing to disintermediation. During 2002–06, a framework for reserve money management was set up to enable the BCC to track autonomous factors affecting liquidity on a monthly basis. With this system in place, the BCC is now focusing on improving its database and forecasting ability.

Monetary policy instruments were overhauled.<sup>8</sup> In February 2005, the refinancing facilities were consolidated into one standing facility; the conditions of eligibility of papers used as collateral at the refinancing window were tightened; bank-by-bank refinancing ceilings—a direct credit control instrument—were eliminated; and central bank bills (*billets de trésorerie*), which were introduced in December 2002, were used in 2005 to mop up liquidity. The reform of monetary instruments allowed the BCC to redesign the framework for currency management as so to make it a tool for managing banknote flows and stock rather than monetary control.

---

<sup>8</sup> Due to a myriad of issues (such as acute human capacity shortages and statistical data weaknesses), the BCC was able to present the analytical version of its balance sheet only in 2005. Efforts are now focused on forecasting the analytical balance sheet.



*Supervision*

The reforms strengthened the BCC's authority as well as its administrative and operational capacity to conduct effective supervision. The Directorate of Supervision of Financial Institutions (DSIF) was reorganized in July 2003, with subdirectorates for offsite examination and onsite inspection, as is standard. However, a separate subdirectorate for micro finance institutions was retained. Prudential norms (such as for capital adequacy) and regulations—which most banks did not observe in 2001—are being redesigned and aligned with international standards.

Offsite examinations have been improved with: (i) the introduction of new tools such as permanent files, an early warning system (EWS) of indicators, and new methodology and procedures (for example, a CAMEL-based analysis of banks' financial position, detection and treatment of irregularities in bank statements, and sanctions for noncompliance); (ii) the preparation of a procedures manual; and (iii) electronic data transmission via the Réseau Métropolitain Africain (RMA) network, and the selection of periodic bank data to be reported.

Onsite inspections are now carried out in accordance with an annual program. The processes and methodology for conducting these inspections have been formalized; and a procedures manual has been prepared. In addition, in April-May 2006, the DSIF launched an onsite inspection covering all banks, with a view to assessing the quality of the loan portfolios. Finally, the DSIF has trained its staff (for example, on the methodology for conducting onsite inspections) as upgraded information technology (such as the forthcoming implementation of a new software application for banking supervision named BSA, which was developed by Southern Africa Development Community countries in the context of regional integration).

The BCC is now focused on completing the remaining supervisory reforms. These include the adoption of several new draft regulations, and the implementation of the BSA software application and the new

bank accounting plan. The latter are critical to improving the quality of bank data reporting and analysis.<sup>9</sup>

### **Building Infrastructure and Support Functions**

In 2001, priority reforms also included enhancing functions such as audit, accounting, currency issuance, anti-money laundering, and combating the financing of terrorism (AML/CFT), and organization. These functions were considered to be critical in the context of the IMF programs.<sup>10</sup>

#### *Audit*

Reforms covered external and internal audit to ensure transparency in financial information and good governance under the IMF's staff-monitored program.

External audit. For IMF program monitoring purposes, BCC began submitting its financial accounts (for 2000 and 2001) to an internationally recognized audit firm in 2002.<sup>11</sup> The firm also conducted special audits of quantitative performance criteria set forth under the IMF-supported program.

Internal audit. Reforms drawn up in 2001 included a roadmap for building the newly-created audit function and immediate actions set forth in the Interim Multiyear Audit Plan to address major risks in directorates playing a key role in IMF program implementation. In 2002 and thereafter, key reforms included: the adoption (2002) of an audit charter and a multiyear audit plan; the reorganization of the DAI, with a focus on onsite audit missions and the delegation of internal control activities to the operational directorate; a methodology for the preparation and conduct of a multiyear audit program; and the introduction of new audit instruments and operating procedures in line with best practices. In 2004, a procedures manual was put in place and

---

<sup>9</sup> The draft project document was issued in early 2006; see République Démocratique du Congo (2005).

<sup>10</sup> The BCC was already addressing bank restructuring with World Bank assistance. Supervisory reforms were included later. They were elaborated with IMF assistance, at the request of the BCC.

<sup>11</sup> The financial statements for 2000 and 2001 were not approved.

risk mapping (*cartographie des risques*) was undertaken. Finally, DAI staff received an intensive training program both in-house and abroad.

The BCC now broadly has the capacity to conduct internal audits. It has made impressive strides in establishing an adequate organizational structure, a methodology and procedures in line with international norms, and appropriate audit instruments. The principal remaining challenge is the effective and regular conduct of audit inspections.

### *Accounting*

Far-reaching reforms in this area were considered critical to restoring the BCC's credibility. These efforts have four components, some of which are still ongoing:

- At the outset in 2001, an account restructuring committee (CAC) was set up to regularize the BCC's accounts. The focus was on (i) consolidating reciprocal accounts; (ii) ensuring proper recording of high outstanding balance items in suspense accounts; and (iii) setting forth rules and responsibilities for a lasting solution to this problem. This reform was completed in 2005.<sup>12</sup>
- The accounting information system was overhauled to ensure that BCC accounts met national as well as international accounting standards (IAS/IFRS) by 2005. To that end, the BCC adopted a plan for the progressive introduction of IAS norms during 2003–05.
- The BCC reorganized the Accounting Directorate, and in September 2004, a charter, setting forth responsibilities among directorates that are providers of information, was drawn up. Implementation of this charter awaits the completion of the computerization of the BCC's accounting operations.
- In 2004, the BCC set up a committee to steer the reform to computerize its accounting operations, but there have been significant delays. The new software application has, however, now been selected and is expected to be operational by end-2006.

---

<sup>12</sup> As a result of the reform, BCC financial accounts of 2004 were approved by an external auditor for the first time.

### *Currency issuance*

These reforms laid the foundation for the BCC to strengthen its operational capacity and perform its currency issuance function.

- In January 2005, the BCC decided to guarantee the convertibility of banks' free reserves into cash, restoring the fungibility between cash and bank deposits at the BCC and ending the long-standing use of the *décote*.
- A plan for the gradual and prudent issuance of new banknotes of higher denomination was launched in 2003 to reduce the unit cost of production, and improve the quality of currency in circulation. That year, banknotes of large denominations—CGF 200 and CGF 500—were successfully introduced.<sup>13</sup>
- An operational framework for the management of banknote flows and stocks was developed by redesigning the currency framework used for monetary control. Since the beginning of 2005, this new framework has been used as a tool for forecasting and monitoring banknote flows, and planning the mint's production of banknotes by denomination.
- In late 2005, the reorganization of the Treasury Directorate (DT) was completed with the adoption of a new organizational chart and reassignment of staff. New work procedures and processes are being developed and put in place. The rehabilitation of the physical infrastructure of the DT (security perimeters, vault, storage facilities, counting/sorting machines, storage areas) has been launched with the inauguration of the new counting/sorting room in May 2006. A training program is also being implemented.

Despite these achievements, the BCC needs to make further efforts to put in place the infrastructure for issuing currency. The most important remaining steps include new work procedures and methodology (counting and sorting of banknotes, destruction of unfit notes); and the rehabilitation of the DT infrastructure.

---

<sup>13</sup> Currently, the highest denomination (CDF 500) is equivalent to about \$1.

*AML/CFT*

Reforms covered both the legal framework and operating procedures. With the legal authority (central bank law of February 2002) and a mandate from the government, the BCC set up a committee in 2002 to draw up a national strategy for AML/CFT (*Groupe de Réflexion sur la Lutte contre le Blanchiment de Capitaux*). In July 2004, Parliament adopted an AML/CFT law in line with international standards. Enabling decrees, including a decree for setting up a Financial Intelligence Unit (FIU), have been prepared. High-level seminars were held in 2004 and January 2005; and a workshop was held in December 2004.

While these advances have contributed to laying the groundwork for the AML/CFT strategy, the remaining agenda is large. The next phase involves the adoption of implementing decrees and the launch of the FIU.

*Organization*

In parallel with the reorganization of the operational directorates, a comprehensive reorganization plan was drawn up and is being put in place gradually. The plan seeks to refocus the BCC's activities on its core operations and functions. It also seeks to contain operating costs and thus to contribute to the restoration of the BCC's financial position and financial autonomy. The action plan includes ongoing actions since 2001 to (i) improve human resources management (for example, a definition of competencies and positions; a new job classification system; introduction of tools for job evaluations); and (ii) a major reassignment of senior staff in 2005 along with the launch of an organizational audit of the central bank. The plan envisages eliminating BCC activities unrelated to central banking, such as the hospital complex.

Despite a modest pace of implementation, BCC organizational reforms to date have been substantial. Remaining challenges include the organizational and human resource effects of the greater use of information technology.

## Key Determinants of the Reforms

The BCC has played the major role in setting the reform agenda, with assistance from key development partners, including the IMF. Taking the driver's seat in the reform process allowed the BCC to focus on key areas in which capacity weaknesses had been identified. Framing these reforms in a multiyear plan of action with a specific timetable for implementation, and updating this plan annually, has enabled the BCC to assess progress and to expand its reform agenda as new challenges emerged (such as building up the currency issuance function).

The transitional political setting influenced the pace of implementation of the reforms. While the breadth and depth of the central banking reforms put in place during 2001–06 have been impressive, the need for continuous consensus-building among the five factions has slowed down the pace of implementation. This tendency was exacerbated by a growing focus on the preparations for the first general elections since independence.

Skilled staff shortages were also a constraint on the pace of reform. In mid-2004, only 16 percent of the 2,000 BCC staff were university graduates. Nearly half of the professional staff (*personnel cadres*) were promoted to that category by seniority rather than training. In 2006, the BCC embarked on a massive recruitment drive to meet an acute need for skilled staff in operational and IT directorates.

## Lessons

BCC reforms during 2001–06 have been remarkable, given the disastrous condition of the central bank and the financial system following the end of major armed conflict in the DRC. The reform agenda yet to be implemented is vast, daunting, and challenging. Nevertheless, there are several lessons that may be of benefit to other post-conflict central banks.

- Ownership and domestic consensus are critical for adequate elaboration and successful implementation of central banking reforms. Although the

BCC was determined to take the lead in the reform process, it recognized the importance of political consensus on reforms because of the transitional arrangements. This approach was instrumental in advancing the reform agenda, albeit at a slower pace than expected. Indeed, despite initial technical difficulties and political interference at times, rapid progress was made in moving from an administrative-based to an auction-based mechanism for foreign exchange allocation. In contrast, important accounting reforms have yet to be fully implemented, reflecting the varying degree of ownership among the directorates involved (Computer, Accounting, FED) and the slowness in adopting BCC's new accounting plan. Remaining reforms in central bank organization are also awaiting completion, as the BCC took a gradual approach, largely reflecting the transitional political setting.

- Central banking reforms should be drawn up and carried out in the context of a broad and coherent macroeconomic and structural policy framework. This was not the case for the first wave of BCC reforms, which were drawn up in areas based on identified needs by an organizational audit of the BCC in 1998. The integration of key reforms (such as setting up the audit function) into the BCC plan of action drawn up after 2001 has contributed to building up capacity quite rapidly in those reform areas. In contrast, the exclusion of other reforms (such as human resource management and bank restructuring) from the action plan has resulted in slow progress being made in these areas.
- The reform agenda of post-conflict central banks should balance reforms aimed at building up operational capacity with those designed to build up financial infrastructure and support functions. While reforms to build up infrastructure are for the most part in non-core areas and tend not to receive enough attention, they are critical in post-conflict central banking reforms. In the BCC case, the focus on audit and accounting at the outset of the reform process was critical to ensuring transparency in financial information and good governance, and thus adequate monetary management. Prior to the reforms, the poor quality of data—inaccuracy, unreliability, and lack of timeliness—had cast a shadow on the BCC's capacity to carry out an economic program. The same rationale accounted for the priority placed subsequently by the BCC on information technology reforms, notably the computerization of BCC foreign exchange operations and reserves management, and accounting operations.
- Human capacity building is both a constraint and a key determinant of reforms and should be a priority reform area for post-conflict central banks. In the case of the BCC, while capacity constraints played a key role in establishing the scope of priority reforms, there was limited action to

alleviate this constraint. The full extent to which this situation had contributed to slowing down the pace of the reforms became clear only over time. Hands-on staff training and capacity building should be integral components of central banking reforms in post-conflict cases.

- The key pre-requisites for successful capacity building reforms are a firm commitment and sustained efforts to ensure their implementation. Indeed, compared with reforms to enhance operational capacity, reforms to build up support functions and financial infrastructure seem to take longer and often meet with stiffer resistance. Completion of these reforms requires firm determination and ongoing monitoring of implementation in the case of post-conflict central banks.
- Development partners' involvement in capacity building should be for the long haul. Such long-term involvement is critical for financial infrastructure and support function capacity building due to the usually large related financial costs (for example, the cost of rehabilitating the DT infrastructure). This involvement should be based on donors' respective domains of expertise.

## References

- Banque Centrale du Congo, 2004, *Plan Stratégique du Développement de la Banque Centrale du Congo et du Système Financier National*, August.
- Clément, Jean (Ed.), 2004, *Post-Conflict Economics in Sub-Saharan Africa: Lessons from the Democratic Republic of Congo*, Washington D.C.: International Monetary Fund.
- Laurens, B., and W. Fontaine, 2004, "Challenges to Financial Intermediation in the Democratic Republic of Congo (DRC)," in *Post-Conflict Economics In Sub-Sahara Africa, Lessons from the Democratic Republic of Congo*, Ed. Clément Jean, Washington D.C: International Monetary Fund.
- Masangu Mulongo, J-C., 2004, *Contribution à l'Assainissement du Système Financier Congolais*, Kinshasa: Banque Centrale du Congo.
- République Démocratique du Congo, 2005, *Projet du Guide Comptable des Etablissements de Crédits*, Volumes I and II; Kinshasa: Banque Centrale du Congo.

Also, further information on all aspects of the BCC's activities can be found on its website at <http://www.bcc.cd/go.html>.



## CHAPTER

# 3

## The Kyrgyz Republic: Challenges of Financial Sector Reforms

OBERT NYAWATA AND JUDIT VADASZ

Upon the break-up of the Soviet Union, the Kyrgyz Republic, as other transition economies, faced major challenges in reforming its legal and institutional framework to facilitate economic reforms and strengthen market mechanisms. In the initial stages, the country had to cope with major macroeconomic imbalances, including high levels of inflation. Nevertheless, the Kyrgyz government persevered with their economic reforms, and in the process, restored macroeconomic stability at low levels of inflation, and developed the basic instruments and infrastructure consistent with a market economy.

The challenges for policy makers were manifold. In the monetary and financial area, the National Bank of the Kyrgyz Republic (NBKR) introduced reforms to liberalize the financial sector, changed the monetary policy framework, and made important changes to the statutes governing its operations and those of the financial institutions. Through technical assistance (TA) from the IMF and other providers, the NBKR adopted wide ranging reforms.

This chapter discusses the challenges faced by the Kyrgyz Republic in the monetary and financial area. It also reviews the contribution of TA to reforms, with a view to drawing lessons that could be used to further strengthen the reform process.

### Background

#### Institutional and Macroeconomic Background

The Kyrgyz Republic is one of the Commonwealth of Independent States that instituted comprehensive financial sector reforms in support of stabilization programs in the context of transition to a market economy. It stands out in terms of being one of the more

proactive countries in implementing reforms. These efforts have been supported by financial and TA from the IMF and other providers. The legal and institutional framework for policy making, which required total revamping, was the key element on which other reforms depended. Institution building and instrument design required considerable resources, particularly regarding monetary operations, banking supervision, and modernization of the central bank.

Progress during the early stages of economy-wide reforms was set back by the emergence of major macroeconomic imbalances, characterized by output collapse and hyperinflation. However, the Kyrgyz pressed ahead with their reforms. Three phases of macroeconomic development may be observed.

- **The early period up to 1996** was dominated by macroeconomic instability attendant to the transition process. The manifestations included real output collapse, hyperinflation (over 1000 percent), and currency depreciation.
- **Between 1996 and 2000**, economic growth became positive and inflation declined. However, the 1998 regional financial crisis dealt a severe blow to the nascent reforms across the economy and induced banking sector distress. Sharp currency depreciation and debt accumulation made for difficult reforms.
- **The more recent period, dating back to 2001**, has seen the restoration of macroeconomic stability and implementation of major structural reforms. Economic growth has been vibrant, inflation has been reduced to single digit levels, significant remonetization has taken place, some progress has been made in addressing banking sector problems, and monetary instruments have been developed.

## **IMF Technical Assistance**

IMF TA in the Kyrgyz Republic has focused on banking supervision, monetary and foreign exchange operations, central bank modernization, accounting, and payments system (Figure 3.1). The modality for the delivery of IMF TA has been a combination of missions and peripatetic visits by experts and resident advisors in banking supervision and payments. Chronologically, the early stages of TA focused on monetary operations, central bank organization, and

the payments system, with the bulk of the work on banking supervision taking place in the aftermath of the 1998 crisis (Figure 3.2). The thrust of IMF TA was consistent with staff recommendations in the context of IMF membership discussions in 1992, and the findings of the 2002 Financial Sector Assessment Program (FSAP).

The training of local staff has been an important aspect of TA delivery. Many NBKR staff have participated in short-term training, seminars, and regional courses in a wide range of areas related to banking. The interaction and dialogue between the provider community and the central bank has been intensive, with the IMF playing a crucial role in providing direct advice as well as channelling assistance from other central banks. Since much of the advice was based on the practical experiences of other central banks, NBKR staff found it to be particularly valuable.

## **Monetary Policy**

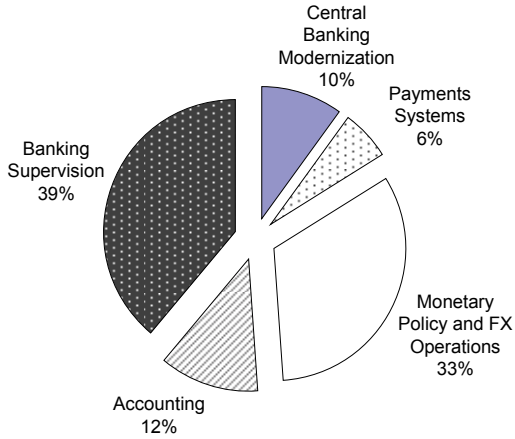
### **Interim Monetary Policy Framework**

The Kyrgyz Republic did not adopt its own currency after the break-up of the USSR. It remained in the ruble area and operated with a rudimentary set of monetary instruments and institutions, which did not function well. Attempts to agree with other former Soviet Union (FSU) countries on a coordinated monetary policy to reduce inflation were futile.

At the outset, even the basic monetary policy framework was unclear, as no decision was made whether to remain in the ruble area or introduce a national currency. On May 3, 1993, the discussions on the extent of economic independence from the FSU culminated in the parliament formally approving the issuance of the new currency, the som.

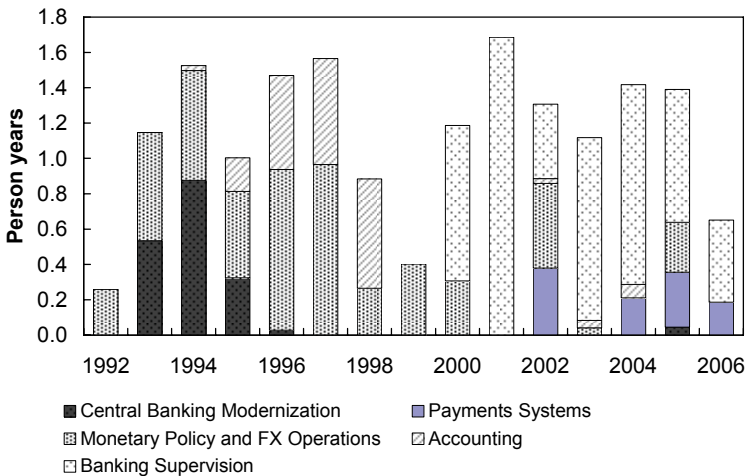
The IMF's delivery of TA started at the beginning of the transition period, when the country was still part of the ruble area. TA consisted of the simultaneous review of several central banking topics and the appointment of resident general advisors to the NBKR until the time when more specialized advice was needed (i.e., until September 1996).

Figure 3.1. Kyrgyz Republic: IMF Technical Assistance Delivery by Topic, 1992–2006  
(In percent of total person years)



Source: IMF.

Figure 3.2. Kyrgyz Republic: IMF Technical Assistance Topics, 1992–2006



Source: IMF.

The central bank was very receptive to the TA recommendations. In addition, the work of subsequent resident advisors was moderately successful, even if they were somewhat overstretched because of the NBKR's need for extensive hands-on advice.

The IMF assisted the central bank in implementing its reform agenda. The transition process in monetary operations included the introduction of a range of monetary policy instruments to allow for the implementation of indirect monetary control. As a first step, these measures included improvements to: (i) the system of refinancing credits and the accompanying refinancing policy of the NBKR; (ii) the reserve requirements system, including the remuneration of reserves; (iii) the auctions for government securities; (iv) the internal requirements for monetary policy decision-making within the central bank; and (v) the introduction in August 1993 of the Lombard facility.

Work on the creation of financial markets started early in the transition process (May 1993). The initial steps included: (i) the establishment of weekly credit auctions; (ii) the development of the money market; (iii) weekly sales of foreign exchange by the NBKR to the interbank market; and (iv) putting into operation regular treasury-bill auctions.

The initial reforms were partially successful in developing the monetary framework. Some weaknesses derived from the fact that the foundation on which these reforms were built was unsophisticated. As a consequence, the early rules for the operation of some of these instruments and markets had to be changed later, while others, notably, credit auctions, had to be discontinued in a more advanced phase of the transition process.

### **Improvements in Monetary Operations**

Once the basic elements of the monetary operations system were laid, the NBKR focused on strengthening the framework. This required—at a general level—a four-pronged approach: (i) creating “second tier” reforms (i.e., more sophisticated rules and institutions); (ii) refining the functioning of existing instruments and markets to make their operation more effective; (iii) adapting the system to the macroeconomic challenges facing the country; and (iv) boosting human capital both within the central bank and in the financial system.

The four-pronged approach was supported by extensive TA provided by various donors, and was supportive of IMF surveillance work.

Notwithstanding the effort made, monetary conditions remained intractable to the point that financial stability was threatened. Large swings in liquidity were endemic, reflecting the deficiencies in the NBKR's liquidity management capability. The weaknesses were due not so much to the lack of instruments, but to the lack of deep markets, the insufficient volume of marketable government securities, poor liquidity forecasting capacity, and limited cooperation in T-bill issuance between the Kyrgyz Ministry of Finance and the NBKR.

### **Effects of the 1998 Regional Crisis**

The spill-over effects of the 1998 crisis dealt a severe blow to the nascent reforms in monetary operations. The adverse effects on the banking system led to a loss of confidence in financial intermediation and thereby impaired monetary operations. Specifically, the NBKR's monetary instruments were rendered ineffective, liquidity was squeezed, and the transmission mechanism of monetary policy was severely constrained. The country came close to a financial crisis, requiring decisive action in order to stem the loss of confidence in a financial system that was facing the specter of depreciating financial assets and capital flight.

The liquidity problems stemmed from the market's concern that the government might default on its domestic debt, as had happened in Russia. The key issue for monetary policy was the erosion of the demand for soms, coupled with falling confidence in banks. The lack of trust in the banking system translated into a lack of trust in the national currency and triggered a flight to safety in foreign currency deposits. The central bank reacted to these difficulties by drastically raising interest rates (to 64 percent at the height of the crisis). The annual inflation rate rose from 8.9 percent in 1998 to almost 40 percent in 1999.

With IMF technical support, the NBKR took steps to address the slack in the demand for T-bills and restore the credibility of the primary sales of these securities. Emphasis was placed on the need to

limit the risks of contagion through the payments system and distress borrowing by illiquid banks. The NBKR was to provide sufficient liquidity support to solvent banks on a timely basis. However, this lender of last resort function had to be transparent and not used to prop up insolvent banks. Much against the initial IMF advice, the NBKR veered toward issuing central bank bills, risking impairing its balance sheet and compromising its autonomy somewhat. Furthermore, this went against the efforts that had been put on developing the T-bill market.

The macroeconomic effects of the 1998 crisis gradually wore off, with the process lasting from August-September 1998 until at least mid-2000. By 2001, there were positive signs regarding confidence in the domestic currency. Most of the framework for the effective implementation of monetary policy had been created by this time, including a wide range of monetary instruments (including central bank bills, repo and reverse repo operations, an overnight credit facility, reserve requirements, and the discount rate).

### **Current Situation**

The new set of monetary instruments still does not function properly, owing to the shallowness of the markets and certain operational deficiencies. In particular, the securities settlement systems are only partially satisfactory, there is no proper collateral, and the maturity profiles of some securities preferred by the markets are missing. The turnover in the securities market is very low, and this can be partly explained by the fact that: (i) the auction process allows the Ministry of Finance to significantly alter the composition of the tender after the bids are received; (ii) the Ministry of Finance does not advertise the tender schedule; and (iii) while there is little retail demand for securities, the demand from large investors is not met. The equity market is also very small. Neither the securities nor equity market employs delivery-versus-payment settlement; only central bank bills are settled within the NBKR in that manner. The money market is underdeveloped, and the development of the inter-bank market is undermined by banks' ready access to the overnight credit facility of the NBKR at close to market interest rates. The problem of collateral has been a long-standing issue, which has not been solved since the start of the transition process. Collateral systems other than

the traditional mortgage are poorly developed, due also to a lack of available securities and gaps in the legal framework. Implicitly admitting the problems with collateral, the NBKR (non-emergency) overnight credit facility is uncollateralized, potentially creating credit risk for the central bank. As in many other transition countries at an early stage of development, the maturity structure of the government securities is skewed toward the short end. The reason is essentially a lack of confidence in longer term investments by the retail sector, while banks have no interest in creating a maturity mismatch in their balance sheets, and institutional investors are very small in size.

Recognizing the difficulties with the securities markets and the effectiveness of monetary instruments, the Swiss government has agreed to fund a regional project that aims at promoting the development of the government securities markets and domestic debt management, and thus strengthening the monetary policy framework. The project will be managed by the IMF and covers Azerbaijan, the Kyrgyz Republic, and Tajikistan. While sharing the broad overall objectives, the project has country specific components to reflect what needs to be done for each of the countries to increase the range of monetary instruments, deepen the markets, and improve their infrastructure. A long-term resident advisor has been appointed to coordinate the project. He will be stationed in the Kyrgyz Republic and will travel to the other countries as necessary. Additional TA will also be provided in other areas of monetary operations, such as liquidity management, and inflation forecasting.

## **Banking Supervision**

### **The Issues**

Banking supervision and restructuring have absorbed the largest share of TA resources to the NBKR during the period 1992–2006. This reflects the range and scope of issues that needed to be addressed in order to successfully complete the transformation of the banking system from the mono bank system and state-owned banking institutions of the Soviet era to a market-based banking system. In the early 1990s, three state-owned banks (Agroprombank, Promstroibank, and Kyrgyzstan Bank), which were converted to joint stock



companies with shares held by various state enterprises, dominated the banking sector and accounted for over 90 percent of total bank assets. The system was described as universal yet in practice it continued to be highly segmented with sectoral specialization, a feature that inhibited competition. Major supervisory problems arose and some of them were associated with legal constraints.

### **Early Approach to Banking Problems**

Early on, the NBKR tightened its licensing procedures and suspended new bank registrations until minimum capital requirements and prudential regulations had been reviewed and strengthened. The procedural and institutional arrangements of the Gosbank (the U.S.S.R. Central Bank) were inadequate to address the new situation and emerging challenges. Recognizing the capacity and manpower constraints, as well as institutional and accounting deficiencies, IMF TA recommendations proposed a sequential approach for building the necessary blocks for a strong supervisory function for the NBKR. IMF TA was coordinated with World Bank advice on bank legislation and accounting procedures. The Bank of England provided a foundation course in bank supervision to NBKR officials.

In light of initial constraints, in 1993, the NBKR adopted a two-stage approach to dealing with problems in the banking system. This entailed aggressive tackling of the problems of small banks and some holding operations for the four large banks formerly owned by the state. In the latter case, the objective was to prevent a further deterioration of the situation while crafting an overall strategy to address the problems with the assistance of donors. Within this framework, the IMF recommended that all banks with negative net worth be placed under direct supervision and that all undercapitalized banks draw up plans for recapitalization and restructuring, including other remedial measures such as strengthening credit polices and enforcing compliance with prudential rules in a time bound manner.<sup>1</sup>

---

<sup>1</sup> Other remedial measures included the imposition of limits on insider lending, improved risk diversification, better collateral valuation, and improved loan procedures.

Four banks were brought under direct supervision and two banks were placed under temporary administration and had their licenses suspended.

Regarding the former state-owned banks, it was clear that the government had contributed to the banks' problems through directed credit. This reinforced the view that the government needed to assist in the one-time recapitalization operation by substituting government bonds for the banks' bad loans. The IMF alerted the NBKR to two alternative strategies, and pointed out the pros and cons of each. One approach would be to have an outside agency take over all or the largest part of banks' bad loans and the other would be to have the banks manage their own restructuring processes. Although the IMF TA staff expressed marginal preference for the latter, a separate agency was used, namely the Debt Enterprise Bank Resolution Agency (DEBRA), which had been established under the World Bank financial sector program in the Kyrgyz Republic.

### **Banking Crisis and Restructuring Efforts**

The regional financial crisis of 1998 led to a loss of confidence in the domestic currency and in the banking system. In addition to the confidence issue, the currency mismatch in banks' portfolios and the government's default in redeeming its bonds, which a state-owned gas company had used to secure its liabilities with banks, were the main channels for the crisis in the Kyrgyz Republic. Banks had extended large dollar-denominated credits to the enterprise sector, whose earnings were mainly in domestic currency. The collapse of the nominal exchange rate rendered large parts of banks' asset portfolios nonperforming as it became difficult to recover loans. As a consequence, in the late 1990s, the three biggest banks were liquidated, and part of their assets transferred to a new, state-owned Kairat Bank.

## **Toward a Comprehensive Bank Restructuring Plan**

Resolution and stabilization remained elusive as over half of the banking system continued to experience severe capital and earning problems. The pitfalls of the partial, sometimes hesitant approach to solving banking system problems became apparent. In response, the IMF and the NBKR worked on a more comprehensive and proactive plan. This plan, which was conceived in 2000, was to be underpinned by a shared vision between the government and the NBKR. The stabilization of the banking system was to be accorded first priority in an overall strategy that sought to restructure the banking system and remove underlying weaknesses. The key elements of the strategy were to: (i) involve a high level policy committee in the design, coordination, and advocacy of the plan; (ii) resolve and restructure banks, while charging the recovery of assets to a separate agency (DEBRA); (iii) undertake a full assessment to determine the cost of bank resolution and ensure explicit budget support for recapitalization; (iv) identify and put in place the supportive institutional and legislative arrangements; and (v) make bank resolution transparent and fully accountable to the public.

The NBKR took a proactive stance in addressing banking distress by immediately establishing the high level committee, initiating the liquidation of some banks, and effectively marshaling assistance from multilateral institutions. The high level policy committee faced problems in ensuring proper governance, transparency, and accountability in several areas that were core to the banking sector problems. In particular, there was a lack of sound principles of bank governance, the legal system was inefficient and corrupt, and financial governance weak. Insider and directed lending to shareholders or their associates proliferated. The NBKR did not have any legal basis to conduct fit and proper tests of the owners and its powers over the Board of Directors were limited. The court system could overturn NBKR actions and thus further undermine the central bank's supervisory function. A survey of several banks and law firms in the country revealed that the only two ways to win a judgment in a court were the use of political or family influence, or the use of financial incentives.

Financial sector reforms were an integral part of the authorities' economic program, and were supported by IMF resources. From the start, the policy dialogue between the IMF and the NBKR has been covered both in the IMF's TA and its surveillance activities. In 2002, an FSAP mission identified a number of challenges and constraints in the banking sector, and its recommendations further broadened the scope of the IMF's TA.

There has also been close collaboration with the World Bank. In early 2001, a joint IMF/World Bank team proposed urgent action to break the cycle of abuses in the banking system, stem the accumulation of quasi-fiscal losses, stabilize the banking system and restore depositor confidence, and establish a sound framework for effective bank supervision. Immediate actions were to be taken to remove insolvent banks from the system, and clear signals were to be given to the public and bank shareholders that financial abuses would not be tolerated. Box 3.1 summarizes the five main guiding principles provided to the NBKR in this plan for addressing banking sector problems.

The NBKR made considerable progress in addressing the issues raised by IMF staff, closing four of the five problem banks identified for immediate action and initiating liquidation procedures. However, certain serious legal and institutional issues remained unresolved.

### **Current Situation on Banking and Supervisory Issues**

The banking sector in the Kyrgyz Republic remains shallow, with credit to the private sector amounting to a mere 11 percent of GDP at the end of 2006. By and large, confidence in the banking system has been restored. Two major banks—Inexin and Asia Universal Bank—account for about 40 percent of the total assets of the sector.

The increase in minimum capital requirements has not led to a significant consolidation of the banking system as envisaged. However, overall, bank portfolios have strengthened, and the share of nonperforming assets in the total loan portfolio declined from 13 percent in 2002 to 6.5 percent in 2005. Over the same period,

### Box 3.1. Kyrgyz Republic: Guiding Principles for Banking Resolution

**Principle 1.** The NBKR should take timely measures to address problem banks, based on prompt intervention on insolvent banks and intensified measures to ensure that systemically important banks remain sound. The NBKR should inform the government of the actions to be taken but not engage in policy debate about a rescue of a bank unless the bank has systemic significance.

**Principle 2.** Shareholders should participate in problem bank resolution- by capitalizing banks to adequate standards or losing their investment in the event of closure and liquidation of an insolvent bank. Creditors should have the right to pursue shareholders in the event of mismanagement or misappropriation. This will herald a policy of “zero tolerance” of financial abuses.

**Principle 3.** There should be no explicit or implicit deposit protection scheme. In the event of liquidation, non-affiliated depositors may be partly covered based on fair valuation of the assets of the bank.

**Principle 4.** Thorough investigation of the causes of failure should be undertaken and in cases where shareholders or management have contributed to the failure through malfeasance, the cases should be referred to the Interior Ministry for prosecution.

**Principle 5.** The costs of bank restructuring should be borne by the budget and not through monetization, which would impair the NBKR’s ability to maintain stable monetary conditions.

return on equity increased to 18 percent compared to about 5 percent in 2002. Partly reflecting the increased profitability of the sector and the increasing liberalization of foreign ownership clauses in the banking law, foreign participation in the banking sector has grown—Kazakh banks have recently expressed interest in the sector.

Recent TA in banking supervision took the form of peripatetic visits by a banking expert, who advised NBKR staff on early warning systems for banking sector difficulties, and stress tests; regulations

governing banking; country risk analysis; foreign exchange position calculations; and market risk. Notwithstanding the numerous existing regulations and legislation, the NBKR still faces some challenges in improving its regulatory enforcement powers and authority; eliminating conflicting articles in various laws to ensure coherence among rules and regulations; and strengthening the enforcement of creditor rights and the insolvency regime. Overall, the management and the staff of the NBKR have been receptive to advice, welcome new ideas, and are eager to introduce the proper rules and regulations.

## **Central Bank Modernization**

### **Setting Up the Central Bank of an Independent Country**

Before the Kyrgyz Republic became an independent country, its central bank was essentially a branch of the Gosbank, with limited tasks and responsibilities. At the beginning of the transition process, the Kyrgyz Republic faced the challenge of transforming this former branch of the Gosbank into a full fledged central bank that would dispense with directives and let market mechanisms work. Much of the early work on the central bank entailed the creation of basic functions, the legal framework, and building a core of staff with the requisite skills.

The creation of the new central bank required developing new functions or adapting old functions to the new situation. The building of the NBKR's capacity to formulate and implement monetary policy was one of the early concerns. At the outset, the IMF and other providers impressed upon the Kyrgyz authorities the importance of autonomy for the NBKR, and also underscored the importance of accountability for its behavior in the execution of its mandate.

At the time of independence from the Soviet Union in 1991, the statutes adopted for the central bank did not ensure the independence of the central bank from the government nor did they provide for all key functions of a central bank operating in a market economy. There was an immediate need to create the proper legal framework in order to ensure the desired features of a central bank in a market-friendly setting. The new National Constitution of 1992 enshrined wider

powers and more independence than before for the NBKR, and was followed at the end of 1992 by a new central bank law.

The structure, staff complement, and training of the new central bank also needed to be significantly improved. Initially, in the NBKR structure, the governor supervised many departments directly. The NBKR contained departments or other organizational units that disappeared or were significantly altered later as their relevance changed. Recognizing the need for fundamental changes, the structure of the NBKR and the supervisory tasks of its top managers had already been revamped in 1992, and was then gradually changed over the following years. New staff had to be hired to fulfill new tasks and, because everyone had been raised to be knowledgeable about the workings of a planned economy, they had to radically alter their whole outlook. Initially, this was only possible through training, which mostly took place outside the country.

The wholesale changes that were required to modernize the central bank would have been impossible without effective leadership at the NBKR, and would have been more protracted and costly, in terms of mistakes, had the international community—including the IMF—not provided substantial support. Starting in 1992, IMF technical support covered issues such as central bank legislation and organization, human resources, and training. In the initial period, the various IMF teams dealt with the basics, including providing “model” central bank laws, useful organizational structures, advice on the tasks of individual departments and their preferable groupings. IMF staff also arranged for training to be provided to the NBKR.

### **Setting Up an Independent Central Bank**

Since the mid-1990s, the focus of central bank modernization has shifted from basic changes to the adaptation of the NBKR to the challenges of an independent central bank. This second phase, which followed further modifications in the central bank law in 1997, addressed questions of central bank independence, accountability, governance, and the details of internal organization.

Even though the independence of the NBKR was enshrined in the constitution and the 1997 NBKR Law, the central bank has been

repeatedly subjected to pressure from the government, the parliament, and the public. This pressure is exacerbated by the limited financial autonomy of the NBKR, which is reflected both in the legal framework (which, for example, sets a yearly ceiling on the development budget of 5 percent of international reserves and according to which the government could withdraw assets from the NBKR) and the weak balance sheet position of the NBKR on account of the need to service its own securities. To some extent independence has also been breached by an exaggerated notion of accountability in which the NBKR is subjected to continuous audits and inspections from various bodies, negatively affecting staff morale, as they are obliged to devote much of their time to these investigations (especially in the departments dealing with accounting and foreign exchange operations).

Central bank governance is crucial to build confidence in the institution, both within the political sphere and from the population. In the second stage of the development of the NBKR, governance issues revolved around the structure of the central bank Board, the number of its members, the role of the Board and that of management, and the accountability of the NBKR. While the central bank law set the number of Board members at nine, a presidential decree of 2004 cut this down to seven, with repercussions for the organizational chart of the NBKR, and ultimately having a negative effect on its independence. As for the structure of the Board, the NBKR made great efforts to follow best international practices by designating the governor as the chief executive officer and laying down (albeit sometimes with some contradictions) the tasks and responsibilities of individual members. Internal rules also describe the hierarchy of decision-making procedures, and the roles and composition of Board committees.

The smooth functioning of the NBKR is enhanced by the importance given to internal organizational issues and, more generally, personnel matters. The organizational structure was revamped more than once during the period in question, with the last change—as indicated above—resulting from the externally-imposed decrease in the number of Board members. The number of staff has continued to increase significantly during the last couple of years.



Overall, the NBKR has carried out extensive changes to modernize its structure and operations. Many of these changes were implemented based on earlier advice, since the NBKR very enthusiastically made use of international assistance to improve its operations. At the same time, especially in the latter phases, it also actively worked to find the best solution in the particular circumstances it was facing.

## **Payments System**

### **Ruble-Based System**

In the initial phase of independence (between 1991 and 1993), the Kyrgyz Republic used the Russian ruble as the currency for payments. The most important payment instrument was cash, which was supplied by the central bank of Russia, and this was problematic.<sup>2</sup> The use of non-cash payments was restricted by the limited use of bank accounts and the absence of bank branches in remote areas. Consequently, the government made efforts to introduce and encourage the use of direct deposits and payments. Regional clearing centers were set up to process wholesale payments. However, paper records of all transactions were sent to Bishkek only every five days, and this increased credit risks considerably. Almost all interbank payments cleared through accounts in the central bank, and this slowed down the payment process considerably in the early stages. A significant “float” developed because, after a commercial bank debited the sender’s account, several days passed before the receiver’s account was credited (in 1992 some banks estimated the float to have reached 40 percent of their capital).

The crucial element in the early plans for the modernization of the payments system entailed the modernization of the clearing centers. The goal was to improve the speed and efficiency of the payments system by providing each center with computers and hence establishing the possibility of on-line connections between them. The new system was planned in such a way as to lessen the risks

---

<sup>2</sup> At some point in time, cash shipments fell so far behind the requests by the Kyrgyz authorities that severe cash shortages occurred and the salaries of workers could not be paid in full.

emanating from the payments system and to reduce the size of the float, and hence make the system more efficient and less costly for the ultimate users. The early plans were supported by extensive foreign assistance, including by the IMF, as well as outstanding support from the Japan International Cooperation Agency (JICA).

Using the ruble had not only the disadvantage of possible cash shortages, but severe difficulties emerged in payments between the former Soviet republics. These difficulties originated in the inability of some central banks and enterprises to make payments, but also in the inefficiency of the payments system itself.<sup>3</sup> In addition to the modernization of the clearing centers within the Kyrgyz Republic, initiatives were taken to solve the difficulties in payments between the former Soviet republics. One initiative was to set up an interstate bank that would handle these payments. Such initiatives, however, were superseded by the decision of the Kyrgyz Republic and other former republics to issue their own currency.

### **Introduction of the Som**

Shortly after gaining independence, the Kyrgyz Republic decided to issue its own currency, the som. Preparations for the issuance began in 1992, supported by the IMF and other providers, and the som was put into circulation on May 10, 1993. The IMF and other TA providers assisted the NBKR in different aspects of the implementation, including the proper institutional framework, financial policies, exchange and trade arrangements, the technical requirements, and the process of change-over.

### **Further Work in Developing the Payments System**

After the introduction of the new currency, the authorities' attention shifted to changes that were required to make the existing payments

---

<sup>3</sup> For example, if a Russian enterprise wished to pay a Kyrgyz counterparty, its payment order was first sent to a local bank, then to the local clearing center, from there to the regional center, and then to the Moscow clearing center. The Moscow clearing center sent the documents for payment by courier to the Bishkek clearing center and only then to the commercial bank. Each of these steps involved an average of four days.

system more efficient and to new improvements that needed to be made. The payments system projects (especially the automated clearing house project and the setting up of a gross settlement system) were heavily supported by the JICA, the European Bank for Reconstruction and Development, the International Bank for Reconstruction and Development, and the IMF. Nevertheless, the success of the projects absolutely hinged on the NBKR, which did its best, but encountered human resource capacity constraints in some areas. Thus, the project for the development of the gross settlement system started very early on, but due to these constraints it stalled during the second half of the 1990s.<sup>4</sup> In contrast to the lengthy delays in the area of gross settlements, the projects for the improvements in the paper-based clearing system and for the setting up of an automated clearing house, succeeded (albeit with minor delays).

The NBKR continued to view the payments system as a critical component of economic development and, in order to achieve more success, developed a new phase of payments system reform. This phase of the reform, which started in 2003, focuses on the setting up of the electronic disbursement of salaries and pensions, a bulk clearing system, a card processing center and, ultimately, a real time gross settlement system. This ongoing work also has a clear link with IMF surveillance, as the preparation of a payments system action plan is part of the government's economic program. The projects are assisted by the IMF, the World Bank, and the Swiss and Danish central banks.

### **Accounting**

The IMF's TA has sought to improve accounting and auditing, and thereby upgrade reporting standards. The accounting procedures used in the planned economy framework needed a complete overhaul to function effectively in a market economy. The IMF assisted the NBKR in basic accounting and auditing, and the work was further

---

<sup>4</sup> The NBKR did not have enough human resource capacity to work on two electronic payments system projects at the same time—the automated clearing house and the gross settlement system—and priority was given to the automated clearing house.

supported by a resident advisor and the United States Agency for International Development (USAID) team stationed in Bishkek. Related to this work was the TA on improving financial relations between the NBKR and the government on the one hand, and debt restructuring on the other.

Inadequate disclosure of financial information was one of the obstacles to enhanced financial intermediation and investment in the Kyrgyz Republic. Decisive steps have been taken to improve the situation in that area, although further enhancements are clearly needed. A new law on accounting, which was enacted in April 2002, introduced financial reporting requirements for all businesses.

### **Lessons**

The Kyrgyz Republic's experience demonstrates the critical importance for the recipients of TA to be proactive and fully on board in utilizing outside support to the greatest extent possible. For the providers, the experience imparts a keen sense of appreciation of the challenges in assisting a country in its transition from a controlled economy to a market-friendly one. The process of change can be protracted and should be viewed as ongoing. Basic concepts of macroeconomic policy had to be radically changed, and policy instruments and markets had to be built from scratch. The lack of requisite skills was a major challenge that perhaps could have been addressed better by receiving more prominence in the initial stages.

The significance of capacity constraints is borne out by the slow progress in many areas covered by TA. Legal and institutional problems remain a major impediment to work related to banking supervision, while work on both bank restructuring and the payments system has been sluggish.

Overall, the financial sector in the Kyrgyz Republic remains shallow, and monetary policy implementation faces many of the all too common constraints confronting countries in a similar situation. The involvement of experts with wide country experiences has been

particularly helpful in imparting knowledge to the NBKR in its aspiration for best international practices in many areas of the financial sector. The TA provided by the IMF, the World Bank, and other providers has contributed to improvements in the legal and regulatory framework for macroeconomic policy. However more needs to be done in this area.

TOKIO MORITA

**Overview of the Financial Sector of Mongolia**

The financial sector of Mongolia comprises banks, nonbank financial institutions, savings and credit cooperatives, and the securities companies. There are 16 banks, 23 non-life insurance companies, over 150 nonbank financial institutions (NBFIs) engaged in a variety of financial activities, such as leasing, factoring, money transfer, consulting and trust business, and over 800 officially registered savings and credit cooperatives. Until recently, the credit and savings unions were virtually unregulated and unsupervised.

The securities market and the stock exchange are largely moribund; and the economy is highly reliant on the banking sector for financial services. Around 400 state-owned enterprises were converted to public companies in the early 1990s by issuing free vouchers to the public that could be used to buy shares. At the outset, around 1.3 million people became shareholders, but by 1998 around 75 percent of the shares of the 377 companies that remained were owned by only 1200 individuals and their related parties. This ownership concentration led to a marked fall-off in the number of trades, and lack of interest in the stock market was exacerbated by losses suffered in the banking crises of the 1990s. In addition to shares, corporate bonds are issued through the stock exchange, but the Securities Commission approves the listing details, and there is no liquid secondary market.

Among the financial institutions, the banks have the dominant share, and are critically important for financial and macroeconomic stability. In addition, the banking sector is concentrated, with 80 percent of assets held by the seven largest banks. The Bank of

Mongolia (BOM) supervises the banking sector, while other financial sectors are supervised by the newly established Financial Regulatory Commission (FRC).

At the beginning of the economic transition, the IMF assisted the BOM in areas including central bank operations, payment and settlement systems, and monetary policy operations. However, in connection with a series of banking crises in the 1990s, the focus of TA shifted to financial sector issues. The IMF has provided TA to the BOM, mainly in the area of bank regulation and supervision, reflecting the central importance of this topic for macroeconomic and financial stability. Technical assistance to other financial sector supervisors and the commercial sector has been provided by other international financial institutions such as the World Bank and the Asian Development Bank (AsDB).<sup>1</sup>

The Mongolian commercial banking system is still in its early stage of development in the sense that the banks have been established for less than 15 years after the beginning of the transition process. The managers of some big banks are young and have little experience in the banking business, while the largest banks are run with foreign investment. The main client base of the local banks is medium and small enterprises and consumers. These customers usually have a limited capital cushion but a high exit rate. Leverage in many borrowers is high. At the same time, competition in the banking sector has been strong, which has led to a rapid growth of bank lending. These problems have greatly increased banking risks. Most bank loans are short term.

### **The Initial Stage of the Transition**

The transition process started in the early 1990s. Until 1990, Mongolia had a pure monobank system, without even the specialized banks found in most other socialist countries. In 1991, new banking and central banking legislation was passed, and the monobank was

---

<sup>1</sup> The AsDB has delivered TA mostly in the areas of NBFI supervision and capital market development; and the World Bank has helped the authorities with the medium-term financial sector strategy.

broken up into six institutions. The loans transferred from the state bank to the commercial banks were characterized as high risk, low-interest rate, and long-term. Banks that were burdened with these inherited long-term loans tended to experience rising ratios of loans to deposits, loans to assets, and nonperforming loans to total loans. The loan portfolios of the majority of the banks were not well diversified, but rather concentrated in a few sectors of the economy. Some of the banks were inadequately capitalized; and they found it difficult to maintain their reserves at the minimum required levels and experienced adverse clearing in their relations with other banks to an extent that posed serious risks for the banking system as a whole. In addition, the number of banks increased owing to lax licensing procedures, competition became increasingly fierce, while the management of the banks did not have adequate skills, and corporate governance was weak.

At the outset of the transition process, the bank supervisory authority faced tremendous difficulties. There was a shortage of staff, and improved staff training was urgently needed. The separation between the internal audit and the banking supervision functions had not been fully achieved. Although on-site examinations began to be performed even early in the transition, they were more focused on compliance than on risks. Off-site supervision was quite limited. The banks' monthly balance sheets were collected by the Statistics Department of the BOM, but in case of noncompliance, little financial analysis of the reports was performed. Banks' profitability, or lack of it, attracted little attention, since profit and loss accounts were not adequately collected. Similarly, off-balance sheet operations of the banks were not reported. Comprehensive loan classification and provisioning guidelines also needed to be developed.

Effective and efficient banking supervision is impossible unless banks provide the responsible agency with all the information on operations and transactions needed to properly perform its supervisory functions. Much needed to be done in this area. When the transition process began, there were no uniform accounting standards, bank reporting standards to the BOM, audit standards, and prudential standards. Afterwards, the introduction of the International Financial Reporting Standards (IFRS) was made compulsory by a law issued in



1993. In 1996, another law was issued to reinforce the previous one by requiring auditors to include in their report a statement as to whether or not the accounts they had audited comply with the Generally Accepted Accounting Principles and IFRS. This meant that all banks operating in Mongolia were required to comply with IFRS. However, the infrastructure of the accounting and auditing industry was weak, and in reality, the internationally accepted accounting standards were not well respected, and inadequate provisions were made for nonperforming assets. Off-balance items were not declared. The upshot was that financial statements prepared by banks could not be fully relied upon. The legal framework was also inadequate. For example, the legal system lacked well-elaborated rules for determining the priority of the claims of creditors possessing security interests in the same property. Because of this inadequacy of the legal system, it was hard for the banks to recover loans through collateral.

### **The Emergence of the Banking Crises in the 1990s**

These structural weaknesses, which were typical of many transition economies, caused a series of banking crises when output declined and inflation soared. Although these banking crises—which occurred in 1994, 1996, and 1998/99—were triggered by macroeconomic events, the structural weaknesses described above contributed to and aggravated them. The inherited loan problems had not been solved; and the weak governance and management of the banks resulted in connected lending and a large dividend payment to the shareholders. The BOM tried to alleviate liquidity problems by providing financing on favorable terms to banks in difficulty, instead of strictly applying supervisory norms and enforcing corrective action. Furthermore, the absence of adequate monetary instruments meant that there was little ability to sterilize liquidity injections. Monetary control was rapidly lost, the exchange rate depreciated, and inflation accelerated further.

The non-government sector generally could not be relied upon to discipline bank management and to provide new capital, even if the banks were economically solvent. The capital market was yet to be developed, and market oversight was weak or nonexistent. Rather, the non-government sector relied critically upon the banking system to provide transaction services. In this sense, the continued functioning of a banking system represented a kind of public good.

In addition, the systemic nature of the banking system problems became evident through breakdowns in the payment system.

Given the macroeconomic relevance and importance of the banking sector, the IMF's programs with Mongolia included substantial and extensive policy action in the financial sector. Particularly after the serious banking crisis of 1998/99, the government adopted a comprehensive plan to strengthen the banking system. The strategy sought to restructure distressed banks, reduce government ownership, improve BOM's ability to enforce compliance with prudential regulations, and strengthen market discipline and incentives for sound bank management. Some examples were the elimination of passive clearing loans by BOM to banks, the cessation of BOM credit and liquidity support to insolvent banks, and a BOM review of all existing bank licenses, with action against those banks not found "fit and proper." Although the plan was only partially implemented, it was successful in restoring confidence in the banking sector, fueling remonetization.

### **Developments Since 2000 and IMF Technical Assistance**

Since 2000, the IMF has supported Mongolia under its Poverty Reduction and Growth Facility. Strong economic performance helped achieve most of the macroeconomic goals, while the structural aspect of the program re-focused on the IMF's core areas of responsibility. Conditions initially aimed at improving fiscal management, but later shifted to strengthening the financial sector through better management and supervision of the banking system. In parallel, in order to support Mongolia's comprehensive reform initiative in the financial sector, the IMF has supported the BOM in achieving capacity building and addressing the initial problems of a transition economy through its TA activities.

The IMF's TA has taken various forms. Recommendations have covered the necessary changes in the BOM's regulations, the on-site and off-site bank supervisory framework, as well as the organization of on-the-job training for supervisory staff. Interviews with banks were used as a basis to advise the BOM on the necessary administrative actions to be taken.

In order to prioritize the BOM's efforts to improve its supervisory capacity, a preliminary assessment of bank regulation and supervision was undertaken, in light of the Basel Core Principles (BCP). Based on this assessment, the TA helped map out the strategy of the government reform initiative. The recommendations also covered some issues of the supporting infrastructure such as accounting and legal systems.

One of the challenges for the BOM during its reform process has been the rapid expansion of bank lending that began in 2001. This phenomenon can be interpreted as a sign of recovery from the past banking crises, and may also indicate financial deepening and more extensive financial intermediation, which would be welcome from the perspective of financial development and longer-term growth. A welcome return of public confidence in the banking system, and improvements in the legal system have also supported rapid loan growth. From a macroeconomic viewpoint, the recovery of economic activity in the industrial and services sectors since 2001 has been another important factor driving loan growth, especially as most banking activity is concentrated in Ulaanbaatar, which is growing faster than the rest of the economy. While this loan growth reflects a confluence of welcome factors, it also poses risks and heightens the importance of banking supervision to prevent any deterioration of credit quality.

It should be noted in this context that most loans are short-term, for working capital or for the acquisition of assets. Mongolian banks' client base is narrow, and the share of the 20 largest borrowers is large. On the demand side, the loan expansion reflected the ongoing transition to a market economy, with the privatization of many state owned enterprises and the development of new small retail businesses. In this initial stage of transition, the small shop owners relied on external funds, especially from banks, to supplement the modest resources available from their personal savings, which led to a rapid growth in credit to individuals. Along with the expansion of credit, non-performing loans (NPLs) have also increased rapidly after a significant drop in the aftermath of the banking crises in the late 1990s. Although most banks have managed to remain adequately capitalized, the high level of NPLs has increased the vulnerability of the banking sector to adverse shocks, such as a deterioration in the terms of trade, or greater political uncertainty. The combination of a

high rate of lending growth, high levels of NPLs, inexperienced management teams at both banks and borrowers, and the likely exhaustion of the supply of creditworthy borrowers all represent potential threats to the financial soundness of the banking sector. It has been under such circumstances that the BOM has had to build its capacity in an expeditious manner to keep up with the changing environment of the economy and the banking sector.

### **Progress in the Bank Regulatory and Supervisory Capacity of the Bank of Mongolia**

With the capacity building TA provided by the IMF, the BOM has achieved significant improvements in the regulatory and supervisory system; and many initial weaknesses present during the early transition process have been overcome. As a result, the BOM has, at least thus far, successfully passed through a difficult phase dominated by rapid credit expansion.

The overall standard of banking supervision has reached a reasonable level, although some shortcomings still remain in consolidated supervision. By and large, the BOM has all the powers it needs to conduct effective supervision, such as access to information, the right to approve investors in banks and their management, the right to impose restrictions on banks' activities, and the right to close down troubled banks. The Banking Law provides a satisfactory framework for the BOM to approve significant owners of banks and also control their activities. Licensing criteria, which had been an issue during the 1990s, have become comprehensive. The laws and regulations regarding capital adequacy are in line with the Basel Accord, the minimum capital adequacy ratio (CAR) mandated by the BOM is 10 percent, and the BOM has the right to vary the ratio should it wish to do so. The regulations on large exposures are satisfactory. The formal position under law and regulation regarding connected lending, which has been a long-standing issue since the transition process began, is also satisfactory in terms of the regulation. The Banking Law and regulations give the BOM substantial powers to take action against both banks and their management when necessary. The lack of appropriate regulations on loan classification and provisioning had been the major weakness in supervision, and a key focus for IMF TA. The BOM overhauled the loan classification

method in 2000 and subsequently tightened the provisioning regulation in line with IMF TA recommendations.

The lack of reliable data and analysis, and the paucity of attention given by the BOM to the profitability of banks, were major problems during the period of the banking crises. Mongolia has since taken a number of important steps to improve the quality of financial reporting, including training programs and the translation of the IFRS into Mongolian, in cooperation with international and regional financial institutions. In addition, the banks are now audited by external audit firms. Although much still remains to be done in this area, the quality of the financial information reported to supervisors has improved. Off-site supervision now collects a series of monthly reports from banks, which include balance sheets and income statements, together with data on capital ratios, loan classification, a breakdown of assets and liabilities by maturity, large exposures, connected loans, and foreign exchange positions. These data are used to prepare detailed and extensive monthly reports for BOM management. The supervisor in charge of a particular bank contacts the bank to verify data accuracy upon completion of analysis. Based on the analysis, a letter is written to each bank, containing information on findings, as well as recommendations on improving compliance with prudential norms, if necessary. The results of the analysis are also discussed with the on-site examiners. Significant attention is now paid to asset quality analysis, adequacy of loan loss provisioning, and capital adequacy, which are consistent with the recommendations of the IMF TA.

On-site examinations are conducted once every year for each bank. Traditionally, on-site examinations in Mongolia had been audit oriented, as was common in centrally planned economies. The emphasis of audit oriented examinations is on checking transactions, verifying balances, checking for compliance with laws and regulations, and performing quantitative analysis. BOM examiners normally verified all transactions made by the bank since the previous on-site examination. This approach is some times referred to a “bottom up” process. It is time consuming and labor intensive. Moreover it is also the responsibility of a bank’s internal auditor.

Many countries have adopted a different approach to on-site examinations known as a risk-based examination. This approach is based on the management perspective. It evaluates the condition and future prospects of an institution. It is known as a “top down” approach that systematically evaluates banking risk management and the condition of the institution. The advantages of risk based supervision are that it quantifies the condition of each bank on a comparable basis with other banks, it qualifies the condition of the banking system, and it prioritizes supervisory attention.

The BOM has now adopted risk management procedures for on-site examinations to supplement its traditional approach. The on-site examinations are conducted based on the Supervision Handbook, which was reviewed in connection with IMF TA. Based on this handbook, credit risk, interest rate risk, liquidity risk, market risk, foreign exchange risk, transaction risk, compliance risk, strategic risk, and reputation risk are analyzed. BOM examiners perform a banking risk assessment and propose corrective action, if necessary.

It is widely recognized that a stable banking system is not possible unless banks fully understand the risks that they run in their business and have appropriate controls to manage these risks. Consequently, bank supervisors in many countries have come to realize that their supervisory techniques need to include: (i) an assessment of individual banks’ risks and their capacity to manage these risks; and (ii) incentives to banks to improve their risk management. The supervisory rating of banks’ risks and controls is the first stage in a full risk-based approach. A rating of this kind helps focus supervisory action on excessive risks and control weaknesses, and is commonly assigned using a risk-rating system. Under such a system, supervisors rate banks’ risks and controls numerically according to a standardized approach. The separate scores for specific risks and controls are then aggregated to produce an overall risk rating or “risk profile” of the bank. A recognition of the importance of risk management and the associated rating system were lacking in Mongolia in the 1990s. With the support of TA, the BOM introduced the CAEL system for offsite monitoring and the CAMELS system for on-site examinations.

CAEL categories comprise capital, assets, earnings, and liquidity, whereas CAMELS categories also cover management and sensitivity in addition to those of CAEL. Both systems produce ratings for each category by breaking down that category into smaller components, which are separately rated. These component ratings are first weighted and then aggregated into a general score for the relevant category. Further assistance aimed at making the ratings systems more sophisticated and more usable for prompt corrective action. These rating systems have helped the BOM to better identify risks and lay the foundation for risk based supervision.

Progress has also been made in the related legal and accounting infrastructure, but much remains to be done. Mongolia allowed private ownership of real estate such as land and houses beginning in 2000, and because of this, real estate can be used as collateral for borrowings from banks. The civil code and other relevant laws were amended to allow banks to repossess or dispose of collateral outside the court system for certain types of defaults. But there are still ambiguities in the procedures, requirements, and remedies for the enforcement of commercial contracts. By contrast with the banks, few Mongolian companies keep financial statements in compliance with IFRS, which has made sound bank credit decisions difficult.

The BOM is continuing its efforts to develop a sound and stable banking sector and to improve its supervision. For example, the BOM recently established a development strategy for the banking sector. This strategy clearly defines the role of the government in the reform process and focuses on the areas for future reform, including the legal and regulatory environment. The BOM revised its regulation and guideline on corporate governance of the commercial banks in line with the Basel guideline, and introduced new early-warning indicators of banking and currency crisis. In addition, the increase in the minimum capital requirement for commercial banks from Tog 40 billion to Tog 80 billion, which was completed at the end of March 2006, is a major step toward greater banking soundness. The IMF has provided assistance on some of these core issues.

## **Future Challenges for Capacity Building**

The further strengthening of the banking system will remain a central element of Mongolia's reform program, in particular in the areas of bank supervision, bank corporate governance, and strengthening market discipline. IMF TA can continue to play an important role, especially in building capacity for bank supervision, which remains the top priority for the IMF's financial sector TA in Mongolia.

As competition has become fierce in the banking sector, banks have expanded into fee income business, e-banking, and derivatives transactions, and have taken on risks other than those associated with traditional bank lending. These developments underline the need to tighten the supervision of new business operations and to adopt full-fledged risk-based supervision, by carefully focusing scarce supervisory resources on those institutions and activities that pose the greatest risk. Off balance sheet transactions should be more closely monitored. Virtually unregulated and unsupervised savings and credit cooperatives have competed with banks for deposits, which has pushed up interest rates. Until recently, even the information to judge the size and importance of the savings and credit cooperatives sector was not available. Savings and credit cooperatives may not represent a systemic risk to the financial system, but still there are a few large ones that may need stronger supervision. It should also be noted that there is no deposit insurance scheme in Mongolia. The establishment of the FRC, which has begun to supervise the savings and credit cooperatives, is a step in the right direction, but there is a need for a formal mechanism to ensure close coordination between the BOM and the FRC.

One of the biggest challenges is enforcement. Now that effective off-site monitoring and on-site examinations are in place, the next step is to build a framework for prompt corrective action when excessive financial risks or non-compliance with prudential norms are



discovered. The organizational structure of the Banking Supervision Department of the BOM could be modified to facilitate more targeted, risk-based supervision through better coordination and cooperation between on-site examinations and off-site monitoring.

Although future IMF financial sector TA in Mongolia will continue to focus on bank regulation and supervision, the topics are shifting from the traditional, general capacity building to more targeted and specialized technical support.

## **Conclusion**

IMF TA on bank supervision in Mongolia has supported the implementation of policies and reforms identified in the context of surveillance and lending operations. In particular, TA has focused on this area owing to the close linkages between macroeconomic and financial system stability. In Mongolia, macroeconomic stability was of particular importance given the weak balance sheet structure of the banks in the early 1990s. Inherited bank loans transferred from the state bank were a burden for the newly established commercial banks, which had little managerial capacity. When the macroeconomic situation deteriorated, the latent problems in the banking sector emerged, which in turn aggravated the macroeconomic problems. An intensive effort was needed to stabilize both the macroeconomy and the financial system, and to fundamentally reform the financial system and its supervision in the interest of sustainable growth and low inflation.

Capacity building is sometimes a painfully time-consuming process. It comprises the introduction of an overall framework, provision of staff training on the practical implementation, and detailed follow-up actions. The elements need to be developed in a step-by-step fashion. Sometimes, country officials struggle to keep up with the changing environment of the financial system and the macroeconomy. Under such circumstances, particularly when financial system stability is at stake, TA may not be limited to the mere transfer of knowledge and the dissemination of good practices, but can play a more central role in the provision of overall economic policy advice. In Mongolia, IMF TA has taken such a role in the bank

restructuring process, and after the banking crises in the monitoring of rapid loan growth.

To be effective, TA must be carefully sequenced and prioritized, while maintaining flexibility to cope with unforeseen events. Ideally, a recipient country should introduce a range of good practices simultaneously, but this is usually difficult to accomplish owing to limited absorptive capacity. These limits to the pace of change may be particularly binding in a transition country like Mongolia, where the entire economic system needed to be overhauled and the initial level of development was low. Mongolia lacked well-functioning and profitable commercial banks, and an effective system of prudential oversight. In this environment, a lax licensing procedure resulted in a greater number of badly managed banks, which fueled lending competition that led to declining asset quality. Consequently, the bank licensing procedure was one of the first priorities for IMF TA delivery. This example serves to illustrate that even when TA deals with hands-on issues, it must be accompanied by a policy dialogue on the prioritization of reform. In Mongolia, a continuous policy dialogue was ensured under the IMF lending program discussion and routine surveillance.

The coordination with other donors has also been important to the success of the TA effort. In Mongolia, the IMF's expertise and mandate for macroeconomic and financial stability suggested a focus on improving bank regulation and supervision. Of course, effective and efficient supervision requires a solid legal framework as well as financial information based on proper and uniform accounting standards, not just for banks but also for other financial institutions such as savings and credit cooperatives. TA on those issues has been provided mainly by other donors. Donor coordination on the topics, sequencing, and speed of TA delivery on financial sector topics were thus of great importance. Up to now, coordination with other international financial institutions such as World Bank and AsDB has been achieved through regular contacts at the mission site and at headquarters. Donor coordination will be increasingly important as Mongolia moves to implement consolidated supervision and full-fledged risk-based supervision.

**PHILIP BARTHOLOMEW**

In 2003, Liberia's civil war ended with a peace agreement and an interim government, established for two years. With the help of UN peace-keeping forces, the interim government stabilized the situation and prepared for the elections of October 2005. A high priority during this post-conflict period was the restoration of the financial system—much of which was carried out with the assistance of the international community.

This chapter discusses IMF TA to the Central Bank of Liberia (CBL), and the strategy developed in partnership to rebuild the financial sector. The CBL faced many challenges, including a troubled banking system, an inefficient payment systems, little scope for monetary policy, a dual currency system, and debt servicing problems. In this situation the Liberian authorities considered that close cooperation with the international community would be essential, with international expertise called in to help identify priorities, assist in restoring credibility, and advise on directions to take in the priority areas.

### **Background**

Liberia is a coastal West African country with some natural resources, but low per-capita income. It has strong historical ties to the United States and the U.S. dollar was, until the 1970s, its currency. For decades Liberia experienced political problems, but it had built, at least on paper, a strong legal and accounting system. In 2003, after international tribunal charges were made against President Taylor—accused of financing civil wars in neighboring countries—the government collapsed. In August 2003, the warring factions reached agreement on a two-year interim government—the National

Transitional Government of Liberia (NTGL), and the new president took office in October.

The NTGL was expected to prepare the country for elections in October 2005 and to rebuild governmental capacity. Government posts were assigned to the three previously warring parties based on a power-sharing formula. In addition to international peace-keeping efforts administered by the UN, the NTGL sought TA from the international community, including the IMF.

The United Nations Mission in Liberia (UNMIL) began its work in mid-April 2004. At the time, it was expected that UNMIL would re-establish security throughout Liberia. However, the demobilization of about 40,000 combatants was postponed several times owing to organizational problems. Security conditions were bad during the civil war, and although the introduction of UNMIL forces significantly improved the situation early on, there were numerous episodes of civil disturbances during the term of the NTGL, seriously complicating the arrangements for the delivery of IMF TA.

In December 2003, an IMF team visited Monrovia and agreed on a TA program to restore economic and financial stability. Regarding TA to the financial sector, it was immediately found that the CBL possessed certain institutional strengths, if laws were enforced, but it required capacity building. In other words, rather than requiring the basic assistance often needed in a country emerging from conflict (including cash management, establishing a new currency, re-introducing central bank systems hurt by conflict, and re-staffing), the CBL needed advice from international experts for the re-establishment and enhancement of ongoing central bank functions. Since security and safety were serious issues, teams visiting CBL staff often had to meet in Ghana. Moreover, much work was carried out in Washington, including meetings, as well as the use of telecommunication and internet facilities, which worked surprisingly well. After some initial challenges, a good working relationship was established between IMF and CBL staff. However, from the outset it was clear that progress was likely to be bumpy, in part because of the uncertain environment in which the CBL was still operating.

## **The Central Bank of Liberia**

CBL positions were excluded from the NTGL's power-sharing arrangement that covered virtually all other parts of the administration. Initially, the sitting executive governor and deputy governor were retained, but the former resigned in May 2004 before his term had expired, while the deputy governor served to the conclusion of his term in December 2004. Their immediate successors had also been with the CBL before the establishment of the NTGL: the executive governor had been a governor, and the deputy governor had been the CBL's comptroller and chief financial officer. Both were replaced when the permanent government took office in January 2006. The new executive governor, Dr. J. Mills Jones, had been working at the World Bank during the disturbance and the term of the NTGL. His considerable experience has brought much needed credibility in the continuing efforts to re-establish the CBL as a key government institution.

Soon after the appointment of the acting executive governor on May 14, 2004, he requested additional IMF TA to implement many changes recommended previously by IMF teams. In an effort to reduce the CBL's budget and effect management change, he also re-organized the CBL's administrative structure and reduced staff, with several senior staff retiring at that time. In addition, the NTGL requested that the IMF participate with the NTGL, the World Bank, the U.S. Treasury, and the Economic Community of West African States (ECOWAS) to identify a permanent executive governor.

Most of the CBL's staff had remained through the civil war, so institutional memory was retained, and the CBL's capacity to conduct operations was as good as before the war. This probably contributed to the absence of systemic collapse of the financial system, and helped address issues associated with disruption of the system used by the government for making payments, especially to its employees. Banking supervision staff were well trained and quickly absorbed TA offered to deal with troubled commercial banks.

## The Macroeconomic Situation

Real GDP is estimated to have contracted by about 30 percent in 2003. Most of the decline took place in the second half of the year, owing to the intensification of the internal conflict, and the UN ban on timber exports, in effect since July 2003. Displacement of the rural population disrupted agricultural activities, and commerce slowed sharply. While data were sketchy, higher-than-expected revenue collections, and a surge in bank deposits in early 2004 appeared to indicate a rebound of economic activity by mid-2004.

Liberia experienced a substantial outflow of deposits from the banks from the first through third quarters of 2003. With the peace agreement of August 2003, deposits started flowing back in. By December 2003, however, the banking system could be viewed as technically insolvent, due chiefly to problems with loans that banks had made to the government. However, banks had positive cash flows, due in large part to their remittance business, and could, under strict supervision, have a chance to turn around or at least stabilize.

In Liberia, banks were the major potential source of intermediation—channeling deposits into loans—and lending was high risk. Emphasis was placed on a precondition of financial intermediation—restoring banks’ ability to hold and service deposits soundly. This required careful, intense supervision of operating banks, and, as will be discussed below, considerable caution in licensing new banks. Between December 2003 and July 2005, however, lending by commercial banks roughly doubled, fueled in part by deposits coming back to the banking system.

### *Monetary policy and operations*

Before, during, and after the civil disturbance, monetary policy played a limited role in overall economic policy. This was partly due to the government’s poor performance record with repaying its debt, and the absence of tradable financial instruments. Other factors.

limiting the scope of monetary operations included the limited size of the financial market and prohibitions on interbank activities.

Liberia remains predominantly a cash-based economy, and the dual currency system limits the use of many conventional monetary instruments. At least during the tenure of the NTGL, the CBL had as its monetary policy objective the stability of the exchange rate between the U.S. dollar and the Liberian dollar. It was recognized that this could not be done with precision, so the CBL monitored the stability within a band around a baseline target.<sup>1</sup>

In addition to reliable information about the stock of U.S. dollars in circulation, it would have been useful for the CBL and financial markets to have information about interest rates. But, there were (and there are) no government securities, since the government had borrowed directly from banks and the CBL. Moreover, in December 2003, lending rates had been capped by the CBL at 18 percent per year, and the spread between the lending rate and a cost-of-funds rate was 10 percentage points. It was never clearly ascertained whether or not the interest rate spread was governed by the CBL directive, but soon after CBL and IMF staff discussed the issue, both restrictions were dropped.

### *Exchange rate policies*

Structurally, foreign exchange markets for dollars in Liberia can be very efficient, but could be subject to manipulation of the market by big market participants. As mentioned above, Liberia has a history of a dual currency system as the domestic currency was introduced after many years of reliance upon the U.S. dollar. Until 1999, the two currencies remained equal in value, but since then their relative values have been market-based. Markets recognized that the Liberian dollar was not as strong as the U.S. dollar; and it traded at a discount. The availability of both currencies (and coins) in various denominations throughout this period was quite remarkable, and all parts of the market—from banks, to foreign exchange dealers, to shops—quickly equilibrated exchange rates as market conditions changed.

---

<sup>1</sup> In June 2006, the CBL reclassified its exchange rate regime to be technically defined as a managed float with no pre-determined path or target.

Before the introduction of foreign exchange auctions in 2004, the CBL did not use an open system for selling or purchasing foreign exchange. Instead, if it needed Liberian dollars or U.S. dollars, depending on the day or hour, it called individuals or companies that it knew were large holders of these currencies. After bargaining, transactions were made. These selective placements may be efficient for obtaining market prices, but they are susceptible to possible abuse, and are not transparent (for example with respect to transaction fees or exchange commissions charged by the central bank).

### *Remittances*

A country suffering a disaster such as a major civil war typically requires inflows of capital to assist with rebuilding. With trade disrupted, Liberia was dependent on outside assistance. As with other countries in post-conflict and as with other cash economies, Liberia benefited from foreign exchange inflows, typically from Liberians abroad in the form of remittances.

Remittances are usually provided by nonbank companies and are usually made by telephone or telegraph—and today, the internet. In Liberia, the major international providers of remittances, such as Moneygram and Western Union, affiliated their services with commercial banks. Remittances can be a major factor in a post-conflict situation as they are a way for cash to come in, especially from families abroad. As the transfers were chiefly conducted by banks, remittances provided useful income not related to banks' lending. It can be safely assumed that, during a political crisis or natural disaster, the lending business is more likely to suffer than the remittance business.

While the remittance business was good for Liberian banks, policymakers needed to be concerned about remittance volumes. During the first six months of 2005, for example, gross inflows through the banks were about \$300 million, but gross outflows were almost the same, with the net inflow of U.S. dollars amounting to about \$5 million.



## **The Financial Sector**

Liberia had three operating banks in December 2003, and several non-operating banks that were in the process of resolution or liquidation. During the civil war, one bank then in operation exited and did not come back. One high priority for the CBL was to ensure that this bank made good on claims against it—which it reportedly did. The highest priority, however, for the CBL was addressing issues at the operating banks—all of which suffered varying degrees of problems.

The condition of the three operating banks was poor in December 2003. However, the CBL decided, in concurrence with the IMF, that banks could operate in the near term under regulatory forbearance, so long as remittance income remained strong. Non-interest income (i.e., income from fees, in this case, chiefly remittance fees) remained above 80 percent of total income during the period of the interim government. As there were no Liberian government securities to invest in, banks kept their liquidity in cash, deposits with the CBL, or deposits with other banks. Typically, all banks in Liberia had foreign correspondent banks.

As mentioned above, commercial bank loans (net of provisions) roughly doubled from December 2003 through July 2005. Growth in lending was fueled by a 178 percent growth in deposits over the same period. This high rate of growth is typical of post-conflict countries where public confidence in economic institutions is in the process of restoration. Nevertheless, supervisors closely monitored the quality of banks' loans and other weaknesses.

Liberia also had two state-owned development banks, although neither was performing any business as of December 2003. Both the Agriculture Cooperative and Development Bank and the National Housing and Savings Bank were operating under the regulation and supervision of the CBL. Each was wholly government-owned, but governed by independent boards of directors—with ex-officio government representation—and had been engaged in commercial banking activities prior to cessation of operations.

Nonbank financial institutions operating in Liberia included foreign exchange bureaus, credit unions, and insurance companies. While these institutions fell under the Financial Institutions Act, only the foreign exchange bureaus were regulated; some of these were supervised by the CBL, others not. While foreign exchange bureaus were active in trading Liberian and U.S. dollars, they did not formally provide financial intermediation. At least during the interim government, the credit unions and other nonbank financial institutions, such as microfinance companies, did not appear very active.

### **CBL and IMF Technical Assistance**

For a number of years prior to the civil war, Liberia was among the highest users of IMF TA. In mid-2001, however, U.N. sanctions were established against Liberia; and that, together with Liberia's protracted failure to address its arrears to the IMF, as well as the continuing security problems, interrupted IMF assistance to the country.

Liberia had been in continuous arrears to the IMF since 1984, and ineligible to use its general financial resources for the past 20 years. A declaration of noncooperation was issued in 1986, and the Executive Board suspended the country's IMF voting and related rights—including rights to TA—in March 2003, owing to a protracted lack of cooperation, including on the arrears issue. However, the NTGL cooperated well with the IMF, and in 2004, Liberia began making rescheduled payments against its arrears. On March 1, 2004, the IMF Executive Board granted a waiver against the prohibition of IMF TA.

In December 2003, based on the assumption that the prohibition of IMF TA might be lifted, an IMF team visited Monrovia to determine what it could offer in the post-conflict situation. The team determined that TA to the CBL could be absorbed in all areas. Monetary operations, banking supervision, bank restructuring, payments system, and foreign exchange operations were deemed priorities. The team also suggested that financial soundness indicators (FSIs) be reported to the IMF on a monthly basis, and that the CBL should abandon its practice of selective placement for foreign exchange transactions and

introduce a foreign exchange auction. The authorities were unconvinced by these initial recommendations, but were amenable to continuing discussing them during the first four months of 2004.

The IMF team also advised that a full-scope, due diligence audit be conducted of the CBL by independent auditors from outside the region. The CBL agreed that this was a priority.

As a result, in May 2004 an IMF team covered several topics, including monetary operations, banking supervision, bank restructuring, payment systems, and foreign exchange operations. Due to security restrictions, the work was conducted both in Accra (Ghana), and in Monrovia. While the work was underway the executive governor resigned, and an interim replacement was appointed.

During this visit, the CBL agreed with the IMF on an 18-month action plan for TA, which was supplemented by several IMF staff visits, meetings between IMF and CBL staff in Washington, and visits of experts contracted by the IMF. The TA program was enhanced by cooperation with the U.S. Treasury, which provided the CBL with TA on banking supervision and central bank accounting. The U.S. Treasury and the U.S. Agency for International Development (USAID) were crucial in helping the CBL with audits that had to be conducted before the major audit funded by the European Union could take place.

During the tenure of the NTGL, the TA program was focused on five key areas:

- CBL leadership;
- Arranging an audit of the CBL;
- Setting up the foreign exchange auction;
- Dealing with the troubled banking sector;
- Improving the payments system.

There were other issues that required attention, such as reducing the CBL's budget and dealing with some of the CBL's legacy issues, but these were considered secondary priorities. In keeping with the

objective of central bank capacity building, considerable efforts were made to improve the CBL's ability to conduct monetary operations. While work on the foreign exchange auction temporarily addressed the immediate means for monetary control, much work was devoted to a more permanent monetary operations framework.

## **CBL Leadership**

With the departure of the executive governor in May 2004, the NTGL asked the IMF to be involved in finding a permanent successor. This was an unusual request but appropriate given the special circumstances of the country. Along with representatives from the World Bank, the United States, the Government of Liberia, and the ECOWAS, the IMF was represented on the search committee for the CBL's permanent executive governor. The acting executive governor was then selected by the Chairman of the NTGL to serve temporarily as executive governor, at least until the permanent executive governor was elected. The temporary executive governor repeatedly asked the IMF to provide him with a suitable deputy or advisor. This proved impossible owing to security conditions.

In light of some fiduciary concerns that arose in the summer of 2005, the international community suggested that all revenue-generating agencies, including the CBL, should have experts who would be mutually acceptable to the NTGL and the community, and who would have co-signature authority with the heads of the Liberian agencies. This was a novel arrangement; however, it was made clear by the Liberian authorities that such an arrangement would in no way compromise the sovereignty of Liberia. It was in this context that a Governance and Economic Management Assistance Plan was agreed in September 2005 between the NTGL and the international community of donors, including the U.S., the World Bank, and the Fund.

In February 2006, an accounting and payments systems expert, who worked contractually for the IMF, was appointed by the Board of the CBL as "Chief Administrator." The IMF pays for this administrator, who has co-signature authority with the executive governor. Both the IMF and the Board of the CBL have always viewed this arrangement as a temporary measure.

## **The Audit**

In December 2003, the IMF recommended that the CBL undergo a full-scope, due diligence audit conducted by accountants from outside the West African region. Eventually, the NTGL scheduled this audit, which was financed by the EU and completed by the end of 2004.

Unfortunately, in this process the major audit was delayed several times. With the change in CBL leadership in May 2004, the NTGL and the new temporary executive governor wanted to ensure that both the CBL's liquid assets and stocks of currency out of circulation were indeed as reported. The CBL initiated its own change of control and audit procedures in June 2004 and was satisfied with the results. In addition, the international parent of CBL's private auditor conducted a "peer-review" audit of its local subsidiary.<sup>2</sup> Separately, a USAID-funded team of experts conducted another peer review of both the local auditor's and the CBL's internal audit actions. While problems were detected with both internal and external auditing procedures, by early September 2004, both peer review audits confirmed CBL figures for liquid assets and liabilities and holdings of unissued Liberian banknotes.

While the issue turned out satisfactorily, carrying out the audit had proved taxing. Good audits are expensive, and it took more time than expected to convince the international community of its priority.

## **The Foreign Exchange Auction**

In May 2004, the NTGL Chairman agreed with the IMF's recommendation that a CBL-operated auction of U.S. dollars for Liberian dollars for monthly government expenditure needs should be implemented as soon as possible. The IMF argued that such an auction was necessary to add transparency to financial markets and to enable discontinuing the practice of selective placements of Liberian dollar-U.S. dollar sales. Such auctions had been used in other countries quite successfully; indeed, the CBL dispatched a team to the Bank of Sierra

---

<sup>2</sup> Such an audit is much less intensive than what was planned for the EU-financed audit, but can be done more expediently.

Leone to observe their auction and thereafter began the implementation of its auction program.

The auction procedures were introduced effectively by the CBL. One feature of Liberia's foreign exchange auction was the inclusion of registered foreign exchange bureaus along with commercial banks, which traditionally monopolize such facilities. The foreign exchange bureaus added bidders to the process, helping increase the competitiveness of the bidding. To ensure fairness, the weekly auctions, which began in July 2004, were transparent and highly structured.

But, by September 2004, the government stopped providing U.S. dollars, and there was nothing to auction. In October 2004, the IMF again emphasized the high priority for the CBL to hold regular foreign exchange auctions, and the CBL agreed. The IMF also emphasized that the Ministry of Finance should use the auction to sell its U.S. dollars to make its domestic payments. Auctions took place with irregularity until September 2005, when the CBL and the IMF agreed that the CBL weekly auctions could be for either U.S. dollars or Liberian dollars, depending on the circumstances. Regular, bi-weekly auctions have been held since March 2006.

Overall, therefore, progress has been made in developing the market, through having broadened the market, and introducing regularity, predictability, and transparency into the process. A number of issues remain, deriving in part from the thinness of the market and—particularly as market participants too develop expertise and credibility—there remains scope for the Liberian authorities to take their foreign exchange market reforms further.

### **Dealing with the Banks**

In December 2003, the three operating banks were severely undercapitalized, and some were technically insolvent because of debts owed by the government. There were other factors such as weak management. While standard best practice is to close insolvent banks or force undercapitalized banks to recapitalize, this would have disrupted the whole banking system, leaving the CBL as the only

bank. Central banks typically do not accept deposits from the general public, so this was undesirable.

As banks were able to remain liquid and operate based on their remittance business—at least for the near term—it was decided to keep banks operating and supervise them intensively. The CBL's banking supervision department received good periodic reports identifying vulnerabilities, and shared these monthly with the IMF.

One of the three banks eventually was so weak that its auditors said that, unless the CBL granted a major forbearance, the bank would have to report insolvency. This led to a major political crisis. A Regulation issued in April 2005—technically a reinforcement of provisions in the Financial Institutions Act of 1999—required banks to report to the public their financial condition. Fearing public reaction, the CBL closed the bank on a Friday. However, some government officials disagreed with the action, and asked the executive governor to reverse it, and re-open the bank on Monday. In protest, the head of banking supervision resigned and issued a public statement. Subsequently, the CBL placed the bank under a form of conservatorship, and is working out its problems.

The chartering of new banks was an issue of considerable discussion at this time. The CBL felt that its licensing procedures were sound, and that it should charter new banks to infuse capital into the system. The IMF argued that foreign interest in new banks in Liberia at this time would be questionably motivated, and that new banks would be naturally risky. Nevertheless, the CBL chartered a new bank in late 2004, and another in early 2005. One of these required closure upon its first examination in August 2005. However, the supervisory action went well, with no government interference.

Two new measures were formulated to enhance the CBL's monitoring capacity, and to develop contingency plans in the event of a banking crisis. First, the CBL developed a system in late 2005 to place CBL bank supervisors in each operating bank. Second, a plan was discussed (but did not need to be implemented) to quickly open a new government-chartered bank in the event of a banking panic. Under this plan, the CBL would staff such a bank and accept deposits,

which would be safely held for the depositor in the CBL's vaults until the panic subsided. While not a long-term solution, the "safe haven" scheme would have offered at least some means for the public to safeguard their funds.

## **Payments System**

Liberia remains a cash-based economy. A major consequence of the civil war was disruption of the system used to make payments to government employees—notably many teachers—in rural areas. Under the system used prior to the civil war, employees were issued checks drawn against the CBL and delivered by government agents. As there were few branches of commercial banks in the rural areas, the government agents, sometimes shopkeepers or persons with other businesses, cashed the checks and delivered them. This system had relatively high transaction costs, since the agents charged for their services.

A priority for the CBL was to provide these government employees with better access to banking services. The only armored car owned by the CBL was destroyed during the civil war, and the CBL had no branches outside of Monrovia. The temporary executive governor commenced plans for CBL branches in 2004, but the CBL and the Ministry of Finance also developed a protected system whereby checks due to government employees could be distributed by Ministry of Finance officials and the employees could then cash the checks immediately with a CBL employee who accompanied the Ministry of Finance official. One option pursued, but delayed because of lack of financing, was the purchase of a mobile bank branch.

Another issue related to the payments system was that the CBL's overseas correspondent banks decided to cancel their relationship with the CBL. This meant that the CBL could no longer make foreign payments through its own means, and it could not invest its foreign currency reserves in safe assets.

Meanwhile, there were court cases against Liberia in a number of countries that might result in the seizure of CBL holdings in banks overseas. In mid-2004, the U.S. Treasury and State Department



secured for the CBL a workable relationship with the Federal Reserve Bank of New York.

## Conclusion

The post-conflict challenges for the CBL were significant. Several general lessons can be drawn from the technical cooperation between the CBL and the IMF:

- sound and credible governance of institutions is a prerequisite for political, economic, and financial stability;
- an immediate audit of a central bank's liquid assets is a prerequisite for starting to establish the credibility of the institution;
- some post-conflict situations are less about dealing with a disaster and more about normal institutional capacity building under difficult circumstances;
- greater transparency of markets and government activities is important, but special treatment of problems in the financial sector requires some discretion.

*Central bank governance:* Governance and management of a central bank is a key issue under any circumstance. Public confidence in government institutions requires especially quick restoration in a post-conflict situation. The IMF helped the NTGL in its deliberations on the position of executive governor of the CBL, and later provided an expatriate “chief administrator” who reports to the executive governor.

*Central bank audit:* The importance of a credible audit of a central bank emerging from a conflict situation, as a prerequisite for starting to establish its credibility, is not always well recognized. The credibility of the audit is much enhanced when the audit is conducted by reputable auditors from outside the country or region. It was important at the time to verify that the CBL had the foreign exchange reserves, cash, and uncirculated currency reported on its books. This audit proved expensive and administratively difficult to obtain, but some interim actions were developed in partnership with the CBL, U.S. Treasury, and USAID to satisfy some of the objectives.

*Capacity building:* Although Liberia was in a post-conflict situation, what the CBL requested in terms of assistance from the IMF was similar to requests received from other sub-Saharan African countries. For example, improving the reliability of the payments system, especially government cash payments in rural areas, was an important priority, but this was not specifically a post conflict issue.

*Dealing with banks:* Great care must be taken in dealing with troubled banks, especially during political unrest or fragility, and where every bank in the system is likely to have problems of one kind or another. While transparency of financial markets is in general key to banks' orderly functioning, public confidence may have to rely upon the market regulators in this environment operating discreetly to avoid a financial panic. It is critical nevertheless that the government be ultimately accountable, and good records of actions are kept. Amongst the priorities, legacy issues, such as incomplete liquidations or failed bank resolutions are important, but secondary to the maintenance of operating banks. If the operating banks are financially troubled, intensive bank supervision is required—sometimes with extraordinary measures. And while supervisory capacity is limited and probably overstretched, there needs to be a particularly rigorous approach to licensing new institutions. Experience shows that the risks of introducing non-premier new banks in such an environment can be high.

*Overall.* All of these lessons stemmed from a comprehensive effort on the part of the CBL to restore its functions and build its capacity to perform and enhance its multiple functions. The CBL's action plan for the tenure of the interim government was viewed as ambitious, but the CBL, with technical support from the IMF, actively sought to achieve it. The technical assistance broadly achieved its objectives, in that the functions of the central bank have been restored and measures taken to identify priorities and directions for enhancements. Under the permanent government elected in October 2005, a new regime is in place at the CBL, and the future promises substantial continued progress.

**JULIA MAJAH-JARTBY**

**K**osovo, with a population of around two million, has been a province of Serbia. Following the conflict with Serbia, the United Nations Security Council (UNSC) Resolution 1244 (June 10, 1999) provided the basis for Kosovo's post-war governance by the UN Interim Administration Mission in Kosovo (UNMIK), and for the eventual determination of Kosovo's future political status. Resolution 1244 also granted the IMF and the World Bank a mandate to deliver TA to Kosovo, even though it is not a member of the two institutions.

Although Kosovo's political status awaits final resolution, since 1999 its economy has been functioning independently from Serbia and Montenegro. Following the collapse of socialism, the province faced major challenges in rebuilding an economy that had been characterized by socialist planning, state-ownership, and low productivity; these problems were then exacerbated by very low investment activity during the decade preceding the 1999 conflict. The UNMIK was charged with the task of establishing institutions that would ably assume civil administration responsibilities and competently engage in strengthening Kosovo's economy. The key challenge has been capacity and institution building, given the lack of skilled people and the significant physical infrastructure destruction.

This chapter discusses Kosovo's experience with institution and capacity building in the financial sector, with technical support from the IMF. Kosovo had little, if any, private banking background prior to the 1999 conflict; bank supervision had to be built from scratch; a virtually new payments infrastructure needed to be put in place; a framework for data collection and analysis had to be established; and staff required training in all these areas.

## **Macroeconomic Background**

While pre-war statistics on the Kosovo economy are incomplete and unreliable, they paint an economy in serious decline. Following a short-lived economic recovery from the ethnic conflict, boosted by significant amounts of foreign assistance and private inflows, economic growth slowed down on the heels of donor withdrawal during the period 2003–2005. In 2005, GDP growth averaged only one-third of a percent; the current account deficit was estimated at some 15 percent of GDP; and the unemployment rate was in excess of 30 percent.

Kosovo's medium-term growth prospects are impaired by weak fundamentals. Economic activity pre-conflict had been centered on mining and metals processing, with output sold at below-cost prices to other former Yugoslav republics. Agriculture was the major employment activity, accounting for about 30 percent of output. Given the extent of the conflict, until recently there had been little opportunity to make much progress in addressing such weaknesses. The major challenge going forward is to ensure a sustainable recovery based on the transition toward a market-oriented economy.

Private sector development has advanced considerably since the end of the conflict, but further progress depends on improving Kosovo's competitiveness. This adjustment process started in 2004, but has produced limited results so far. Moreover, productivity gains have been hampered by the lack of high-quality physical and human capital, as well as dilapidated public utilities and infrastructure. On the positive side, Kosovo's investor friendly regulatory environment has created the potential for private sector-based medium-term economic growth.

Fiscal policy faces numerous challenges. Fiscal consolidation was achieved in 2005—the fiscal deficit was almost halved compared with 2004—helping to avert a payments crisis. However, there is still need to create sufficient fiscal space to accommodate the additional financing requirements expected after the resolution of Kosovo's political status, and to build strong physical infrastructure and human capital.

Rapid credit growth and inefficiencies in the banking system, evidenced by high intermediation spreads, increase the vulnerability of the banking system to shocks. Financial intermediation has been expanding fast, with private sector credit and deposits reaching 23 percent and 40 percent of GDP, respectively, by end-2005. However, rapid credit growth, although starting from a low base, could present a risk for an economy with no lender of last resort facilities. Therefore, strengthening prudential regulation and supervision and enhancing enforcement of banking rules are critical steps to mitigate the risk of a systemic crisis. The recent closure of a distressed bank outside the support of safety nets, and in the context of low capacity and a weak institutional framework, illustrates the challenges going forward.

### **Institutional Framework**

Kosovo had a significant degree of autonomy under the 1974 Yugoslav constitution, which gave the province de-facto self-government. Kosovo was stripped of these rights of autonomy in 1989 by Yugoslav President Slobodan Milosevic, who gave control of most of Kosovo's police, courts, and social, economic, and education policies to Serbia, leading to the open conflict between Serb police and the separatist Kosovo Liberation Army in 1998.

The process of institution building, defined by UN Resolution 1244, evolved mainly during the two to three years after the conflict. In May 2001, the Special Representative of the UN Secretary-General (SRSG), issued a constitutional framework for the Provisional Institutions of Self-Government (PISG). The framework provides for the sharing of the provisional interim management of Kosovo with UNMIK. The PISG, which facilitated the first Kosovo-wide elections in November 2001, comprised:

- The Assembly of Kosovo, which elects the President of Kosovo;
- The Government of Kosovo, with the Prime Minister of Kosovo nominated by the President and endorsed by the Assembly;
- The Judicial System of Kosovo, which is appointed by the SRSG from a list endorsed by the Assembly, after being proposed by the Judicial and Prosecutorial Council.

The Constitutional Framework reserves 26 powers and responsibilities for the SRSG, of which key to economic management are:

- Setting the financial and policy parameters for, and approving, the Kosovo consolidated budget, acting on the advice of the Economic and Fiscal Council;
- Determining monetary policy;
- Establishing arrangements for the independent external audit of the Kosovo consolidated budget;
- Exercising control and authority over the UNMIK Customs Service;
- Exercising final authority regarding the appointment, removal from office, and disciplining of judges and prosecutors;
- Concluding agreements with states and international organizations in all matters;
- Appointing the members of the Economic and Fiscal Council, the Governing Board of the Banking and Payments Authority of Kosovo (BPK),<sup>1</sup> the chief executives of the Customs Service and Tax Inspectorate, and the Auditor General; convening and presiding over the Economic and Fiscal Council;
- Regulating public and socially-owned enterprises after consultation with the Economic and Fiscal Council and the PISG.

### **Framework for Technical Assistance**

Pre-war money and banking was vested exclusively in the domain of the National Bank of Yugoslavia (NBY). The 1974 constitution introduced a short spell of relative autonomy, leading to the development of a banking system: 54 banks operated in Kosovo at the beginning of 1999, with five banks locally incorporated. All banks were licensed by the NBY.

---

<sup>1</sup> With effect from August 24, 2006, the Banking and Payments Authority of Kosovo changed name under UNMIK REG/2006/47 to the Central Banking Authority of Kosovo (CBAK).

In 1999, the BPK was established as an independent body, accountable to the SRSG. Its objectives are to foster the development of financial and payment systems in Kosovo, and to supervise and regulate banks, insurance companies, pension funds, and other microfinance institutions. In accordance with the Constitutional Framework's reserved powers, a Governing Board and a Managing Director are in charge of the BPK.

In line with UNSC Resolution 1244, UNMIK asked the IMF to provide technical assistance (TA) to reform and transform the payments and financial systems. During the last few years, several teams of IMF staff and experts have been assigned to work in Kosovo, in response to specific requests by the BPK, including staffing for the position of Managing Director of the BPK. Technical assistance responsibilities were defined by UNSC Resolution 1244 as "...supporting the reconstruction of key infrastructure and other economic reconstruction." Against that background, technical support from the IMF and other donors or TA providers was focused on laying the framework for fiscal policy, strengthening the financial and payments system, and establishing monetary and trade policies.

Since Kosovo's banking structure and payments system were part of the unified monetary system of the FRY, the first step was to establish a legal framework for the new payments authority, which would also be the supervisory agency. The IMF, in collaboration with the World Bank and United States Agency for International Development (USAID), assisted in drafting Regulation No. 1999/20 on the BPK (recently superseded by Regulation No. 2006/47), and Regulation No. 1999/21 on Bank Licensing, Supervision and Regulation. The legal frameworks for the BPK and its supervisory mandate were adopted on November 15, 1999, enabling the BPK to assume its legal status as the supervisory authority of Kosovo's financial system.

Another major development has been the modernization of the payments system. While before the conflict the legal tender in Kosovo had been the Yugoslav dinar, in practice, the use of the German mark as the medium of exchange had been widespread.

Bank liquidity had gradually shifted from the Yugoslav dinar to the German mark. One of the first important roles of the BPK was to provide, temporarily, German mark deposit and payment services, while defining its leading role in the development of a safe and efficient payments system. With the introduction of the euro, the BPK successfully managed the changeover from the German mark in 2002.

### **Policy Reforms**

A deeper analysis of the economy's evolution after the conflict, *inter alia*, called for the development of strong institutions and human capacity; reliable statistical data; and closer strategic-level coordination between providers for effective TA delivery.

Partnerships with the international community have been a major driving force behind the process of “Kosovarization”, aimed at encouraging qualified Kosovars to work in the Kosovo public administration sector. The building of professional capacities and the implementation of policies aimed at efficient Kosovarization have called for coordinated technical support, which has been readily provided by a number of development partners.

The process of Kosovarization is now in full swing. All the powers and duties of the key institutions, previously given to the international community, have been gradually transferred to, or are in the process of being transferred to, the local authorities. As in the case of other post-conflict situations, Kosovo's economic prosperity depends on well-functioning institutions. In turn, well-functioning institutions depend on a strong sense of local ownership. With the sharing of power between UNMIK and PISG, local ownership of projects has, at times, not been straight forward. At the initial stages of institutional capacity building, the BPK has also struggled to balance capacity building with the efficient use of international advisors, who—unusually for many of the providers involved—have tended in the initial stages to be appointed to line positions. Progressively, all management positions, except that of Managing Director, have been transferred to local counterparts. However, loss of trained staff to the private sector has also plagued the BPK's capacity building efforts,



complicating the process of Kosovization, and this is likely to be a major challenge in the short- to medium-term.

While the international community, led by UNMIK, has assisted in the orderly development of the structures and institutions necessary for the autonomous formulation of economic policies, the reserved powers, including the appointment of governing boards, etc., have at times led to conflicting views between UNMIK and PISG.

The IMF has played a key role in a number of important institution-building measures, including:

- The adoption of laws providing Kosovo with a framework for international best practice in various areas of economic management;
- The establishment of the BPK, charged with the licensing and supervision of banks and, more broadly, the stability of the financial system;
- The modernization of the payments system into an efficient interbank clearing and settlement system.

One of the big successes of the post-conflict period has been the rebuilding of the banking system based on international best practices. When the BPK was established in 1999, there were no operating banks in Kosovo, all pre-existing banks having closed during the conflict. By the end of 2001, seven banks had been licensed (two foreign and five locally-owned), with an aggregate of €520 million in total assets; €26 million in loans; and €492 in total deposits (Table 6.1). The significant increase in banks' loan portfolios from €26 million as of end-2001 to €514 million as of end-2005 carries its own risks, taking into account the nascent culture in risk assessment by the banks—combined with poor corporate governance.

In 2002, the BPK reorganized itself into a more efficient and accountable institution. It closed its 21 branches and sub-branches, paving the way for a greater focus on its core functions. The closure of the branches involved a transfer of about 250 employees to commercial banks, which took over the BPK's regional operations.

The streamlining of the BPK's structure, combined with a modern payments system and stronger banking supervision, went a long way in preparing for the orderly closure of a failed bank in the first half of

2006. The absence of safety nets (lender-of-last-resort and deposit insurance) has, however, continued to present a challenge for bank resolution.

Table 6.1. Total Assets, Loans, and Deposits of Commercial Banks  
(thousands of euros)

	2000	2001	2002	2003	2004	2005
Assets	103,130	519,766	473,715	589,198	812,899	984,412
Deposits*	93,003	492,255	427,194	513,994	694,739	836,657
Loans	3,314	25,916	86,498	232,773	373,668	513,856

Source: BPK.

\* Excludes balances with commercial banks.

Following the closure of BPK branches, a number of reforms were instituted. The BPK:

- embarked on the establishment of international best practices in the supervision of banks (including developing strategies for attracting and retaining qualified banking supervision staff);
- introduced improvements in the procedures governing cash operations;
- established the Electronic Interbank Clearing System to facilitate the transfer of funds and interbank settlements;
- developed appropriate retail payment solutions;
- established systems for strengthening insurance supervision and regulation (including training of staff);
- introduced compulsory third party liability insurance (TPL), as Kosovo's first insurance product (including training of staff to conduct on-site inspections of the insurance companies' TPL book);
- adopted regulations to increase funding requirements for insurance companies and to provide for the liberalization of tariffs for TPL products (in the context of a strong solvency framework);

- introduced accounting and control systems (including the recruitment and training of staff to operate new accounting systems);
- strengthened internal audit systems and engagement of external auditors to improve management of the BPK's financial operations;
- developed the research function of the BPK to provide the financial information needed for the smooth functioning of private markets in Kosovo;
- developed capacity for research strategies in response to market information needs; and
- revised the BPK Regulation to provide for more autonomy, transparency and accountability, and thus, improve governance.

### **Toward Macroeconomic and Financial Stability**

Considerable progress has been made over the last six years in developing an efficient banking system and launching private sector-led economic growth. For example, the banking supervision system recently showed its ability to avert a crisis by closing one of the banks and managing the receivership for the benefit of small depositors. Nevertheless, Kosovo's low levels of productivity and competitiveness, together with the excessively high rate of unemployment, suggest that much remains to be done in order to bring a significant increase in per capita income.

The development of an efficient payments system provided a stable framework for depositor payout during the BPK's first experience with a bank closure. While there is a need to upgrade the capacity and to develop a more integrated system, the current system has been adequate for the size of Kosovo's payments activities.

The BPK has been actively considering all available options for promoting efficient liquidity management by banks. A proposal to issue BPK securities has been deemed unnecessary at this time, in light of the depth of euro money markets, which can be (and are) tapped by local banks.

The BPK's research and statistical functions have been gradually improving. The BPK publishes monthly and quarterly statistical

bulletins and an annual report, which may be accessed by market analysts. In addition, the BPK has recently published the first balance of payments statistics.

### **Relations with the IMF**

Technical support from the IMF and other providers has been instrumental in the process of institution and capacity building. For example, the BPK has significantly strengthened its banking and insurance supervision capacity, although more work is needed to move toward international best practices; the payments system has been modernized, although additional work is needed to expand capacity; the BPK has also established good frameworks for statistical analysis, auditing, and controls. However, the availability of safety nets has recently become a more pressing issue.

Improved provider coordination could make it easier for the PISG to take control, and for the BPK to improve its implementation of TA recommendations. TA absorption has certainly improved, but a reassessment of the TA strategy is required as Kosovo nears resolution of its status.

### **Conclusion**

Kosovo has made significant progress in reforming its financial sector through the use of IMF TA. Key to the financial sector reform process has been the establishment of the BPK, whose operations started in earnest in 2000 when the IMF assumed responsibility for the appointment and supervision of the BPK's Managing Director, and for the administration of TA for the financial sector.

Along the way, capacity constraints have negatively affected the TA program, often leading to slower than envisaged implementation of TA recommendations. Local ownership of reform programs has been, in some cases, impaired by struggles to maintain a balance between the reserve powers of the SRSG and the transitional transfer of powers to the PISG. At the practical level, the BPK has struggled to build local capacity, in part due to the loss of trained staff to the private sector. Appropriate sequencing and prioritization of reforms has been a challenge for TA programs, as well as donor coordination.

With medium-term growth prospects impaired by weak fundamentals, institution and capacity building in Kosovo are becoming increasingly important. In this environment, continued investment in physical and human capital is crucial to ensure adequate policy responses to future macroeconomic challenges.

**Banking Supervision in an Ongoing Conflict: The Case of Iraq****OLIVIER FRECAUT**

**D**evelopment of financial intermediation and other financial services is of critical importance to support economic growth in Iraq. This requires both a banking regulatory and supervisory system in line with best international standards and practices, and sound and efficient financial intermediaries. None of this was in place under the former regime, which was shaped after the Soviet centrally-planned model, with a financial system designed to support a war economy.

Substantial technical assistance (TA) from a number of sources and covering an extensive range of issues was made available to Iraq by the international community in the wake of the March 2003 invasion by the coalition. However, very soon the security situation started to deteriorate, severely impairing TA activities, and to this day there has been no sustained respite that would facilitate the delivery of broad-based technical assistance.

This chapter discusses a specific sub-set of the wider TA program for Iraq carried out by the IMF: prudential supervision of commercial banks. It is meant to illustrate how extenuating security issues, which severely impair progress, sometimes stopping it altogether for a while, can nevertheless be overcome, through continuous adaptation of TA activities and delivery methods.

**Strong Beginning, Followed by an Abrupt Stop  
in August 2003**

Immediately after the end of the war in Spring 2003, substantial TA funds were mobilized for Iraq from a number of sources. They covered a wide spectrum of issues, including the financial sector. In July 2003, in a visit to Iraq, IMF staff explored a wide range of financial sector issues, and identified related TA needs, while the World

Bank and the UN conducted a parallel visit to prepare a joint assessment of financial sector needs. This joint assessment provided a description of the financial sector and a preliminary diagnostic of its condition and of its supervision. These two visits, which identified the sector's needs and proposed priorities for reform in the financial sector in a well coordinated fashion, marked a strong beginning for the involvement of the international community in setting-up an efficient, market-based financial system in Iraq.

The system consisted, in addition to the Central Bank of Iraq (CBI), of (i) two large state-owned commercial banks (Rafidain and Rasheed), accounting for over 90 percent of commercial banking assets and 75 percent of the branch bank network, (ii) four specialized, state-owned banks serving the agriculture, industry, real estate, and social sectors, and (iii) 19 small private commercial banks. With assets of only \$2 billion, the banking system played a marginal role under the former regime both as a provider of resources to the economy and as a store for national savings. But Rafidain and Rasheed had contracted on behalf of the government and were keeping in their books a large part of the country's foreign debt.

The Coalition Provisional Authority (CPA) and the different U.S. government agencies providing technical support for the reconstruction of the country were also significantly involved in financial sector reform. As early as June 2003, a banking supervision expert from the U.S. Treasury had completed a preliminary assessment of Iraq's compliance with the Basel Core Principles for effective banking supervision. The assessment made clear how far Iraq had drifted from international norms and best practices during its years of isolation. It also identified priorities for action, which would form a suitable basis for any TA program.

Work started in earnest on a number of fronts, with multiple contributors. In the financial sector, the key priorities were the establishment of a functional payment system and currency reform. As regards banking supervision, the work appropriately started with the regulatory infrastructure—bank legislation, and the related prudential regulations—and was taken care of mainly by U.S. institutions and the IMF's Legal Department.

A watershed turning point for the worse was the deadly bombing of the UN building in Baghdad during August 2003. An IMF team was in the building, and several of its members were hurt, some of them severely. Travel to Iraq by IMF staff and experts was suspended. This ban, which at the time was expected to be only temporary, continues to be a major impediment for IMF TA work, requiring adjustments both to TA activities and to delivery methods.

### **Laborious Start, but Eventually Successful Delivery of Supervisory Training Outside Iraq (Late 2003 and First Half of 2004)**

The October 2003 Donors Ministerial Conference for Iraq in Madrid provided an opportunity to discuss with the CBI a resumption of the IMF's TA activities, to be henceforth carried out outside of Iraq. The Conference confirmed that banking supervision would be one of the key components of the TA program. To implement it, the approach selected was a partnership between the IMF and the U.S. Federal Reserve System (FRS), in particular the Federal Reserve Bank of New York (FRBNY). Together, the two institutions designed a curriculum for training courses and workshops that would foster the emergence of a core group of professional banking supervisors among the existing CBI staff.

A large-scale, two-week workshop with a broad program, to be held in Amman, Jordan, in April 2004, was developed jointly. A majority of the topics, including case studies and group exercises, were to be covered by the FRBNY, adapted from their internal training curriculum. The IMF, in addition to covering the other topics of substance, was to take care of the logistical arrangements, including funding. The workshop was expected to cover systematically all major supervisory issues, thus providing Iraqi supervisors with a comprehensive overview of the scope of their profession in a market-oriented, open economy, as well as a wealth of reference documents to take back home, including lecture notes, international standards, case studies and exercises, all translated into Arabic.



In the event, the workshop had to be postponed just 10 days before its scheduled start because of the emergence of severe terrorist threats in Amman. Subsequently, it had not only to be postponed again, but also to be relocated out of Jordan. The search for a new suitable venue and appropriate dates was demanding and eventful. Finally, by June, an appropriate venue was found in Manama, Bahrain, with support from the Bahrain Institute for Banking and Finance. The whole team of lecturers had arrived, and an evening welcome reception, including invitations to senior local officials, had been set up, when it was announced that the road to Baghdad airport had been shut down that day, preventing the participants from catching their flight. The Iraqi delegation eventually arrived two days later.

Despite this inauspicious start, the workshop was quite successful. It turned out to be beneficial regarding both substance and the level of interaction between the team of lecturers and the Iraqi participants. For most participants, this was their first trip out of Iraq (and also their first air travel). The obstacles encountered seemed to have strengthened their motivation and their eagerness to learn. This training event in Bahrain, which continues to be mentioned as a key reference point by the Iraqis, was the first major step in capacity building for the CBI in the field of banking supervision.

The workshop also provided an opportunity for planning ahead. At the end of the workshop, subsequent joint IMF/FRBNY training events were discussed and designed in broad terms, with a view to further build-up capacity by raising the level of expertise of Iraqi supervisors, but circumstances would soon delay their actual delivery.

Soon thereafter, there was also an attempt to foster the emergence of a strategic vision among CBI managers and to buttress their ownership of the financial sector reform program, in close coordination with the World Bank. A Joint IMF/World Bank Banking Supervision Symposium, which took place in Cairo in July 2004, aimed at laying out a strategic plan for banking supervision. While the joint IMF/FRBNY training workshops were geared toward raising the immediate operational effectiveness of a relatively large group of Iraqi supervisors, the Cairo Joint IMF/World Bank Supervision Symposium had a broader perspective, a longer time horizon, and involved more senior Iraqi counterparts with responsibility for policy-making. The

Symposium provided Iraqi counterparts with information on international best practices for banking supervision in other parts of the world and practical guidance, with a view to fostering the development of a strategic plan with strong ownership by the authorities.

### **Second Temporary Interruption (Second Half of 2004)**

By the summer of 2004, however, the security situation in Iraq had further deteriorated. It also became increasingly apparent that the overall absorptive capacity of the CBI was being stretched by the large number of issues requiring their attention, while the basic aspects of key issues had not yet been dealt with completely, particularly with regard to currency reform, monetary policy, and payment systems. In addition, the hoped-for strategic plan for banking supervision had not materialized. During the September 2004 Annual Meetings, the decision was made, in concurrence with the Iraqi counterparts, to temporarily suspend the banking supervision component of the financial sector TA program and give full priority to the modernization of the payment system. Key reforms were needed in order to put in place the basic infrastructure to support financial transactions and activity.

### **Progressive Resumption (2005)**

Whereas the IMF had decided to suspend its activities in the field of banking supervision, all U.S. institutions were proceeding with theirs, and pursuing the implementation of the TA program. This included seminars, courses, and workshops on banking supervision, both in Baghdad and outside of Iraq (particularly in Jordan) as well as much-needed training on accounting issues. The arrangements put in place by the U.S. Baghdad-based advisors consisted of preliminary courses, delivered in Baghdad to large groups of CBI staff, with little selection among the participants. The courses concluded with a demanding written exam administered by the U.S. advisors. The best performers were then sent abroad to attend a more advanced course on the same topic, delivered by a wider set of lecturers, in particular from the FRBNY. This arrangement proved particularly effective in raising participants' motivation, implementing a fair and transparent selection process for training opportunities abroad, instilling a sense of pride

among the successful candidates, and fostering the emergence of a core group of Iraqi banking supervisors.

The IMF resumed its involvement progressively. Initially, this was done through off-site contributions to the discussions held by the U.S. partners on the technical details of the ongoing TA program, and later through the delivery of lectures during a workshop on credit risk analysis organized by the United States Agency for International Development (USAID), its contractors, and the FRBNY in Amman, in late April/early May 2005. IMF participation focused on the international aspects of credit risk, in particular the international norms, standards, and practices in this field.

The workshop covered extensively the technical aspects of credit risk and its management, under the guidance of the FRBNY. The mix of lectures, in-class exercises, and group exercises (one-third each) was right on target for the audience. While retaining all key concepts, the case studies and exercises had been carefully reviewed for simplification and removal of U.S.-specific aspects, a marked improvement as compared with the Bahrain workshop one year earlier. The Iraqi banking supervisors confirmed their interest in practical examples and case studies, and became more at ease with group exercises and open discussions of issues. Their progress was clearly discernable and highly encouraging.

The workshop also provided an opportunity to engage in policy discussions on banking supervisory issues with relevant CBI managers. These covered the legal and regulatory framework, as well as the alleged inadequacies in the new Banking Law of 2004, including inaccuracies in its translation from English to Arabic. It appeared that at the CBI, strong command economy instincts were lurking below the surface, so that on all issues, they spontaneously selected the most interventionist approach. For instance, they insisted that the central bank should review beforehand and give prior approval for large loans by commercial banks. Their inclination was also restrictive on licensing of foreign banks, in contrast to the liberal approach included in the Banking Law. Finally, they also wanted to participate in any negotiations on the price paid by foreign banks to acquire equity interests in existing Iraqi banks. On all these points, however, they were open to discussion, and ready to take on board

new approaches. Issues pertaining to problem banks were also discussed, particularly in relation to the need for an increase in banks' minimum capital.

### **Completion of the Initial Cycle of Supervisory Training (Early 2006)**

At the end of the April/May 2005 Amman workshop, a consensus was reached that another two-week course outside of Iraq would be needed to complete the initial training cycle for the emerging core group of supervisors. The course would bring together and complete the knowledge accumulated during the previous training. To this end, it would focus on the financial analysis of commercial banks, including the computation of key ratios—particularly the Basel I capital adequacy ratio—and assets-liability management, including interest rate risk and foreign exchange risk.

With a view to combining the lessons drawn from all previous events, the IMF agreed to coordinate and finance the workshop. At the same time, the FRBNY would provide the key contributions of substance for the course, and BearingPoint/USAID advisors in the field would set up and deliver preparatory courses in Baghdad, including a new screening and selection of the participants. The target date established for the course was September or October 2005, and the preferred location was in an Arab-speaking country.

Severe security issues again interfered with these plans. After Amman, Jordan, had been selected as the location for the workshop and logistical arrangements were well underway, suicide bombers blew themselves up in several hotels in that city on November 9, 2005. This included the hotel where the group had held a farewell luncheon the previous time. Once again, the team had to both relocate and reschedule a joint workshop. After exploring a range of possibilities, it was decided to choose Istanbul, because of the availability of direct flights from Baghdad and the willingness of the local authorities to grant visas to the Iraqis.

The Istanbul joint workshop took place in January/February 2006, covering financial analysis of banks. As envisaged, the workshop

completed the initial training cycle for the core group of CBI supervisors that had progressively emerged and then been confirmed over time through the selection process and the string of workshops. More than ever before, the Iraqi supervisors appeared focused, eager to learn, and fully aware of the importance of their role. Their involvement and participation in the discussions and group exercises was excellent. Most of the workshop was attended by two key CBI managers, the Deputy Governor and the department Director in charge of banking supervision. Their presence made it possible to assess and discuss the participants' progress and needs, and to plan for the next steps in the program of technical cooperation to build up the CBI's banking supervisory capacity.

### **New Approach: Remote Supervisory Arrangements (From Spring 2006)**

The completion of the initial cycle of supervisory training provided the opportunity to reassess the joint IMF/FRS TA program. It had become apparent that the Iraqis had become increasingly apt at mastering supervisory concepts, and that they dealt remarkably well with case studies and exercises in the comfort and security of conference facilities away from Baghdad. However, at the same time, there were growing doubts about the range and scope of actual supervisory work in Iraq in between training courses. Inputs received from Baghdad were scarce and rudimentary, suggesting that the main priority should temporarily be shifted to the practical implementation by Iraqi supervisors of the vast theoretical knowledge they had accumulated so far.

This would have led under normal circumstances to the assignment of a resident advisor on banking supervision. The advisor, to be based in Baghdad, would have reviewed on a daily basis, together with bank supervision managers, the actual work and outputs produced by Iraqi supervisors, and provided them with feedback and practical guidance for improvement. Due to the continuing unsettled security situation in Iraq, this is not feasible for the time being for IMF employees and experts. Even the Baghdad-based BearingPoint/USAID advisors are

severely constrained in their movements and their work by security considerations that slow down progress substantially. To preserve the momentum generated by the training provided so far, and accelerate the buildup of supervisory capacity, an alternative arrangement has been designed for a transition period.

The new approach is a temporary set-up for remote monitoring of actual performance in banking supervision. This will be done through electronic communications, videoconferences, and periodic meetings outside of Iraq, but in the region. The remote banking supervision set-up replicates, albeit on a limited scale, the work of a resident advisor in reviewing the actual work and outputs produced by Iraqi supervisors, and in providing them with feedback and guidance, both for off-site and on-site supervision.

As part of this set-up, and in direct preparation for the first meeting, on-site and off-site supervisors were asked to provide, through electronic communications coordinated by the Baghdad-based BearingPoint experts, samples of their actual work outputs. The documents forwarded to Washington were worryingly basic and incomplete. The FRBNY then provided a template from an inspection report for a small community bank in upstate New York, which was translated and forwarded to Baghdad. It was relied upon as a model by the Iraqis to regroup all their findings about two specific banks. In itself, this collection and ordering endeavor marked some significant progress in the working of the CBI. The resulting two “reports” were to be reviewed in detail during the first regional meeting by the authors and the team of international experts.

The authors were subsequently expected, upon their return to Baghdad, to follow up on the findings and recommendations reached during the discussions, revisit and improve their reports, and also brief their colleagues. Once the authors had passed on the practical lessons they had learned, work would start in Baghdad on another set of supervisory reports, which would hopefully be of a better quality. Upon completion, the best among this new batch of reports would be selected by the IMF and the Baghdad-based U.S. advisors,

translated, and their authors would be invited to travel abroad and join the next regional meeting for a common review and discussion of the reports.

To set the ground for financial sector surveillance work, the CBI was also urged to start working immediately on the computation of the IMF's Financial Soundness Indicators for Iraq. At this preliminary stage, this involves little more than collecting and aggregating the balance sheets and income statements for each and every bank in Iraq. Beyond the long-term goal of developing a surveillance capacity, immediate results also revealed serious gaps—lack of data on income and expenses—and anomalies—huge unexplained suspense and sundries accounts—which require immediate attention.

Logistical difficulties related with security issues again delayed these plans. The first meeting, scheduled to take place in Beirut in June 2006, was postponed at the last minute because of a sudden worsening in the security situation in Baghdad, which made even the trip to the airport too dangerous for staff. The first meeting was then rescheduled for September 2006, again in Beirut, but hostilities erupted shortly thereafter in Lebanon. Despite the difficult circumstances, the IMF and its FRS partners remained fully determined to implement this new approach. The first of these new workshops eventually took place in Bahrain in November 2006; a second followed, again in Bahrain, in March 2007, and a third, this time in Cairo, Egypt, during July 2007. Each time, the on-site and off-site reports on actual banks prepared by the Iraqi supervisors, and reviewed in details during the workshops, were of markedly improved quality, confirming the emergence, within the central bank of Iraq, of a group of professional supervisors that will be in a position to serve their country well in the future.

## **Section II**

# **Implementing Monetary and Financial Policies**



*This page intentionally left blank*

**Surveillance and Technical Assistance  
Working Together: Modernizing  
Monetary and Financial Policies in  
Guatemala**

LUIS JÁCOME

Guatemala was a pioneer country in requesting to participate in the IMF and World Bank's Financial Sector Assessment Program (FSAP). The FSAP, which was completed by September 2000 in an environment of close cooperation with the country's economic team, aimed at identifying: (i) the linkages between macroeconomic performance and the health of the financial system; (ii) the strengths, risks, and potential vulnerabilities in the financial system that could have macroeconomic consequences; and (iii) the measures required to reduce these risks and make the system more resilient to crises.

The FSAP was requested at a time when Guatemala had been hit by a number of external and policy-induced shocks that had weakened the condition of the financial system. Large capital inflows materialized after Guatemala signed a peace agreement in December 1996, which ended a civil war that had lasted more than 30 years. The resulting increase in bank deposits fueled a credit boom, which took place in an environment of weak prudential regulation and supervision. In 1998, however, a number of exogenous shocks—mainly terms of trade deterioration, severe weather conditions, and the international financial turmoil—produced a stop and reversal of capital inflows. This situation was then exacerbated as a result of the political uncertainty associated with the 1999 presidential electoral campaign. The adverse effects of these exogenous factors were aggravated by lax monetary and fiscal policies aimed at fostering economic growth to underpin the benefits of the peace agreement. To cope with the subsequent mounting pressures on the domestic currency, the Bank of Guatemala (Banguat) started to intervene in the foreign exchange market to moderate the quetzal depreciation and tightened monetary policy. However, the real depreciation of the quetzal and the hike in interest rates unveiled major weaknesses in a

number of financial intermediaries, which required financial assistance from the Banguat.

Under the FSAP, a broad-based strategy was designed to prevent a further deterioration of the financial system and eventually a major crisis and, in general, to strengthen financial and monetary policies. The strategy included both institutional and operational measures to boost the autonomy of the Banguat and the Superintendency of Banks and Insurances (SBI), and to improve the effectiveness of their policies. These recommendations laid the ground for the subsequent provision of technical assistance by the World Bank and, in particular, the IMF.

This chapter aims at examining Guatemala's modernization of financial and monetary policies that followed the 2000 FSAP. The proposed analysis is relevant for a number of reasons. First and foremost, it is a case that stresses the benefits of integrating surveillance and technical assistance work. Second, it shows the fruits of the cooperation between the World Bank and the IMF in the provision of technical assistance to their member countries. Third, Guatemala is a good example of a country that adopted broad-based structural reforms with the aim of underpinning the stability of its financial system and the autonomy of monetary policy. And fourth, it illustrates the experience of a non-emerging economy in transition to inflation targeting (IT), offering an additional angle to the existent IT literature, which largely focuses on industrial and emerging countries.

The rest of the chapter is structured as follows. The first section provides a summary of the 2000 FSAP diagnosis and the main recommendations. The second section takes stock of the key financial reforms adopted by Guatemala with the aim of reducing the vulnerabilities of its banking system and strengthening the institutional foundations to deal with potential banking crises. The institutional and operational steps adopted by the Banguat to modernize monetary policy are described in the third section. The final section fleshes out key elements of Guatemala's future reform agenda.

## **Brief FSAP Diagnosis**

The FSAP characterized the Guatemalan financial system as “quite fragile.” By end-2000, nonperforming loans in the banking system were increasing without appropriate provisioning, thereby leading to a deterioration of its capital adequacy.<sup>1</sup> Five small banks had accumulated mounting liabilities with the Banguat, exceeding several times their book capital. Weaknesses in the financial system were mostly the result of structural flaws in prudential regulation but also of deficient supervisory practices. The lack of a consolidated approach to the supervision of financial conglomerates and, in particular, the existence of unregulated financial intermediaries—most notably offshore institutions—were the key regulatory caveats.<sup>2</sup> As a result of all these weaknesses, compliance with the Basel Core Principles for Effective Banking Supervision was poor and, in practice, any assessment of the soundness of the financial system would inevitably lead to wrong conclusions and, specifically, to an overestimation of its solvency.

The FSAP also stressed the lack of both an incentive-compatible financial safety net and an appropriate institutional framework for bank resolution and restructuring. Thus, the SBI was restricted to managing banking crises and, if necessary, conducting a smooth exit for troubled banks. In practice, banks’ liquidity and solvency problems were tackled using Banguat resources, and hence based on moral hazard-prone measures. The Banguat’s involvement in addressing banks’ distress tended to induce short-run macroeconomic instability. Behind the scenes, there was a legal framework that did not empower the SBI to introduce and enforce prompt corrective actions on a timely basis and also restricted SBI’s abilities to execute a smooth resolution of troubled banks.

On the monetary side, the FSAP found an obsolete institutional framework that hindered the effectiveness of monetary policy. The

---

<sup>1</sup> The financial system was dominated by commercial banks, which accounted for nearly 90 percent of the regulated financial intermediaries.

<sup>2</sup> Deposits in offshore institutions were estimated to be about one third of the onshore system.

institutional underpinnings of monetary policy had been mostly established during the 1940s in the context of the prevailing international economic order, which implied that monetary legislation was framed for an environment of fixed exchange rates and interest rates, and low capital mobility. The legal framework for monetary policy featured three important shortcomings that had serious effects for the Banguat: (i) a policy objective that did not envisage a commitment to price stability; (ii) a lack of political autonomy; and (iii) no accountability requirements and limited disclosure obligations. The first two shortcomings were incorporated into the 1985 constitution in relation to the Monetary Board (MB)—the governing body of the Banguat and the SBI.<sup>3</sup> On the positive side, the Banguat was prohibited—also via the Constitution—from extending direct or indirect credit to the public sector.

The FSAP noted other distortions affecting the effectiveness of monetary policy, including the existence of open-ended and highly discretionary lender-of-last-resort (LOLR) facilities and an inappropriate payments system that featured considerable operational risks. The Banguat was also accumulating a significant negative net worth that reached approximately 8 percent of GDP in 2000. This was an additional constraint on monetary policy, as raising interest rates would exacerbate Banguat's financial losses.

### **Building a More Solid Financial System**

With the technical support of the World Bank and the IMF, the SBI sketched a broad-based reform strategy aimed at addressing the most urgent vulnerabilities and at laying the ground for a gradual strengthening of the financial system. As a first step, the MB authorized the SBI to take action for the resolution of three small

---

<sup>3</sup> The Constitution requires the MB to focus on “formulating monetary, exchange rate, and credit policy, and to preserve the liquidity and solvency of the banking system, securing the stability and strengths of national savings” (Article 133). It also establishes the structure of the MB, which is comprised of the following members: its president (who is also President of the Banguat), the ministers of Finance, Economy, and Agriculture, and four additional members appointed each by the legislature, the commercial banks' association, the private enterprise association, and the largest public university (Article 132).

insolvent banks, representing about 7 percent of total deposits, and to impose a program of recapitalization on banks operating under financial stress. Taking a long-term perspective, the SBI drafted a new Banking Law and a new Law of the SBI. Both pieces of legislation were approved by the Guatemalan Congress in 2002.<sup>4</sup>

While closing insolvent banks was a step in the right direction, the modality chosen by the MB was not efficient. This, in part, reflected the absence at that time of a suitable institutional arrangement to address the resolution of failing banks in a non-traumatic manner. Initially, the Banguat had extended generous liquidity assistance to troubled banks, without succeeding in bringing them onto a sound financial footing. Then, fulfilling an MB mandate, the SBI appointed conservatorships to the failing banks and, with the aim of preventing contagion to other banks, the Banguat made available an open line of credit to pay deposit outflows from these banks—which was equivalent to offering a general deposit guarantee. In the end, the Banguat paid virtually all deposits and acquired in exchange a portfolio of assets of dubious quality, which inevitably hurt its already weak financial position. From a macroeconomic perspective, the Banguat stepped up open market operations to mop up the monetary expansion derived from open-bank assistance, and hence, only a moderate impact on inflation occurred. However, honoring deposit withdrawals in the intervened banks with the Banguat's money was only possible given the idiosyncratic nature of the banking crisis.

The presumption that a large crisis could not be handled without inflicting considerable costs on the Guatemalan economy encouraged the government to improve the legal framework to prevent and address banking problems. The new legislation introduced limited LOLR provisions, which restricted the Banguat to cope exclusively with banks' liquidity problems. It also made operational the existing limited deposit insurance and expanded its coverage. In addition, the new law created a financial trust fund to support failing bank's mergers and closures. As a key innovation, the legal reform framed the institutional setting to conduct purchase and assumption operations so as to facilitate more efficient market exit solutions.

---

<sup>4</sup> The Congress also approved AML/CFT legislation in 2001 and 2005.

The new legislation also addressed structural weaknesses in prudential regulation. It raised the regulations for loan classification and provisioning and for monitoring connected lending closer to international standards. To help the new regulations work, the legal reform envisaged the creation of a centralized credit information system and reinforced the powers of bank supervisors to allow them to enforce the new regulations. In addition, the new law merged off-site analysis and on-site inspections into an integrated framework and, in particular, expanded the powers of the SBI to execute surveillance of financial conglomerates on a consolidated basis. The legal authorization for conducting on-site inspections and off-site analysis of offshore banks was a milestone in the new legislation. Meanwhile, the SBI established a program to strengthen capital in stressed banks, which raised the system's risk-weighted capital-asset ratio above the 10 percent minimum requirement.

### **Enhancing the Effectiveness of Monetary Policy**

Immediately after the completion of the FSAP and in close cooperation with IMF experts on monetary issues, the Banguat launched a broad-based monetary policy reform. The reform was aimed at providing the institutional underpinnings for a more independent monetary policy focused on achieving and preserving price stability.<sup>5</sup> The new legislation was passed by Congress in 2002 and laid the ground for a gradual transition from the current money-based regime to IT. More recently, the Banguat adopted operational changes in order to enhance the effectiveness of monetary policy execution.

The cornerstone of the monetary reform was a new central bank law that replaced the 1940s' legislation. The new Law of the Bank of Guatemala strengthened the institutional framework for the formulation and conduct of monetary policy and simplified the

---

<sup>5</sup> The conventional wisdom claims that enhancing central banks' independence is fundamental to defeat inflation and achieve price stability, which explains why many industrial and emerging economies have granted broad independence to central banks.

previous cumbersome monetary legislation.<sup>6</sup> However, the new legislation also had to reconcile the modernization of monetary policy with the limitations imposed by the Constitution, namely the lack of Banguat's political autonomy and the definition of a policy mandate that does not include price stability as the main objective of monetary policy. The enhancement of the Banguat's instruments' independence and the introduction of transparency and accountability requirements were the key innovations of the new legislation.

All in all, the institutional reform of monetary policy granted the Banguat greater legal independence, which allowed it to operate with more autonomy from the government.<sup>7</sup> Figure 8.1 puts in a quantitative perspective the change in the Banguat's autonomy as a result of the legal reform, and compares Guatemala with the rest of the Latin American countries. It clearly shows that the monetary reform increased the Banguat's autonomy, but still left Guatemala ranking below the majority of countries in the region because of the limitations imposed by the Constitution.

Based on its enhanced institutional strength, and with IMF technical support, the Banguat started in 2004 a gradual shift from a money targeting regime to IT. Shifting to IT was a priori a complex endeavor in a developing country like Guatemala that does not have the same technical and operational expertise as the industrial and emerging economies. Thus, the Banguat chose a gradual approach, which entailed first building the blocks that would allow it to later adopt IT on a more solid base. The new monetary policy regime has been framed based on a structured forecasting and policy analysis system (FPAS), which is currently under construction. In preparation for launching the new policy regime, the Banguat also has started to

---

<sup>6</sup> The new Law of the Bank of Guatemala substituted the previous Law of the Bank of Guatemala, the Monetary Issuance Law, and the Transitory Law of the Exchange Regime. A fourth piece of legislation, the Monetary Law, remained because it was established by the Constitution.

<sup>7</sup> In Latin America, the empirical evidence shows that there is a negative correlation between legal central bank independence and inflation. See Luis Jacome and Francisco Vázquez (2005) "Any Link between Legal Central Bank Independence and Inflation? Evidence from Latin America and the Caribbean," IMF WP/05/75.

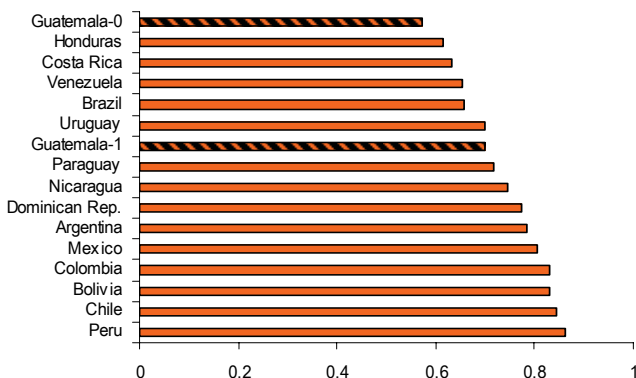


modernize its operational framework for the conduct of monetary policy.

The FPAS comprises a framework that generates data analysis, short- and medium-term forecasting models, and risk and policy analysis. Building the FPAS required the Banguat to commit a considerable amount of time and human resources. The FPAS database has been upgraded to ensure uniqueness and consistency and has been made accessible to all departments in the Banguat. The database is now in the process of being integrated by a simple automated system of monitoring reports.

Figure 8.1. Guatemala: Legal Central Bank Independence <sup>1</sup>

(Guatemala pre-reform and post-reform and Latin American countries)



<sup>1</sup> Calculations based on Cukierman's index (see Cukierman, 1992, Central Bank Strategy, Credibility, and Independence: Theory and Evidence, MIT Press), plus additional criteria that mainly capture accountability and transparency provisions (see Luis Jácome and Francisco Vázquez, 2005). The index varies in the scale from 0 to 1, with higher values corresponding to greater legal central bank independence. Guatemala-0 = pre-reform evaluation and Guatemala-1 = post-reform evaluation.

Inflation forecasting has been significantly improved by upgrading the existing short-term forecasting models and by building a structural medium-term core projection model. While short-term models have

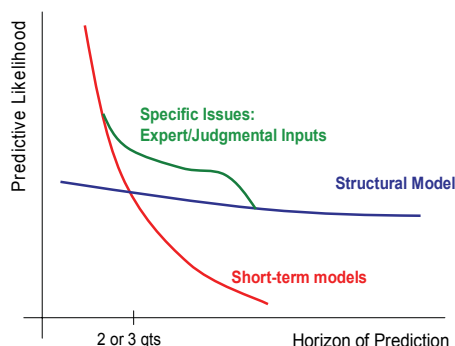
been extended to include multivariate models—such as vector autoregressions and a wider set of variables—to provide a more accurate forecast in the short run, the structural model will offer a consistent framework to understand and discuss monetary policy.

The integration of short- and medium-term forecasts will allow the Banguat to take decisions and to formulate a pre-emptive monetary policy based on a thorough understanding of current economic developments. The integration of both types of models also implies understanding their complementarities, which become critical when considering the horizon for decisions (see Figure 8.2). Soon, the Banguat will be in a position to simulate alternative scenarios to sort out the trade-offs that monetary policy faces, to be more precise about how monetary policy works, and to provide consistent policy advice based on the transmission mechanism of monetary policy for the medium term. Policy advice should also be based on discussions of medium-term developments and their contingencies, while taking uncertainty into account.

At the same time, the Banguat has put in place a broad communication strategy. Communication with the market is crucial given that inflation targets are not observed all the time, and because in a small and very open economy like Guatemala, the markets are used to focusing primarily on exchange rate trends as the key driver of inflation expectations and performance. The Banguat's strategy includes both specific (e.g., seminars, governor's speeches) and general channels of communication (e.g., reports to the Congress, press releases). The former is helping the Banguat to create a substantial support group for its policy among interested parties, while the general channels of communication will display the Banguat's competence and help build confidence on its ability to drive inflation to a price stability environment.

Progress has been slower in building a more effective framework for the conduct of monetary policy. The Banguat is in the process of building an operational framework that comprises banks' liquidity forecasting and management, the use of a short-term interest rate as its

Figure 8.2. Integration of Short-Term and Structural Forecasting Models



policy rate, and a policy of signaling to the market the stance of monetary policy. In the meantime, the Banguat uses open-market operations as its main policy instrument, although they are not always conducted on the basis of market criteria. On the other hand, with the technical cooperation of the IMF and other multilateral institutions, the Banguat has upgraded the quality of its payments system by establishing a real-time gross settlement system.

### Agenda for the Next Few Years

Following the FSAP, Guatemala went through far-reaching institutional reforms. Despite the progress achieved over the last five years, there is still scope for further strengthening of the foundations to preserve the stability of the financial system.

- The deposit insurance system provides very limited coverage—equal to Guatemala’s per capita GDP, which is rather small when compared on a worldwide basis and with Latin American standards (three times per capita GDP, on average). In addition, the deposit insurance system is under funded (it covered less than two percent of total deposits as of end-2005).
- The framework for bank resolution has limited operational capacity, given that the capitalization trust has almost no resources to finance possible purchase and assumption operations—or any other form of bank restructuring strategy—in a country where public debt issuance must be approved by Congress. There are also little alternatives in the law to handle more systemic bank failures.

- Banks' risk management practices require improvement, in particular to address and monitor foreign currency-induced credit risk, which is important because of the partial dollarization of the Guatemalan financial system (consolidating on-shore and off-shore activities).
- Consolidated financial supervision needs to be upgraded, given the important presence of offshore banks. Consolidation should also include cross border transactions because of the increasing integration of the Central American region.

There is no room for complacency in terms of monetary policy either. Guatemala still faces the challenge of controlling inflation and achieving price stability. Nonetheless, this may be a difficult endeavor in a country that features a record of low economic growth (less than three percent during 2000–2005). Hence, the Banguat can be expected to struggle to further reduce inflation while simultaneously minimizing an adverse impact on growth.

Efforts to reduce inflation should be based upon stronger institutional underpinnings, strengthened capacity building, more appropriate operational capabilities to execute monetary policy, and further progress in achieving transparency. The IMF has been providing technical support in most of these areas. However, while additional legal reforms are desirable, in particular to define an unequivocal mandate to the Banguat and to strengthen its political autonomy, the chances of their approval are slim as they require a constitutional amendment.<sup>8</sup> Thus, a second-best alternative might be that the government and the Banguat sign a protocol tackling these institutional weaknesses. This arrangement will bear fruit by enhancing the Banguat's credibility, a *sine qua non* condition for maintaining an effective monetary policy stance. From an operational perspective, the Banguat has to develop greater expertise in forecasting banks' liquidity, which forms the basis for effective liquidity management and monetary policy signaling, and should also stick to market-based criteria when implementing open-market operations.

---

<sup>8</sup> Any constitutional amendment requires a qualified majority of two thirds of the total number of congressmen and a subsequent endorsement in a national referendum.

## Achieving Exchange Rate Flexibility: The Challenges of Egypt's Ongoing Experience

MOHAMMED EL QORCHI

Egypt has a deep banking system, a much smaller, but still sizable stock exchange, and a relatively small insurance, mutual fund and contractual savings sector. There are 39 banks operating in Egypt and the banking sector predominates, as evidenced by its role in mobilization of funds and payments.

The public sector has played a dominant role in the Egyptian economy since the 1950s, including in the financial sector. The dominance of the government throughout the financial system significantly affects the functioning of Egyptian markets, which perpetuates market distortions, increases the vulnerability of the financial system, and retards economic growth. Despite the recent privatization efforts, the banking system is still concentrated in the hands of a few government banks that account for more than half of bank deposits.

Egypt's economic and financial challenges have called for far-reaching reforms to liberalize the economy, improve its efficiency, and accelerate growth. Recent years have seen considerable institutional strengthening of the Egyptian financial system. The legislative underpinnings of supervision have been improved and technical aspects ranging from payments mechanisms to the trading of securities have been modernized. Restrictions on financial markets have been progressively eliminated and participants have become somewhat more competitive, with a growing presence of foreign ownership and management. Steps have also been taken to strengthen the enforcement of creditor rights and improve credit information.

More recently, significant progress has been made in reforming the exchange rate regime and strengthening the banking sector. The

exchange rate has been allowed to move to a more flexible regime, and the process of privatizing banks has been firmly engaged.

The sale of Bank of Alexandria was scheduled to be completed by end-2006. The authorities are merging two of the remaining three state banks and intend to restructure and recapitalize the resulting two state banks over the next three years.

Progress has also been made in reinforcing the CBE's monetary policy implementation, and modernizing its monetary policy instruments and money markets. The monetary framework has been revised to ensure consistency with the change in the exchange regime. Efforts are underway toward the adoption of an inflation targeting framework in the medium term, and strengthening further the central bank's capacity to conduct monetary policy. The CBE is revamping its monetary policy strategy in preparation for the adoption of inflation targeting.

The IMF has accompanied Egypt's efforts in enhancing the Central Bank of Egypt's capacity in various areas. IMF technical assistance (TA) has covered monetary and exchange rate operations, bank supervision, bank restructuring and financial modernization and reform. IMF TA has become more focused since the completion in 2002 of the Financial Sector Assessment Program (FSAP), and more recent renewed interest in financial reforms. Long term and peripatetic experts in exchange market operations assisted in enhancing CBE capacity during the move from the exchange rate peg to the currency band and more recently to a more flexible exchange rate. The experts helped the CBE reinforce its capacity in the area of monetary policy strategy and implementation, with the change of the exchange regime, and in the preparation of an inflation targeting framework. Egypt is also a recipient of financial sector TA provided by other bilateral and multilateral institutions.

The paper describes the exchange rate regime in the 1990s and discusses the factors underlying the move from the peg to an exchange rate system with a band (2001-2002). The next section describes how the difficulties related to a fixed exchange rate regime precipitated the

transition toward a more flexible rate. Finally, the paper reviews the challenges posed by the adoption of a more flexible rate and the authorities' efforts to improve the functioning of the new regime and overcome the various obstacles in the context of Egypt's financial reforms.

### **Developments in the Exchange Market and Policy Responses in the 1990s and Early 2000s**

During the 1990s, the primary objective of the CBE with respect to monetary policy was to “ensure the stability of the Egyptian currency,” even though developing or fostering the national economy was also listed as an objective. The “stability of the Egyptian currency” had an ambiguous meaning. It was understood to refer to domestic price stability, although at almost all times since the promulgation of the 1957 banking law it also included fixing the nominal exchange rate of the Egyptian pound at a precise rate or, more recently, within a band against the U.S. dollar. The simultaneous objectives of keeping the exchange rate fixed while maintaining price stability were achieved through the management of reserves and through restrictions on foreign exchange transactions. The CBE described the objective of its monetary policy as pursuing price stability by targeting M2 growth (its intermediate target), usually aiming for it to grow in line with nominal GDP based on expected growth and desired inflation. Beginning in 1991, excess reserves of the banking system as a whole were used as an operational target to achieve the desired growth of M2. The CBE continued to use M2 and excess reserves as its intermediate and operational targets, respectively, until it departed *de jure* from using the exchange rate as a nominal anchor in 2003.

Legally, the CBE is independent, but *de facto* the Government had some influence on its decisions. During the 1990s, the CBE succeeded in reducing the inflation rate from around 20 percent to the low single digits for a sustained period. In early 1991, a reform program sought to enhance market forces in financial markets and monetary policy implementation. T-bill auctions were introduced, bank lending and deposit rates were liberalized, and (later) credit ceilings on bank lending were removed. The reserve requirement ratios were reduced

on both domestic and foreign currency deposits. Real interest rates increased as inflation fell, and the share of foreign currency deposits in broad money declined significantly. However, the passivity of monetary policy and the ineffective use of monetary policy instruments did not prevent a surge in credit and a decline in net foreign assets.

## **Currency Peg**

During the 1990s, the Egyptian pound was pegged to the U.S. dollar.<sup>1</sup> In the context of the peg, the inconsistency of macroeconomic policies and other exogenous factors helped to give rise to difficulties in the external sector. While exchange market intervention was periodically sterilized during the early 1990s, this was not generally the case later in the decade, and monetary conditions tended to reflect exchange market intervention. In fact, in 1997 Egypt started to incur substantial overall balance of payments deficits, largely reflecting developments in the capital account as well as shocks to tourism activity. Considering the prevailing rigidities, the peg to the U.S. dollar led to an appreciation of the pound in real terms during the late 1990s.

A considerable part of the exchange market intervention was financed by the central bank, with net official reserves falling from US\$20.3 billion at end-June 1997 to US\$14.2 billion at end-June 2001. Commercial banks were also apparently pressured to draw down their own net foreign assets to meet client needs, with banks' NFA falling from US\$7.7 billion to US\$1.4 billion over the same period. While banks' sales of dollars were initially from a long foreign currency position, they eventually incurred short dollar positions well in excess of prudential limits. To clear these short positions, the central bank sold commercial banks about US\$3 billion in late 2000 and early 2001 on the understanding that these funds would be reinvested at the central bank.<sup>2</sup>

---

<sup>1</sup> During the 1990s, the exchange rate of the LE was 3.39 per U.S. dollar.

<sup>2</sup> This policy left reported official NIR unchanged, even though part of the overall amount was now being used to satisfy banks' net open position requirement.



Continuing sales of foreign currency by the CBE under the pegged exchange rate system led to a substantial depletion of the foreign currency reserves. The amounts sold by the CBE decreased substantially during 1997–2002, and sales had to be halted at the beginning of 2003. Public sector banks were the main beneficiaries of CBE intervention.

The authorities resorted to direct interventions on foreign exchange transactions in the late 1990s and early 2000s. In particular, following the East Asian crisis of 1997, the central bank instructed banks to lend in foreign currency only to those who had an adequate source of foreign exchange earnings. Banks had to restrict their credit facilities for import finance, and traders had to self-finance the total value of their imports in Egyptian pounds.

### **Currency Band**

As pressure on the currency and foreign exchange reserves continued to build, the authorities made a change in Egypt's exchange rate policy on January 30, 2001 by moving to a pegged exchange rate within horizontal bands. Initially, a band of  $\pm 1$  percent was established around the central rate, which was set at LE 3.85/US\$. Subsequent shortages of foreign exchange resources in the official channels led to a widening of the band to  $\pm 3$  percent from August 2001 onwards; and the central rate had to be adjusted in several steps to LE 4.51/US\$, resulting in a total (nominal) depreciation of the pound of around 17 percent.

Under this arrangement, the CBE announced the central rate, and all foreign exchange trades by banks and foreign exchange bureaus had to take place within the band around this rate. The central rate could be adjusted in light of market conditions. In practice, however, the CBE was slow to devalue and reluctant to satisfy foreign exchange demand, even within the permitted range.

The foreign exchange market consisted of the customer market between banks and their clients, the inter-bank market, and the cash market. In the customer market, the CBE required that the quotations, consisting of buy and sell rates, be kept unchanged for one hour and

be applied uniformly to all customers. Transactions were carried out at banks' rates quoted on the Interbank Information System (IIS) and also displayed on the banks' premises.

The cash market, operated by exchange bureaus, was of minor importance in comparison to the banks' customer market. Under the new regime, exchange bureaus were required to have an agreement with a commercial bank whereby they were obliged to sell to that bank at the end of the business day any surplus resulting from their customer transactions during the day.<sup>3</sup> This meant that their rates also had to be kept at the same level for at least one hour or as long as the bank's rate did not change. During the first few days following the introduction of the new exchange rate regime, some sales of surpluses to a few banks were reported, but the inflow into the banking system from this source dried up.

The CBE reported an "official exchange rate," defined as the simple average of all transactions conducted between banks and foreign exchange bureaus with nonbank customers.<sup>4</sup> At that time, the spread between buying and selling rates in the official market was very narrow, reflecting in part the fact that banks were not making profits in the foreign exchange market, but acting as brokers accommodating customer orders to the extent possible.<sup>5</sup>

The supply of foreign currency to the official market dropped sharply during 2001–02. Outright purchases of foreign exchange from the CBE almost ceased as lower foreign exchange receipts by the government<sup>6</sup> and the reluctance to decrease net international reserves put a stop to CBE sales: the CBE sold US\$19 million in foreign

---

<sup>3</sup> Exchange bureaus were required to apply the same rates to their transactions with customers as the bank to which they were linked, including the same spread of 3 piastres between their buy and sell rates.

<sup>4</sup> The official exchange rate is an accounting market rate, the buying official exchange rate plus two piastras is also the CBE intervention rate, not to be confused with the "central rate," which is the CBE's policy rate.

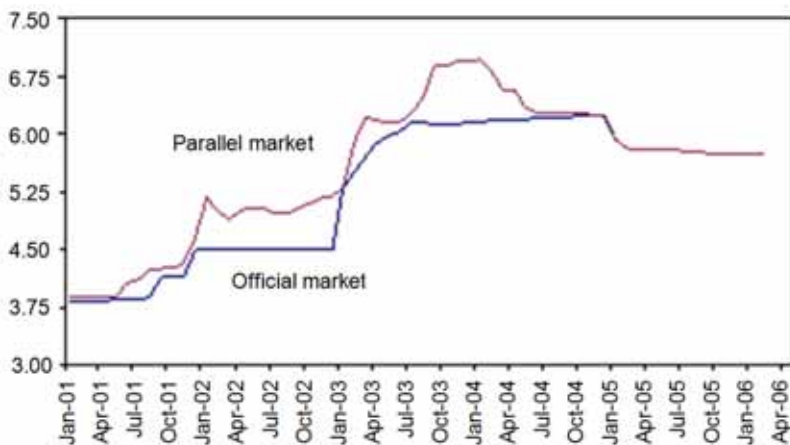
<sup>5</sup> Many of these transactions occurred at rates below the upper band limit in spite of the chronic foreign exchange shortage, possibly because banks took a long-term relationship approach with their clients.

<sup>6</sup> On account of the decline in Suez Canal and oil receipts.

exchange to the market in March 2002 compared with US\$388.8 million in October 2001, hardly enough to cover the queue of just one bank.

The interbank foreign exchange market was inoperative. One reason was that the CBE, as the only provider of foreign exchange to the market, was not selling significant amounts of foreign currency to banks under the new exchange rate regime. With insufficient supply relative to customer demand and understandings among banks on pricing, there was little incentive for banks to transact with each other. Given the absence of interbank liquidity in foreign exchange (with no bank standing ready to quote two-way prices), commercial banks had to focus on purchasing foreign exchange from their customers. However, exporters became increasingly reluctant to sell their foreign exchange to the banks, as the banks were unable to offer more attractive rates, reflecting the prohibition on trading outside the  $\pm 3$  percent band. As a result, exporters sought more attractive rates in the parallel market by trading with intermediaries or directly with importers at rates more depreciated than those being offered by the banks (Figure 9.1). This reduced the supply of foreign exchange available to the banks, further exacerbating the market shortage.

Figure 9.1. Egypt: Official and Parallel Market Prices



With a continuing shortage of foreign exchange in the official market and the decision by the authorities not to adjust the central rate

further beyond the adjustment in January 2002 (to LE 4.51/US\$) or allow CBE's foreign exchange reserves to fall below US\$14 billion, parallel market activity expanded relative to the official market in 2002.

By end 2002, the exchange rate in the parallel market was around LE 5.25/US\$, compared with the so-called "market rate" in the official market of around LE 4.645/US\$.<sup>7</sup> This was close to the upper limit of the band (LE 4.6495/US\$),<sup>8</sup> with the difference between the official central and the parallel market rate of around 16 percent. Under the new regime, considerable unsatisfied demand for foreign currency developed. Importers and hoarders accelerated currency purchases, while exporters delayed conversions or resorted to the parallel market. The size of the queues, as well as the average waiting period of a bank customer, apparently increased in 2002; and some banks were not accepting new customer orders any more. The small sales of foreign exchange by the CBE in 2002 were generally rationed through the banks, with priority given to customer uses considered to be in the public interest (such as food imports). Customers in the queues were thus not served on a first-come-first-served basis, but informally according to a list of strategic priorities, including customer relations.

The end result was a rise in parallel market activity, and significant disruptions and distortions in the economy. Importers not considered strategically important were experiencing difficulties in continuing their normal businesses for lack of foreign exchange for imported inputs. Many opted to limit the size of their business operations. These

---

<sup>7</sup> Used for accounting, customs, and taxation purposes and for CBE transactions (except for receipts from Suez Canal duties and some official payments).

<sup>8</sup> The market rate was calculated hourly by the Central Chamber of Foreign Exchange Statistics (CCFES) on information received from 53 banks and 136 exchange bureaus by applying the simple-average method on all transactions reported. Until August 5, 2001, the weighted average was calculated (with the rates weighted by the amounts traded). The closing rate (at the end of the day) represented the average rate on all transactions during the day (including transactions between the CBE and commercial banks). This rate was also used as the "official exchange rate" and published by the CBE.

conditions may have resulted in the collapse of some of these companies, with the subsequent deterioration in the quality of banks' loan portfolios. The CBE enforced a prudential regulation that was broadly consistent with international practice. The regulation limited banks' net open position in foreign currency relative to their capital base (Tier I plus Tier II) to 10 percent per individual foreign currency, regardless of whether the position was short or long, and to 20 percent for all individual positions taken together. These limits had to be met at the end of each business day. During the day, the limits were higher, at 20 percent per individual currency and 40 percent for total. Banks were required to calculate their net open positions daily, and to report monthly to the CBE. Banks appeared to be free in principle to transact in both spot and forward markets, subject to the limits just cited.

In practice, however, there was evidence of additional restrictions on banks, notably the arrangement that required banks to report each exchange transaction and the corresponding rate to the Central Chamber of Foreign Exchange Statistics (CCFES)<sup>9</sup> every hour on any single day. At the end of each day, this information was sent to the Foreign Exchange Relations department in the CBE, which in turn computed the deficit/surplus for each institution that day. When an institution had a surplus above 20 percent of its capital, it was obliged to sell that excess in the interbank market the following day.<sup>10</sup>

### **The Move to a More Flexible Exchange Rate Regime**

The CBE's objectives of a fixed exchange rate and price stability proved inconsistent, as predicted by standard theory. Under the peg, the CBE was unable to conduct an independent monetary policy while fiscal policy was easy and international reserves declined. In view of the difficulties experienced with the peg and then with the heavily

---

<sup>9</sup> CCFES was operated by the Banker's Association. Since January 2003, the CBE has integrated the CCFES into its Foreign Department.

<sup>10</sup> Given the prevailing foreign exchange shortage, this was a rare event and generally the result of reporting mistakes made by different branches of a bank. Although there was no explicit penalty for non-compliance, banks abided by this rule.

managed exchange rate, the authorities decided to adopt a new monetary and exchange rate policy framework, with the ultimate objective of adopting inflation targeting in the longer run. In the new framework exchange rate of the Egyptian pound vis-à-vis the US dollar was to be determined by the foreign exchange market and no longer by the authorities. The exchange rate would be influenced only indirectly by monetary operations, through a tightening or loosening of domestic liquidity. It was also clear that CBE interventions in the inter-bank foreign exchange market should be aimed at, and limited to, avoiding an over-shooting of the exchange rate, and (after the initial phase) to attenuating “erratic” rate fluctuations and restoring “orderly market conditions” whenever necessary.

In support of the new framework, the government enacted a revised banking law in 2003 (the Law on the Central Bank and the Banking and Monetary System), which specified that the objective of monetary policy was to “achieve price stability [...] in the framework of the Government’s general economic policy.”<sup>11</sup> At the end of 2003, the CBE established a Monetary Policy Committee to study policy options.

Significant efforts were made to modernize monetary policy formulation and operations, with a greater role for short-term interest rates in steering domestic liquidity. The CBE established a corridor for the interbank overnight rate as the operating target instead of excess reserves and enhanced monetary policy communications. The CBE also took steps to address the challenges to liquidity management arising from the liquidity surplus in the system. It first introduced deposit auctions, and subsequently supplemented these with reverse repo operations. In 2004, the CBE started absorbing liquidity with reverse repos using bills as collateral.

### **Initial Experience in Launching the Flexible Exchange Rate**

In preparation for the move to a more flexible exchange rate regime, the CBE covered the short positions of the banks as of January 16, 2003. The operation was carried out in order to start the new

---

<sup>11</sup> The CBE’s Board of Directors comprises 15 members, including three members representing the Ministries of Finance, Planning, and Foreign Trade.

exchange rate regime with a clean slate and to avoid any pressure on the exchange rate on account of the coverage of short positions by banks.

The net open position in foreign currency of the banking system was brought down to zero under an arrangement in which the CBE sold US\$1.2 billion to banks against domestic currency at the rate of LE 4.6350/US\$; and the counter-value in LE was debited to the banks' current accounts. The foreign exchange sold was then placed in time deposits with the CBE carrying a maturity between 24 and 36 months, to prevent an immediate drain on the CBE's foreign exchange reserves. The CBE paid interest on these deposits at the Libid rate for 1 year, payable in foreign currency on a quarterly basis.

The main beneficiaries of this operation were the state-owned banks, with the National Bank of Egypt taking the lion's share of US\$600 million of the total amount of US\$1.2 billion. The government also injected LE 3.2 billion of additional capital into the public sector banks and made several management changes to strengthen them. In addition, it pressed private banks to increase their provisioning.

On January 29, 2003, the authorities moved from a currency band to a more flexible exchange rate regime in an attempt to unify the foreign exchange market. With the adoption of the flexible exchange rate regime, banks were permitted to quote exchange rates freely vis-à-vis other banks as well as customers, based on their foreign exchange liquidity position. In principle, the exchange rate was to be determined by market forces, reflecting the supply and demand in the market.

Banks were informed of the new exchange rate regime in a meeting with the CBE on January 28, 2003. To encourage the return of parallel market funds to the official market, banks agreed among themselves to open trading on January 29, 2003 at rates above those in the parallel market the day before. The first quotations on that date were in the

range of LE 5.35/US\$ to LE 5.50/US\$. Most banks quoted a spread of 5 to 6 piastres between their buy and sell rates, but some banks applied a wider spread.<sup>12</sup>

The adoption of the flexible exchange rate resulted in a 30 percent depreciation after one quarter and a narrower premium in the parallel market. Following an initial alignment with parallel market rates on the first day of the new regime, a series of developments and measures, detailed below, led to the re-emergence of shortages of foreign exchange at banks; and there were reports that the informal market was once again becoming a significant channel for foreign exchange flows.

The authorities imposed a surrender requirement for export and tourism foreign exchange proceeds, on March 24, following a sharp run-up in the parallel market premium. This measure reflected their concern about overshooting of the exchange rate due to speculative hoarding of foreign exchange receipts. Under Prime Ministerial Decree 506, exporters (and providers of tourism services) were required to deposit their foreign exchange proceeds in the domestic banking system within 90 days of shipment (or provision of services) and to convert 75 percent of such deposits into Egyptian pound within 7 days. Implementation of this measure, however, was not very effective; and enforcement was reportedly selective and focused on the tourism industry.

The authorities and some banks were also of the view that speculators had been driving the exchange rate past its market clearing level in the informal market. To avoid exchange rates in the banking system from moving too rapidly, banks apparently entered into a “gentlemen’s agreement” limiting buy and sell spreads to a range of plus or minus 3 percent. The agreement also obliged banks to provide foreign exchange to exporters at any time, provided they sold the export proceeds to the banking system. In this way, banks hoped to attract at least a part of the foreign exchange available on the parallel market. The agreement helped, reportedly, to increase foreign

---

<sup>12</sup> One bank quoted LE 5.39/US\$ to LE 5.50/US\$ at the opening of the market—a spread of 11 piastres.



currency inflows in some banks, allowing them to reduce the “backlog” of importers’ demand for opening letters of credit.

Even so, from about July 2003 on, significant excess demand for foreign exchange had to be cleared in the parallel market, resulting in a widening of the gap between the parallel market and official exchange rates. The reemergence of parallel market activity<sup>13</sup> was assumed to be related to (i) the “gray” economy’s preference for using this channel to avoid disclosure of activities; (ii) the inability of customers, especially importers, to obtain foreign exchange from banks; and (iii) the dissatisfaction of some customers, especially exporters, with the rates offered by banks.

The rapid reversion to a *de facto* peg and the widening in the parallel market spread can thus be attributed to the following factors. First, the interbank foreign exchange market was not allowed to operate freely.

After an initial period of greater exchange rate flexibility, banks, in practice, were not allowed to trade at their discretion within their net open position limits. Second, distortions that persisted or were introduced after the adoption of a *de jure* more flexible exchange rate adversely affected the credibility of the new regime, increasing rather than diminishing speculative activity. It was symptomatic that the exchange rate determined in the inter-bank market was not reflected in the bank-customer market and did not influence the cash market.

### **The Launch of Foreign Exchange (FX) Interbank Market**

Despite the temporary convergence of the official and parallel markets after the adoption of the flexible exchange rate, the unification of the two markets was not achieved until the interbank foreign exchange market was launched at the end of 2004. As discussed above, the exchange rate quickly became relatively inflexible within weeks of the launch of the new exchange regime in early 2003. Further devaluations, significant deregulation, and the

---

<sup>13</sup> Parallel market transactions volumes reportedly accounted for 20-30 percent of total market turnover.

creation of a formal framework for the interbank foreign exchange market were necessary to successfully implement the new exchange rate regime.

Greater flexibility in setting prices was needed in the customer market. The “gentlemen’s agreement” among banks on spreads was a significant impediment to the development of the foreign exchange market. Moreover, the proper functioning of the interbank market required clear rules under which each participating bank would provide quotations depending on its own foreign exchange liquidity situation, and would be obligated to transact at the quoted rates for a specified minimum amount.

The CBE officially launched the FX inter-bank market on December 23, 2004, when all banks ratified the Interbank Convention on Foreign Exchange Trading.<sup>14</sup> In the same month, the CBE cancelled foreign exchange regulation 506 on the surrender requirement. Moreover, the foreign exchange bureaus were integrated and requested to meet a minimum capital requirement of LE 5 million. In January 2005, Egypt accepted the obligations under Article VIII of the IMF’s Articles of Agreement, which entail the elimination of all restrictions on current payments and transfers.

In the new FX interbank market, the exchange rate is in principle set freely by participating banks, based on their perception of market developments and individual positions. All banks are required to give full (two way) quotations. A weighted average interbank exchange rate is calculated daily, at the end of dealing hours.<sup>15</sup> Banks used this rate as a reference rate in determining the exchange rates in transactions with their clients.

---

<sup>14</sup> The parallel market essentially disappeared and the premium was virtually eliminated by September 2004. The spread had started to fall in early 2004 as a result of ample dollar liquidity from current account inflows and also as a result of a gradual tightening in liquidity conditions. Nevertheless, the system remained vulnerable to a reemergence of spreads because exchange rates had not been formally unified.

<sup>15</sup> The calculation is made on the basis of reports by banks and exchange bureaus on their interbank transactions at 11 a.m., 12 p.m., 1 p.m., and 2 p.m. of any given business day.

The CBE was expected to participate in the interbank market only through the provision of an end-of-day clearing facility to banks. Under this facility, the CBE stands ready to buy from and sell to banks foreign exchange to help them to comply with their open position limits. Specifically, the CBE buys all of banks' foreign exchange in excess of their daily net open position limits. Conversely, it sells the foreign exchange banks need to comply with their position limits. In addition, the CBE engages in foreign exchange transactions with the government and public sector entities.<sup>16</sup>

Banks authorized by the CBE may engage in foreign exchange transactions with (i) their customers and (ii) with each other on their clients' behalf or on their own behalf.<sup>17</sup> They may, among other activities, accept deposits, make transfers domestically and abroad and open correspondent accounts abroad in foreign currency. Authorized banks may, with the CBE's approval, import and export foreign bank notes and export foreign exchange. Exchange rates must be posted on the banks' premises. However, large-value transactions may be carried out at freely negotiated rates, within the authorized net open positions.

Exchange bureaus operate in the retail foreign exchange market and account for 5 percent of foreign exchange transactions. Their operations are subject to licensing by the CBE. Exchange bureaus were required to have an agreement with an authorized bank under which they are allowed to apply the same exchange rates announced by the bank, including the spread. They could only engage in cash transactions and in the purchase, collection, and sale of travelers' checks.<sup>18</sup> They had to sell, at the end of the business day, to the bank with whom they had their account, any amounts from customer transactions during the day that exceeded their equity capital.

---

<sup>16</sup> Most of the settlements in U.S. dollars are conducted through the clearing system operated by the CBE.

<sup>17</sup> As of May 2006, there were 42 authorized banks in Egypt accounting for 95 percent of foreign exchange transactions. There were also 92 licensed exchange bureaus, out of which 42 were operating.

<sup>18</sup> Article (37) of the Presidential Decree No. 101 of the year 2004 Promulgating the Executive Regulations of the Law of the Central Bank, the Banking Sector and Money Promulgated by Law No. 88 of the year 2003 (the "2003 Regulations").

The FX market was active and appeared to be operating smoothly; and the volume of transactions in the interbank market has increased significantly since it was launched. The CBE used the abundance of foreign exchange liquidity over the past year as an opportunity to strengthen its international reserve position. In return, the high level of net international reserves (NIR) supported the development of the market and strengthened confidence in the exchange rate regime.<sup>19</sup> The elimination of the surrender requirement was perceived by the authorities as contributing to the supply of foreign exchange in the interbank market. The smooth functioning of the FX interbank market also eliminated the foreign exchange queues and hard currency backlogs. The resilience of the exchange rate in the face of the shocks generated by the terrorist attacks in Taba and Sharm el Sheikh further strengthened market confidence. The pound appreciated by about 7 percent between the launch of the interbank market and the end of 2005. Average interbank daily volumes increased from US\$17 million in December 2004 to US\$88 million in February 2006 (Figure 9.2).

On June 8, 2006, the CBE issued a decree to change the calculation method of its exchange rate for foreign exchange transactions.<sup>20</sup> Under the decree, the weighted average of the closing buying and selling rates of the interbank market for the previous day is the opening rate of any given day, plus a margin not more than 0.5 percent above or below the rate to determine the buying and selling rates.<sup>21</sup> These rates are announced on the screens in the customer service areas of the CBE and its branches, and are used for transactions with the government and public enterprises. In addition, the CBE announces, at the end of each day, the weighted average interbank rate at 2 p.m. as the reference rate. This rate is applied to the CBE's end-of-day clearing facility.

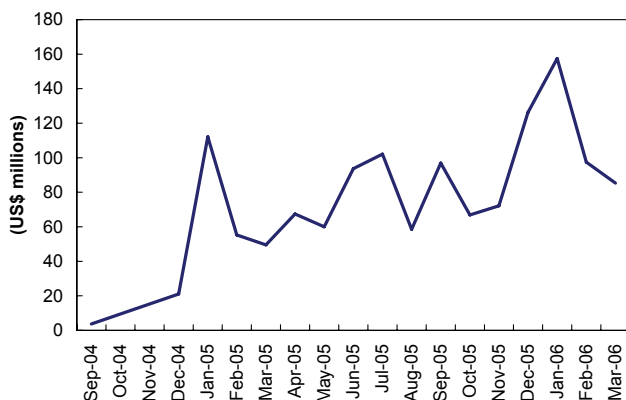
---

<sup>19</sup> NIR reached US\$22.4 in February 2006, the highest level since 1997.

<sup>20</sup> Decree No. 40 of 2006.

<sup>21</sup> These rates are adjusted four times a day at 11 a.m., 12 p.m., 1 p.m., and 2 p.m. immediately following the announcement of the weighted average interbank rate.

Figure 9.2. Monthly Average Turnover of the Interbank Foreign Exchange Market in Egypt, September 2004–March 2006.

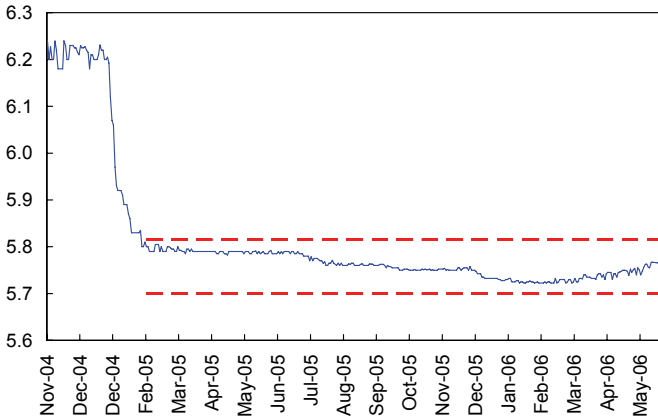


Despite the successful development of a more active FX interbank market, as recommended in IMF TA, the exchange rate since early 2005 once again fluctuated within a narrow margin of 2 percent. CBE's actions apparently influenced the price setting behavior of market participants, keeping fluctuations in the LE/US\$ exchange rate to a narrow range (LE/US\$ 5.72-5.78, see Figure 9.3).

Moreover, while banks were free in principle to set their own bid and ask rates, the gentlemen's agreement reached among market participants at the launch of the interbank market remained in place and was observed by market participants. As of May 2006, retail spreads on LE/Euro and LE/US\$ exchange rates were around 1.50 piastres (0.3 percent), while spreads on other currencies were in the range of 1.1–1.3 percent. Spreads on the interbank foreign exchange market remained below these levels. Most of the large banks applied the same exchange rates to account and cash transactions in U.S. dollars, while their rates differed slightly for cash transactions in other currencies.

Figure 9.3. Egypt: Pounds per US\$1, November 2004–May 2006

(Daily data, with bands of  $\pm 1$  percent around the median after February 1, 2005)



### Persistent Hurdles and Further Challenges

A successful transition to floating generally requires (i) a deep and liquid foreign exchange market; (ii) a coherent and limited intervention policy; (iii) an appropriate alternative nominal anchor; and (iv) adequate systems to review and manage public and private sector exchange rate risk. Developing a deep and liquid foreign exchange market also requires, among other things, the emergence of two-way risk in the exchange market. When market agents perceive that the exchange rate can both appreciate or depreciate, they will develop better risk management expertise and limit recourse to destabilizing trading strategies.<sup>22</sup>

After the exit from the peg, the exchange rate regime of Egypt was characterized as a managed float with no predetermined path for the exchange rate. The lack of flexibility of the exchange rate since early

<sup>22</sup> “From Fixed to Float: Operational Aspects of Moving Toward Exchange Rate Flexibility,” IMF Working Paper 04/126, July 1, 2004.

2005 may have reflected reluctance on the part of the authorities to let the exchange rate appreciate, possibly owing to concerns that an appreciation could have an adverse effect on the economy's external competitiveness.

The lack of flexibility of the exchange rate has implications for the authorities' plans to move towards an inflation targeting framework. A high degree of exchange rate flexibility is indispensable for inflation targeting. Inflation targeting also requires the independence of the central bank to implement monetary policy within a given framework. An important step in this direction would be to amend the central bank law to ensure that the Board of the central bank as well as Monetary Policy Committee are free from government dominance. In fact, government representatives, sitting in the Board of the CBE and the MPC should have only an informal role and ideally no voting rights.

The authorities' efforts to pursue a flexible exchange rate and adopt inflation targeting will reinforce markets' perception about the authorities' overall commitment to implement the broader reforms that were publicly announced. The implementation of the planned reforms, which were welcomed by domestic and international markets, will bolster credibility by modernizing central bank operations, improving financial sector efficiency, and creating a business-friendly environment conducive to rapid growth.

JOHN DALTON

**B**angladesh adopted a floating exchange rate regime in May 2003 as part of a comprehensive medium-term economic program to promote growth and alleviate poverty. This program was designed to strengthen an economy that had become progressively more fragile after the mid-1990s in the wake of expansionary fiscal and monetary conditions and slow progress on structural reforms. Growing domestic imbalances were also reflected in exchange market pressures and in a marked decline in international reserves, limiting possible responses to external shocks. The scheduled removal, in 2005, of Bangladesh's preferential access to key foreign markets for its main export category of ready-made garments posed a particular vulnerability in the context of a pegged exchange rate regime.

The move to a more flexible exchange rate system was initiated by the new government of Bangladesh in 2002 to help cushion the economy against external shocks and to enhance the effectiveness of monetary policy. In 2002–03, Bangladesh Bank (BB), working with an IMF technical advisor, put in place the prerequisites for the transition to a floating exchange rate regime, including a range of measures to enhance monetary management. The first two years of the float saw Bangladesh's external position strengthen as a gradual depreciation of the taka helped boost the competitiveness of Bangladesh's exports. In early 2005, however, multiple external shocks raised new challenges for the foreign exchange market and BB. This experience helped BB refine its approach to intervention as a tool to counter disorderly conditions in the foreign exchange market, and led to the identification of further steps to develop the operations of the market.

This chapter provides some brief background on the macroeconomic and institutional settings, and policy discussions in



the period leading up to the float. This is followed by an outline of the technical issues addressed in the implementation of the float, and a brief discussion of the experiences in the first three years of the float.

### **Macroeconomic Background**

As Bangladesh entered the new millennium, key economic and social indicators reflected a continuation of the steady improvement that had occurred during the 1990s, although poverty remained pervasive. Backed by prudent macroeconomic policies and an initial strong drive for structural reforms, the early 1990s saw robust output and export growth, low single-digit inflation, improved literacy and health indicators, food self-sufficiency, and lower population growth. Over the decade, extreme poverty was reduced by 20 percent, although its level remained relatively high, at one-third of the population.

Despite these achievements, the economy became progressively more fragile after the mid-1990s due to expansionary fiscal and monetary policies along with slow progress on needed structural reforms, especially in the banking and state-owned enterprises (SOEs) sectors. Rising credit demands of the government, the SOEs, and the private sector were too readily accommodated by monetary policy, and credit from the banking system to the central government grew at annual rates of 30–35 percent in the two years through the end of the 2000/01 fiscal year (FY).

Growing domestic imbalances were reflected in pressures in the foreign exchange market and by a marked decline in international reserves. In response, the authorities opted for sporadic step adjustments in the nominal exchange rate and administrative controls to limit the growth of imports. Despite these controls, by mid-2001 gross international reserves had fallen to less than one month of imports.<sup>1</sup> This fragility was exacerbated by the global slowdown that

---

<sup>1</sup> Following this period, the taka continued to go through prolonged cycles of overvaluation and there were further pressures on the balance of payments (BOP). Net international reserves declined from \$853 million at end-2000 to \$479 million by end-January 2002.

began in late 2000 and, with exports declining sharply, real GDP growth in Bangladesh slowed from 5 percent in FY00/01 to around 3 percent in FY01/02. The full impact on the current account was contained, however, through administrative controls on imports, as well as ongoing strong worker remittances from abroad.

During the second half of 2001, the government took a number of measures to address the immediate economic weaknesses. These included steps to tighten budgetary discipline, improve the finances of SOEs, and to increase the effectiveness of monetary operations and policies. Of particular relevance for Bangladesh's exchange rate arrangements, the measures also included a timetable for eliminating all identified exchange restrictions on current international transactions, and a willingness to move to a more market-oriented exchange rate system in order to help cushion the economy against external shocks and enhance the effectiveness of monetary policy.

### **The Institutional and Market Setting**

In 2002, institutions and markets in Bangladesh were at varying stages of development, with impediments that required attention if the medium-term program was to succeed. The financial system was dominated by mainly state-owned commercial banks with total assets equivalent to about 53 percent of GDP, while there were a number of investment and merchant banks, leasing and finance companies, insurance companies, and stockbrokers; but these by comparison were relatively small. The two stock exchanges were insignificant, with market capitalization equivalent to about 2.4 percent of GDP. Financial intermediation was primarily short-term, as the only major source of long-term savings—the National Savings Certificates (NSCs)—fed directly into the government budget. The NSCs also set an artificially high return benchmark on savings (in the range of 5 to 9 percent per year in real terms), which impinged upon the ability of financial institutions to issue long-term liabilities attractive to the general public.

The banking sector was dominated by the four nationalized commercial banks (NCBs) that held roughly 46 percent of industry net assets as of year-end 2002. Other banks included 30 domestic private

banks, 11 foreign banks operating through local branches, and five specialized development banks. For a number of years, however, the banking system as a whole had been characterized by a high level of nonperforming loans (NPLs), low capital, inefficiency, weak governance, and poor risk management. Consequently, resolution of financial sector weaknesses became a key element of the government's medium term development program. Particular attention was given to restructuring the NCBs, which also played a dominant role in the foreign exchange market. Indeed, the two largest NCBs were the main source of foreign exchange for the market at that time. The modernization of their foreign exchange business was an important factor for the successful implementation of the float. In particular, NCBs ceased employing non-commercial practices in their foreign exchange dealings.

The foreign exchange market reflected the limitations of the fixed exchange rate arrangement and was comprised of a number of tiers (Box 10.1). BB responsibilities at the time were many and varied. In addition to its monetary policy responsibilities in a fixed exchange rate environment, BB administered related exchange controls, carried out government debt management operations (and provided finance to the government), and also supervised all private commercial banks operating in Bangladesh.

### **The Policy Dialogue in the Lead-Up to the Float**

During 2001–02, the policy dialogue focused on supporting the efforts of the government to implement its medium term agenda for growth and stability. The dialogue occurred largely in the context of Bangladesh's Article IV discussions with IMF staff, and particular attention was given to the ongoing usefulness of the fixed exchange rate system. Selected issues examined at the time of the 2001 Article IV consultations,<sup>2</sup> for example, identified a number of key considerations and conclusions including:

---

<sup>2</sup> See Marijn Verhoeven, and others, *Bangladesh—Selected Issues and Statistical Appendix*, IMF Staff Country Report No. 02/114 (Washington: International Monetary Fund), 2002.

- In the context of the then overall policy environment and external vulnerabilities, the usefulness of the fixed exchange rate system had run its course.
- Adherence to the current exchange rate regime represented a costly way to keep inflation low. With continued public sector deficits being financed by domestic borrowing, the reduction of inflation had come at the cost of a declining level of international reserves and increased recourse to administrative controls to support the regime. A lower reserve position had also substantially reduced the authorities' ability to defend the peg and rendered the country more vulnerable to external shocks.
- Bangladesh's low export diversification made the country vulnerable to terms-of-trade shocks in the context of a pegged exchange rate regime.<sup>3</sup>
- Greater exchange rate flexibility would help Bangladesh better face the then scheduled loss of preferential market access for ready-made garment exports to the United States, Canada, and the European Union by end-2004 under the World Trade Organization (WTO) agreements, and the expected heightened competition in textiles and clothing following the entry of China into the WTO.
- Greater flexibility was also needed to ensure that the exchange rate sent appropriate market signals, and to enhance the authorities' ability to address both domestic imbalances and external real shocks arising from a rapidly changing global environment.
- Adopting a more flexible exchange rate policy would have a number of advantages including: depoliticizing the determination of the exchange rate to ensure quick adjustment of the rate to market developments; providing a role for monetary policy in macroeconomic management and in enhancing the ability of the authorities to address external shocks in a timely manner; providing appropriate signals for the generation and allocation of savings and the conduct of monetary policy; and stemming the loss of international reserves, and thereby reducing the need to rely on administrative measures to address BOP problems.

---

<sup>3</sup> Exports were concentrated heavily in ready-made garments and a few primary commodities, such as cotton and jute.

**Box 10.1. Bangladesh: Foreign Exchange Arrangements and Market Characteristics Prior to the Float****Operation of the taka trading band**

- The taka was pegged to a weighted currency basket of Bangladesh's major trading partners, from which a trading band against the U.S. dollar was determined. The composition of the basket tended to be changed every three to four years. To retain the taka's value in real terms, the real effective exchange rate (REER) was regularly monitored and the band periodically adjusted partially or fully. The final decisions on changes to the band were taken by the Minister of Finance and Planning in consultation with the Governor of Bangladesh Bank, and took into account the REER calculation and other considerations. The width of the band was 1 taka, having been widened from 30 paisa in May 2001.
- The taka tended towards its lowest level in the band in interbank trading following a refinement of operational procedures in December 2000, when BB announced it would buy dollars from the banks at variable prices while continuing to sell dollars at the fixed rate.

**Procedures for banks bidding for dollars at the intervention rate**

- Banks were required to submit their requests for dollars to BB in the morning and were notified in the afternoon whether they had been successful. The criteria for deciding whether a request should be satisfied were: (1) the underlying commercial transaction should be properly documented; (2) there should be no surplus liquidity elsewhere in the interbank market; (3) the bank should not have a long net open dollar position; (4) the request had to be for a current payment due for settlement.

**Characteristics of the interbank market**

- Banks were free to deal at prices outside the official band, resulting in the taka often trading in the interbank market at a 10 paisa discount to the official floor price. However, the market price was prevented from diverging too far from the official price by the exercise of suasion on the banks withholding dollar liquidity from the market.

### Box 10.1. Bangladesh: Foreign Exchange Arrangements and Market Characteristics Prior to the Float (concluded)

- Banks were nominally free of restrictions on interbank dealing except for regulatory Net Open Position (NOP) limits that were established at 12.5 percent of capital. Dealing was impeded, however, by a market code of conduct that stipulated interbank transactions had to be backed by a customer order and that speculation was prohibited.
- Business was heavily concentrated in the four NCBs, which accounted for some 50 percent of the foreign exchange market, with the two largest NCBs controlling the major sources of foreign exchange.

#### **Parallel markets**

- Money changers were authorized by BB and mainly attended to the needs of travelers with prices that were slightly less favorable than those of the interbank market.
- An unofficial curb market concerned itself mainly with smaller transactions.
- The hundi market was a major conduit for remittances, in particular outflows, although reliable estimates of flows were not available at the time.

The dialogue also identified several prerequisites to adopting a more flexible exchange rate system in order to fully reap the benefits of the new regime as a means to enhance macroeconomic management. It was reiterated that a move to greater flexibility would have to be part of a comprehensive and credible stabilization effort including:

- The tightening of fiscal policy and the imposition of hard budget constraints on enterprises.
- Reducing the vulnerability of financial intermediaries to large changes in the exchange rate through measures to strengthen the banking sector, such

as: limiting banks' foreign exchange positions and external borrowing; establishing and enforcing prudential regulations to limit foreign exchange, interest rate, credit, and liquidity risks; and monitoring capital movements to avoid destabilizing short-term capital flows.

## **Technical Implementation Steps Taken by Bangladesh Bank**

Managing the implementation, and the associated risks, of floating the taka required a close coordination and careful sequencing of technical steps in a number of different areas. The first step involved an analysis of the requirements for an interbank market and a central bank to operate effectively when the exchange rate is market determined (Box 10.2). This analysis, which was undertaken in consultation with an IMF technical team, noted that a number of features and criteria were in place, and identified critical issues that would still need to be addressed in moving to a floating exchange rate regime.

The required technical steps were divided into three stages, with a view to ensuring a critical mass of reforms at each stage. The stages and respective steps are outlined below.

### **The First Stage: Pre Float**

This stage involved essential actions that needed to be adopted before the taka was floated, or in conjunction with the announced floating of the taka. Specific actions were aimed at strengthening BB capacity in foreign exchange and monetary operations, and included:

- **Granting BB authority to intervene.** Such a move was needed to give BB the authority to conduct foreign exchange intervention at its discretion to counter destabilizing price movements.<sup>4</sup> This necessitated amending the Bangladesh Bank Order (BBO).

---

<sup>4</sup> Under the band arrangement, the final decision on changes in the exchange rate were taken by the Minister of Finance and Planning in consultation with the Governor of BB.

### Box 10.2. Operational Requirements for a Market-Determined Foreign Exchange Regime

In a market determined foreign exchange regime, the interbank market assumes the primary role in price formation and currency mediation. A well-functioning market has low transaction costs and no excess price volatility. More specifically:

- An interbank market should be the focal point for foreign exchange dealing, capturing all activity in the system (but with government business handled by the central bank).
- Intervention for reserve management or market smoothing purposes should not prevent the rate from fluctuating in response to market forces. Fluctuations enable banks to perfect the skills of risk management—a necessary precursor to a deepening of the interbank market.
- Banks should be encouraged to make reciprocal two-way markets to provide liquidity for other banks to hedge exposures.
- Regulatory net open position limits should be sufficient to allow dealing imbalances to be carried forward from one day to the next, but not so large as to create undue risks.
- Interbank efficiency relies on reciprocal dealing between banks, which can be encouraged when intervention is directed through one or only a few banks at a time.
- Competition for customer business should be encouraged. Banks with captive clients have less incentive to perfect their dealing skills and invest in interbank dealing.
- Exchange rate transparency becomes more important in the less certain environment of floating. Transparency may be achieved through several means, such as electronic and print media.



### Box 10.2. Operational Requirements for a Market-Determined Foreign Exchange Regime (concluded)

Central banks are confronted by a number of challenges when a semi-rigid foreign exchange regime is replaced by a market-determined system. The first is at the level of their interface with the interbank market; and the second is the internal upgrading of procedures and systems to ensure there are no control weaknesses. The practices conventionally used by central banks in these areas include:

- Responsibility for the tactical implementation of foreign exchange policy rests with the central bank, so that the response to sudden and unwelcome developments may be prompt and effective.
- The dealing room should in turn have authority, within strict limits, to exercise discretion and calm disorderly trading, acting as a first line of defense.
- The dealers in a central bank should be professional operators able to make informed recommendations on market dynamics and the case for intervention.
- The dealing room should be lockable and secure and have the communications and other equipment that allows it to maintain close working contact with the interbank market.
- There should be a clear separation of responsibilities between the dealing room and the back office accounts and payments functions to ensure there are no control weaknesses.
- The accounting and reporting system of a central bank should produce independent reports on exposure positions and profit and loss. Management, for example, should be informed of the consequences of market smoothing on profitability and the bank's net foreign exchange position.

- **A preemptive squeeze on interest rates.** Coinciding with the announcement of the float, BB raised interest rates to forestall any tendency for speculative selling and to emphasize official resolve that the market should remain orderly (the increase was subsequently reversed).
- **Advance warning of a regime change.** Liberalization had been deliberately foreshadowed and trailed through the media and at a seminar beforehand, so the market was not taken by surprise.

- **Establishment of an effective interface between central bank and interbank market.** Such an interface requires, in essence, that dealers are familiar with intervention techniques for varying types of market operations (Box 10.3), as a means of ensuring carefully implemented intervention that avoids practices which might otherwise disturb market order or harm confidence. For the interface to be reliable, it was also intended that the dealing room should have a limited authority to conduct smoothing operations.
- **Reviewing operational reporting arrangements in BB.** This involved establishing a clear separation of responsibilities between the dealing room and back office and respective reporting lines to senior management.
- **Preparing a BB dealing manual.** A manual was prepared setting out the extent of the dealing room's authority and limits as approved by the Governor, including the extent of any limited authority afforded to dealers to conduct market operations on BB's behalf. To date, however, dealing operations have not yet reached the point where dealers have been delegated any authority to carry out market operations and trades independently on BB's behalf.
- **Announcing a time schedule for elimination of restrictions on payments and transfers for current international transactions.**
- **Liberalizing treasury bill auctions.** Monetary operations needed to become more market oriented in the run-up to the float. A key action taken in this regard was to create a greater demand for treasury bills, most notably by allowing auction yields on treasury bills to be determined by market forces, including by changing cut off procedures for treasury bill auctions so that market prices could emerge.
- **Strengthening liquidity forecasting.** As the exchange rate would no longer provide a nominal anchor under a float, increased importance attached to the role of consistent and accurate forecasting and the management of systemic liquidity through open market operations. A strengthened liquidity forecasting framework was important for ensuring adherence to a monetary program aimed at maintaining low inflation and restoring net international reserves to a comfortable level. These steps were also supported by IMF technical advice.
- **Introduction of repurchase operations** as the key tool for strengthening short term monetary management after the float.

- **Alignment of interest rates on NSCs to market rates**, such as treasury bill rates.
- **Continuation of limits on banks' foreign exchange and external borrowing.** This action was aimed at ensuring effective regulation and monitoring of banks' foreign currency exposures, and included enforcing the existing 12.5 percent open position requirement, and limiting banks' foreign exchange exposures associated with cross currency dealing. All positions are captured by these limits, and a "shorthand" method was also put in place for monitoring foreign exchange exposures.
- **Collection and evaluation of information on banks' exposure to interest rate risk.** The banking system could be expected to face greater exposure to interest rate risks, as the adoption of a floating exchange rate regime changed the monetary transmission mechanism to one with a central role for changes in interest rates and market yields. The initial step taken in this stage was to establish information collection on banks' risk management practices.
- **Elimination of restrictions on current account transfers.** Under the fixed rate regime, Bangladesh maintained restrictions on the making of payments and transfers for current international transactions subject to IMF approval under Article VIII, Section 2 of the IMF Articles of Agreement. As part of the transition, all but two of these restrictions were removed in the period leading up to the float, with the remainder to be eliminated on a schedule agreed with the IMF.<sup>5</sup>

## **The Second Stage: Near-Term Post Float**

This stage covered a number of other important near-term actions, to be adopted within a few months after floating to deepen and reinforce those taken during the first stage. The actions, which BB undertook took largely on its own, were aimed at giving the central bank greater independence in carrying out its mandate, and refining monetary and foreign exchange management through adjustments in the mix of instruments. Revisions to the legislative framework were addressed and statistical monitoring of, and accounting for, foreign exchange operations received greater attention. Emphasis was also

---

<sup>5</sup> Of these, only one remained in place as of end-September 2006, with the expectation of its removal before end-2006.

given to strengthening prudential regulation and supervision of the banking system. Please see page 148 for specific actions.

### Box 10.3. Establishing an Effective Interface with Markets: Modalities for Intervention

Establishing an effective interface with the market requires that intervention practices are well understood by central bank staff and carefully implemented. This works to avoid practices that might otherwise disturb market order and harm confidence. Some specific intervention practices include:

- Intervention for reserve accumulation. With the taka near an equilibrium after it is floated, the BB may seek to accumulate reserves without disturbing the exchange rate or interbank liquidity, and in a way that conveys no signaling effect. Acting like any other market participant, BB could respond to offers of dollars by making specific bids, or by placing small buying orders with one or a few ‘agent banks’ at prices inside their own dealing spreads.
- Taking advantage of a large surplus of dollars in the market to build reserves. In such instances, the central bank would place a floor under the dollar by leaving a firm bid price with one or several banks and steadily rebuild reserves. The support for the dollar would be clear evidence that the central banks was intervening, although it would be important to ensure that the local currency did not appreciate overly when the program of reserve accumulation came to an end.
- Intervention for market smoothing purposes. Intervention may on occasion be called for to smooth markets that have become disorderly. A number of approaches can be adopted depending on the circumstances. For a moderate disorder, it might be appropriate to intervene passively by giving buy or sell orders to a few banks within the interbank spread. As the market stabilizes, the prices at which the orders are given could be changed to nudge it back to a more reasonable level. Should disorder be more pronounced, however, the bank could take a more aggressive stance that gave a clear signal of official intentions and made the price adjust sharply. It would do this by simultaneously ‘hitting’ the bids or offers of several banks.

**Box 10.3. Establishing an Effective Interface with Markets:  
Modalities for Intervention (concluded)**

- Intervention as a tool to promote interbank market development. The careful direction of intervention orders can be a useful tool in promoting development of the interbank market. Interbank activity depends on banks establishing reciprocal dealing facilities and then dealing with each other. If the central bank intervenes through only one bank at a time and instructs it to distribute the business throughout the market, the banks will have to communicate and deal with each other.
- Intervention by price alone. In a floating regime, a central bank can no longer be selective on the deals that it covers. Any transaction which meets the price criterion will be eligible. Banks will quite properly be engaging in own account and forward dealing in the normal course of their business and these transactions must be as eligible to be offset against intervention as transactions for customer spot requirements. Any deal offered by a bank will be presumed legitimate. The responsibility for compliance with exchange control regulations would be a separate issue. Banks would be charged with ensuring compliance with relevant foreign exchange regulations for all deals they make and would, subsequent to dealing, be subject to onsite inspections by the central bank.

- **Modifying the cash reserve requirement** in February 2002 to exclude foreign currency balances from eligibility to meet the reserve on taka deposits.
- **Upgrading bookkeeping and accounting arrangements at BB.** This action was specifically aimed at ensuring BB had facilities for accurate measurement and control of unmatured foreign exchange deals and foreign exchange profits and losses. Despite problems in implementing an automated accounting system, BB was able to establish procedures to ensure that valuation gains and losses are accounted for on a daily basis.
- **Reviewing the methodology for compiling statistics,** in particular to capture measures of aggregate turnover in the market and to eliminate double counting of swap transactions.
- **Rescinding anachronistic provisions of the market code of conduct.** Specifically, this measure sought to give banks the freedom to conduct foreign foreign exchange business on both customer and own account

bases.<sup>6</sup> Consequently, the code was modified and banks are now permitted to carry out trades for own or customer business, to speculate within open position limits, and to give two-way quotes.

- **Establishing a Lombard facility** to assist banks in meeting temporary liquidity problems associated with clearing and settlement, but with an interest rate sufficiently above the interbank or treasury bill rates to encourage banks to first seek funding in the market.
- **Closing the BB window offering to purchase banks' treasury bills at any time.** This action was taken prior to the introduction of the floating rate regime to remove the risk that the facility might potentially undermine the development of the secondary market in government securities.
- **Amending the BBO to provide greater independence and accountability for BB.** Increasing the independence of BB and making clear the primary goal of monetary policy was seen as an important part of the strategy to strengthen Bangladesh's macroeconomic policies, including foreign exchange policies. Accordingly, the BBO was modified on March 10, 2003. The changes included a statement that BB would formulate and implement monetary and foreign exchange policies, and give advice to the government on the interaction between monetary and fiscal policies. At the same time, the Council for the Coordination of Fiscal, Monetary, and Exchange Rate Policies was formed. The Council is comprised of the Minister of Finance, Minister of Commerce, BB Governor, Finance Secretary, Secretary of the Internal Resources Division, and the Member (Programming) of the Planning Commission. Of particular relevance to BB, the council's mandate includes responsibility for coordinating the macroeconomic framework and ensuring consistency among macroeconomic targets for growth and inflation, and the fiscal, monetary, and external accounts.<sup>7</sup>

---

<sup>6</sup> The code of conduct, however, prohibited banks from engaging in any speculative foreign exchange activities that were otherwise permissible within their net open position limits.

<sup>7</sup> Other aspects of the Council's mandate include to (i) meet for these purposes prior to the finalization of the budget to determine the public sector borrowing requirement (PSBR) while taking into account credit needs of the rest of the economy and growth and inflation objectives; (ii) meet quarterly (at least) to review the consistency of macroeconomic policies in view of recent economic developments; and (iii) consider the need for modifying the PSBR as necessary in meetings held before and after the adoption of the budget.

### **The Third Stage: Medium-Term Post Float**

This stage included structural measures that would take longer to implement, such as increased support for financial market development and bank and financial sector restructuring. A number of changes to the supporting legal and institutional infrastructure were also expected to flow from Bangladesh's participation in the joint IMF World Bank Financial Sector Assessment Program (FSAP). Specific options available to the authorities included:

- **Gradually reducing, and eventually eliminating, the Statutory Liquidity Ratio (SLR).** This largely prudential tool had created a captive market for treasury bills. While reducing the cost of the government's debt, it impeded the development of a functioning treasury bill market, thus weakening the implementation of monetary and exchange rate policy. The SLR can be used "sparingly" to support a restrained monetary policy stance.<sup>8</sup>
- **Establishing a primary dealer system for government securities,** including support for a number of market makers prepared to quote two way prices for government debt. Initial efforts were hampered by the absence of supporting market arrangements and infrastructure. Further work has been undertaken more recently, however, in conjunction with a TA program for establishing a secondary market for government debt.
- **Adopting a book-entry system for government securities trading.** In 2003, BB introduced a scripless book entry system that eliminated the need for physical transfer of securities each time a securities transaction occurred. A system has been developed, but has not yet become operational.
- **Establishing efficient settlement procedures for government securities** that, in particular, removed settlement risk through the use of delivery versus payment (DVP) procedures. BB introduced DVP in 2005.
- **Eliminating capital controls as the financial system adapts** to operating in a more market-based environment and deeper and more liquid financial markets develop. At the time of the float, and given the low level of financial market development and the then weak condition of the banking system, it was judged necessary to keep controls on capital flows in place for the time being (especially controls on short-term flows that could

---

<sup>8</sup> See Bangladesh Bank, 2006, *Monetary Policy Statement* (Dhaka).

prove destabilizing). Over the medium term, controls could be liberalized in a manner that is carefully sequenced and coordinated with other policies. Any steps in this direction would also need to be accompanied by strong and well-enforced prudential regulations.

## **Post Float Experiences and Further Development**

The transition to a floating taka in May 2003 proceeded smoothly. The shift was carefully planned and nearly all of the specific first stage actions were completed.<sup>9</sup> The shift also coincided with a surplus in the balance of payments that reduced the risk of unexpected exchange rate pressure or volatility early on. With a steady supply of dollars in the system, and a positive response to the accompanying package of confidence building measures (which included a temporary increase in interest rates), the new regime was comparatively straightforward to implement for both BB and the banks.

Favorable economic and market conditions during the first 18 months of the float saw Bangladesh's external position strengthen (Figure 10.1). The taka gradually depreciated by 9 percent and 5 percent in nominal and real effective terms, boosting competitiveness of the export sector. Interventions in the market were largely confined to building foreign exchange reserves, and to countering very rare disorderly market conditions.<sup>10</sup> Over this time, BB made considerable progress in implementing most of the second stage actions, and also refined procedures for monitoring banks' foreign exchange operations and positions in light of market conditions experienced in June 2004. In terms of other second stage actions, the planned upgrading of accounting procedures has been delayed by difficulties associated with a complementary BB automation project.

Pressures emerged at the beginning of 2005, however, as the external position weakened. Export earnings moderated, reflecting

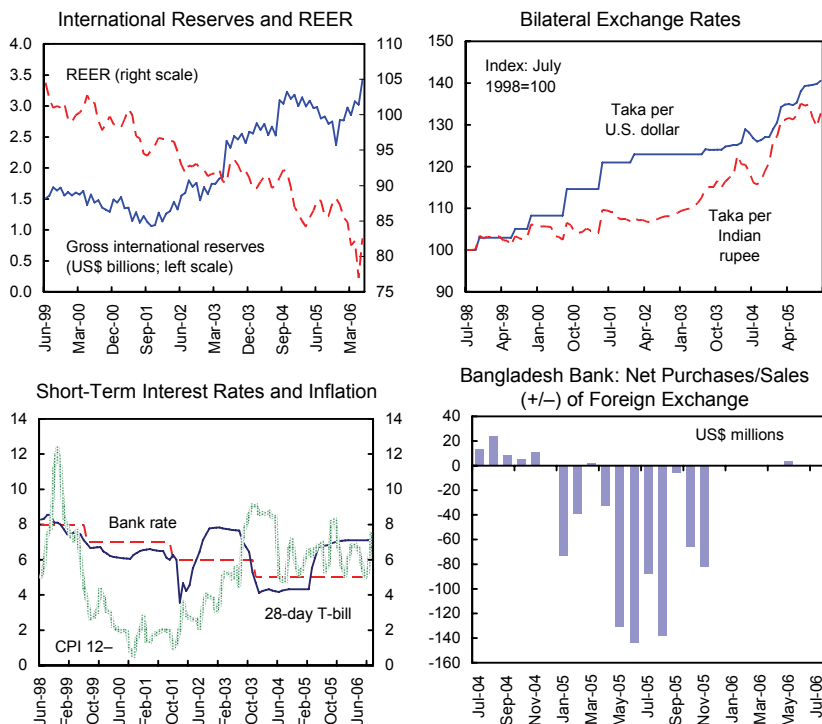
---

<sup>9</sup> The exceptions, which related to establishing dealing room authority and introducing shorthand monitoring of banks' positions, have not yet become operational.

<sup>10</sup> In June 2004, for example, large orders from importers to buy U.S. dollars gave rise to disorderly market conditions. The experience nonetheless proved useful in identifying actions to enhance preparedness for times of possible reversal in market conditions and sentiment.



Figure 10.1. Bangladesh: Selected Indicators



mainly a sharp decline in prices associated with the elimination of the Multifiber Arrangement (MFA) quotas on January 1, 2005.

Also, imports grew rapidly, reflecting higher oil and commodity prices, an increase in food imports following the devastating floods of 2004, and stronger demand for investment goods. The external current account moved into a deficit of about US\$1.1 billion (or 1.8 percent of GDP) in FY05, from near balance in FY04. To ease the pressure from these multiple external shocks, BB sold some foreign exchange reserves while allowing the taka to depreciate by 5 percent against the U.S. dollar. Taking into account higher payments for oil imports, gross international reserves at end-June 2005 were around \$2.7 billion (2.4 months of imports), after peaking at \$3.2 billion at end-2004.

Monetary policy was supportive of growth, although an accommodative stance in early 2005 contributed to pressures on the foreign exchange market. Reserve money growth accelerated in 2005, reflecting in part lending to the agricultural sector for flood rehabilitation and strong demand for credit in a low interest rate environment. Growth of private sector credit and broad money also increased sharply. At the same time, a decline in real interest rates led to a slowdown in the net sales of treasury securities by BB, with many banks holding treasury securities only up to the SLR.

Consistent with its commitment to the floating exchange rate regime, BB used several market based mechanisms to address the pressures that emerged in 2005. These included confining interventions to countering disorderly conditions and building reserves, allowing the exchange rate to absorb some of the pressure, and introducing a number of measures (along the lines of those noted in Box 10.2) to further develop the functioning of the market. Even so, the combination of oil demand, the effort to maintain reserves, and the desire to keep the exchange rate stable induced BB to use suasion, which at times led to the re-emergence of queues for foreign exchange. Over the course of the year, the taka-dollar exchange rate depreciated by about 9 percent.

Steps to improve the functioning of the market focused on achieving equity and transparency in operations. In particular, measures were taken to ensure that no bank was given preferential treatment in the foreign exchange market, with the result that the taka-dollar rates offered by the NCBs and private banks converged. Further, BB interventions in the foreign exchange market were conducted in a transparent manner by selling foreign exchange to the highest bidder, rather than conducting intervention solely through the NCBs as was the case in the early days of the float. The government also reiterated that it would rely on market based mechanisms when the system came under stress, with changes in a market based exchange rate being an expected part of adjusting to an adverse external environment. In view of the considerable pressures in the foreign exchange market associated with oil financing needs, however, the government also noted that further intervention might be needed at times. Such action, however, would be designed to smooth adjustment in the rate, not prevent it.

An accompanying gradual tightening of monetary policy also helped to reduce inflationary pressures while safeguarding the external position. By early 2006, the floating exchange rate system was functioning relatively well, and export competitiveness had improved with the depreciation of the real effective exchange rate. Increases of 2–3 percentage points in interest rates in the first quarter of 2006 also contributed to reducing pressure in the foreign exchange market and helped to contain inflationary pressures.

Subsequent quarters in 2006 saw Bangladesh's external position strengthen, as the exchange rate stabilized, and international reserves increased. The current account registered a surplus of close to 1 percent of GDP in FY06, fueled by strong growth of exports and worker remittances (23 and 25 percent, respectively) and a slowdown in import growth. The exchange rate stabilized around Tk 70 per U.S. dollar, without further central bank foreign currency sales in the market (through end-September).

Experience to date suggests that reform of the foreign exchange regime has made possible sustained growth in exports and remittances, helped the economy to weather external shocks from rising oil prices and the end of the MFA quotas, and facilitated the buildup of international reserves. Further development of the foreign exchange market can be expected with the progressive completion of the supporting third stage actions noted earlier, and ongoing enhancement of market participants' knowledge and confidence in a floating exchange rate environment. As the market develops further, BB can also expect to explore further improvements in its operational capacity to meet new challenges and market practices.

For its part, Bangladesh Bank has noted that experience with the floating exchange rate has been consistent with expectations and favorable on the whole.<sup>11</sup> Looking forward, BB expects the floating rate regime to function more smoothly as various stakeholders become more familiar with it. The initial apprehensions and concerns about

---

<sup>11</sup> See address by BB Governor Ahmed on "Management of Floating Exchange Rate: The Bangladesh Experience," delivered to the Economic Reporters Forum, Dhaka, March 23, 2006, and reprinted in: Bangladesh Bank, March-June 2006, *Quarterly Bulletin* (Dhaka, Bangladesh).

exchange rate movements are also expected to disappear gradually with deeper experience and familiarity with this regime.

## References

Bangladesh Bank, 2006a, March-June, *Quarterly Bulletin* (Dhaka, Bangladesh).

\_\_\_\_\_, 2006b, July, *Monetary Policy Statement* (Dhaka, Bangladesh).

International Monetary Fund, 2006a, *Bangladesh—Fourth Review Under the Three-Year Arrangement Under the Poverty Reduction and Growth Facility and Request for Waiver of Performance Criteria: Staff Report; Staff Statement; and Press Release on the Executive Board Discussion*, IMF Staff Country Report No. 06/57 (Washington: International Monetary Fund).

\_\_\_\_\_, 2006b, *Statement by IMF Staff Mission to Bangladesh*, Press Release No. 06/93 (Washington).

Verhoeven, Marijn, and others, 2002, *Bangladesh—Selected Issues and Statistical Appendix*, IMF Staff Country Report No. 02/114 (Washington: International Monetary Fund).

Weerasinghe, Nissanke, and Olin Liu, 2005, *Bangladesh—Staff Report for the 2005 Article IV Consultation, Third Review Under the Poverty Reduction and Growth Facility, and Request for Waiver of Performance Criterion, Extension of Arrangement, and Rephasing*, IMF Staff Country Report No. 05/241 (Washington: International Monetary Fund).

**OBERT NYAWATA AND WILSON VARGHESE****Background**

Following the restoration of peace in 1999, the IMF assumed the role of primary provider of macroeconomic policy advice to Timor-Leste. This assistance was provided under the aegis of the United Nations Transitional Administration in East Timor from 1999 to 2002. At independence in 2002, the main challenges facing Timor-Leste were to elevate the erstwhile non-oil economy to a higher growth path and improve human development while preserving macroeconomic stability. Distinct from other post-conflict countries, Timor-Leste, at that time, had no pre-existing institutions to provide even basic fiscal and monetary management functions. The support of the IMF was therefore crucial in building institutions and creating capacity for the design and adoption of the requisite macroeconomic policy mix. Reinforcing this effort was the IMF's technical assistance (TA) which created the embryonic institutions, prepared the minimum legal and regulatory framework for their operation and assisted with the bridging of skill gaps and the creation of institutional capacity for policy formulation and implementation.

IMF financial sector TA has evolved from the initial institution building – which successfully created the Banking and Payments Authority of Timor-Leste – to capacity creation for specialized functions such as banking supervision, insurance supervision, payments system modernization and petroleum fund management. In view of the embryonic nature of the national institutions and the pervasive lack of capacity and necessary skills, building local capacity continues to be the key objective of the TA.

With the later discovery of large oil reserves, the country has adop-

ted an economic management philosophy which entails a sustainable long-term use of the income stream from petroleum extraction while also ensuring its equitable inter-generational allocation. The strategy involves current budgetary expenditure patterns not being inordinately skewed by the use of oil/gas wealth. The vehicle making this operational is the Petroleum Fund (PF) akin to the Norwegian “oil fund.” The initial technical work for setting up such a fund facilitated the generation of a broader national consensus on the issue, assisted the government in defining legal and regulatory structures and guided the creation of the enabling fiscal environment. The TA effort at this stage, which involved collaboration with the Norwegian authorities, initially focused on the design of the legal and tax environment and later culminated in the enactment of the Petroleum Fund Law. With the vehicle and the supportive infrastructure in place, the IMF, in collaboration with the Norwegians, sought to strengthen the readiness and capacity of the Banking and Payments Authority of Timor-Leste (BPA) to take on the challenges posed by this new responsibility.

A key aspect of the technical assistance is to address the skill gaps and the lack of institutional capacity at the BPA. Ensuring the transparent and effective management of the oil/gas wealth has also been an integral component of the IMF’s technical assistance. This parallels the great importance that the Timorese attach to creating a credible Petroleum Fund with a clear and robust governance structure that creates buy-in from the relevant stakeholders, notably the government and civil society. In continuing the capacity building effort, the IMF enlisted the cooperation of the Norges Bank, which made available its expertise for the provision of policy and management advice to the BPA and for laying the groundwork for the establishment and operation of the PF. The effort later evolved as a collaborative venture involving both the IMF and the Norwegian Ministry of Foreign Affairs, with the latter providing funding for the project and the IMF monitoring and backstopping the expert.<sup>1</sup>

---

<sup>1</sup> This long-term capacity creation involved the stationing of an erstwhile staff of Norges Bank as the resident Petroleum Fund Advisor at the BPA. The tenure of the Advisor is for an initial one year period with prospect for extension depending on the evolving circumstances.

Overall, Timor-Leste's absorption and implementation of TA recommendations has been strong, in part reflecting the strong Timorese ownership of the TA program. The IMF's TA delivery at the BPA has been cited as exemplary relative to other recipients of technical assistance in Timor-Leste. In attempting to tell this story, this chapter outlines the broader contextual settings, TA response and its evolution, the cooperative nature of the effort, the impact on the recipient institution and the plans for the future, including the transformation of the BPA into a full-fledged central bank.

### **Initial Stages**

With the stronger-than-expected growth in oil/gas revenue, the need to develop a long-term strategic approach to the management of the oil wealth remained the over-arching objective of both the BPA and the government of Timor-Leste. In the initial stages of the IMF's involvement with the BPA, the latter was suffering from an extreme shortage of qualified personnel. Being a major constraint limiting the efficiency and benefit of TA delivery, the early phases of TA intervention in Timor-Leste involved the placement of consultants in organizational positions with responsibility for key administrative and line functions at the BPA. Even with the direct involvement of IMF experts at the organizational level, the underlying strategy was to train Timorese staff with a view to turning over managerial responsibility to them at the earliest possible opportunity. This mode of TA delivery, combined with the active involvement and engagement of the Timorese staff with these experts facilitated the training and transfer of skills. As a measure of its success, in November 2004 all expatriates in key leadership positions at the BPA were replaced with the first generation of Timorese managers.

Following the Timorization of key managerial positions at the BPA, the TA effort shifted from institution building to capacity creation. The modality for TA delivery at this stage was to station resident experts as advisors to the new Timorese managers. While resident experts were stationed at the BPA, a supportive IMF TA effort also continued through issue-driven multi-topic technical assistance missions involving the use of IMF staff, experts from various cooperating official institutions and independent consultants.

Over a three-year period, the stationing of long-term advisors was progressively reduced to speed up further in-house capacity creation. With the emergence of noticeable managerial competence at the BPA, TA delivery later shifted to the use of multiple short-duration expert visits tailored to address specific capacity gaps and new initiatives. Where long-term institutional capacity gaps in some areas still remain—with respect to broader policy design and management—the stationing of resident long-term experts continues to be the preferred option.

### **Evolution of the Oil Wealth Management Philosophy**

Recognizing the likely growth and significance of oil/gas revenue, the Timorese government sought and secured technical assistance from the IMF in 2003. In this regard, the PF was considered a useful tool in ensuring the long-term sustainable management of Timor-Leste's oil/gas resources. Building on international best practice and the Norwegian “oil fund” model, the approach adopted by the authorities addressed broad questions regarding: (i) how much of the income stream should be spent immediately for infrastructure and human capital development and how much should be invested for the future; (ii) how the PF should be designed and managed; and (iii) how transparency and broad public support for the PF could be ensured.<sup>2</sup>

To arrive at a consensus, many consultative meetings were held throughout the country and written submissions were received from many organizations. Taking into account the various submissions, the IMF and other interested parties then contributed to the review process and to the eventual finalization of the Petroleum Fund Law. In June 2005, the Timorese parliament unanimously approved the law, which made it possible for the PF to commence its operations in August 2005. Table 11.1 presents a chronology of developments leading to the establishment of the PF.

---

<sup>2</sup> The BNR also had a rediscount window against government securities (T-bills and development bonds) and prime quality private paper. The posted refinance rate was 11 percent. However, the window was rarely used, given the excess reserves in the banking system.



Table 11.1. Timor-Leste Petroleum Fund:  
Chronology of Developments

Date	Arrangement
June 22, 2005	The Petroleum Fund Law approved by the parliament
August 3, 2005	Promulgation of the PFL
August 3, 2005	First taxpayer deposit to the PF account
August 22, 2005	First purchase of U.S. Treasury bonds for the PF account
September 9, 2005	Opening balance of \$204.6 million transferred to the PF account
October 13, 2005	Management Agreement between MoPF and BPA signed

### Main Elements of the Petroleum Fund Law

The law requires that the PF be prudently managed and invested securely in low-risk financial assets abroad. The PF law, which spells out the main elements for the operation and management of the PF, attaches great importance to ensuring the credibility of the PF and the associated high standards of governance. It also provides for a formal Management Agreement between the BPA—as the designated manager of the PF—and the Ministry of Planning and Finance (MoPF), as the owner of the PF. The key elements of the PF law are:

- Channeling of all oil/gas revenue to the PF.
- Establishing the PF as an integral part of the budgetary process and not as a separate institution. Oil/gas revenue is to enter into a dedicated PF account on a gross basis.<sup>3</sup>
- Ensuring that: (i) there is a fair inter-generational distribution and (ii) the PF serves as a source of financing for building productive capacity in the Timor-Leste economy.
- Transfers from the PF during any fiscal year not to exceed the appropriation amount approved by the National Parliament.

<sup>3</sup> As opposed to net petroleum revenue, i.e., after deduction of general expenditure over the government budget.

- Transparency for PF-related data and decisions, including investment policy, reporting requirements and savings policy in order to foster credibility.
- Creating a governance structure for the PF including an Investment Advisory Board and a Petroleum Fund Consultative Council.
- Delegating operational management of the PF to the BPA and ensuring it is governed by a Management Agreement.

### **Asset Allocation Guidelines**

The MoPF is responsible for the overall strategic asset allocation decisions relating to the PF. With overriding concerns about the dearth of investment skills and the need for the establishment of confidence in the PF management, the Timorese authorities chose a conservative asset allocation strategy akin to an indexing mandate using US dollar based low-risk instruments. The objective of the mandate is not to make active investment decisions in an attempt to outperform the benchmark. Rather, the goal is to replicate the market exposure as expressed in the Management Agreement. Though it entails an opportunity cost in terms of expected returns, the investment approach that has been adopted seeks to minimize operational risks.<sup>4</sup> The initial TA helped define the investment risk profile of the benchmark as stipulated in the Management Agreement.

In light of the authorities' limited investment experience, the IMF encouraged the clarification of the BPA mandate as one of replicating the return on the benchmark rather than attempting to add value by actively deviating from the benchmark. Typical of the approach adopted by visiting TA missions, various options and the attendant pros and cons were discussed with the Timorese. Cognizant of the need to avoid reputational and operational risks in an area which is not the IMF's particular expertise, the approach has been to leverage TA support from the Norwegian government through experts with hands-on experience in their own country and in a way which equips the Timorese nationals with the requisite skills.

---

<sup>4</sup> For the PF itself, the level of financial risk should probably be low in the early stages until the fund has established a footing as an institution. This would reduce the risk of losing political/public confidence in the PF.

The modest risk level reflects the nascent investment capabilities in the BPA in its new function as manager of the PF. Consequently, operational ease, and not only risk-return characteristics of the benchmark over the longer run, has been an important determinant in the choice of the benchmark. Another reason for this cautious approach is that building public confidence in the management of the PF is of paramount importance, particularly in its early stages. In that regard, a benchmark with a higher risk profile, although probably desirable in light of the PF's market value and long-term orientation, risks eroding this confidence in the early years.

### **Management Agreement**

In its fulfillment of the requirements under the Management Agreement, the MoPF is required to: (i) provide investment guidelines and issue such instructions as are necessary for the functioning of the PF; (ii) provide a forecast of the monthly cash requirements of the government fifteen days prior to each quarter; (iii) consult with the BPA on PF related information to be released to the public; and, amongst other things, (iv) appoint independent auditors of the PF and pay for them through the State budget.

On its part, the BPA is required to: (i) invest the capital of the Fund in accordance with the Management Agreement; (ii) maintain accounts of the PF on behalf of the Treasury; (iii) supply information to the MoPF and prepare regular reports; (iv) appoint and dismiss banking correspondents, dealers, brokers etc., as necessary, and evaluate the performance of external fund managers; (v) implement systems, procedures and risk management practices, and take responsibility for the development of human resources to minimize the risk of operational losses to the PF; and (vi) maintain and provide secretariat services to the Investment Advisory Board (IAB).

In implementing the objectives of the Management Agreement, IMF TA ensured that there are strong institutional, organizational and information management arrangements to guarantee proper governance of the PF. High standards of transparency in the operations of the PF, including comprehensive and accessible reporting requirements—both on the management of the PF and on whether the spending of oil/gas revenues is consistent with long-term

considerations—are aimed at strengthening the governance and credibility of the PF. Stringent information requirements on payments made by companies as PF receipts add to the existing measures to strengthen governance structures. All staff of the BPA in general and those dealing with the PF, in particular, are held to the highest standards of probity. The BPA is not liable for losses arising from the operations of the PF unless such losses arise from willful negligence on the part of the BPA or its employees. Independent external audits carried out by an internationally recognized accounting firm helps to bolster confidence that money going into, out of or remaining in the PF is properly accounted for. The external auditor also has to certify the calculation of the estimated sustainable income, and prepare a report on payments made by companies as PF receipts.

### **Investment Advisory Board**

An Investment Advisory Board for the PF was established to advise the Minister of Planning and Finance. Its functions include developing performance benchmarks of desired returns and the risks of PF investments; advising on the investment instructions to be issued to PF investment managers; making recommendations to the Minister on the appointment or firing of external investment managers; and advising on the overall investment strategy. The membership of the IAB consists of the director of the Treasury, the Head of the BPA and three other individuals (two of whom are required to have significant experience in the area of asset management) appointed by the Minister. The BPA provides the secretariat and other necessary support for the IAB.

### **Petroleum Fund Consultative Council**

The PF law has also established an independent Petroleum Fund Consultative Council (PFCC). The PFCC advises the National Parliament on the operations of the PF, for which purpose it has access to expert assistance. The PFCC acts as a “watchdog” and contributes to an informed public debate and the sound management of the oil/gas wealth. Members of the PFCC are appointed by the President, Parliament, Government and civil society, and there are additional seats for former Presidents, Speakers of Parliament, Prime Ministers, Ministers of Finance and Heads of the Central Bank. The

PFCC is required to consult extensively with the community and, to that end, it is required to hold annual discussion forums on the PF.

### **Creating Investment Management Capacity**

It was recognized that Timor-Leste's adoption of the US dollar as its currency set limits to the pursuit of an independent monetary policy. Naturally, foreign exchange reserves management, in its conventional sense, was not an area of concern at the BPA. That being the case, the work of the small investment unit at the BPA remained focused on cash management, provision of banking services to the government and managing banking system settlement activities.

The PF is projected to grow, under very conservative global oil price estimates, to over \$5 billion by 2010. Although the PF has no explicit liability side, i.e., no earmarking of withdrawals from the PF, the government's intended use of the PF, as well as its size, constitute critical information for the investment policy. Considering the long-term evolution of the PF and the continuing lack of staff capability in this area, building adequate capacity to fulfill this mandate and foster the public's confidence in its credibility remains an area of critical importance for the BPA. Alongside this objective, the critical lack of asset management capability at the BPA also became apparent. Considering its strategic importance, technical assistance, over the 2005-2007 period, is focusing on creating and strengthening the BPA's asset management capacity thereby putting the institution in good stead to deliver on its mandate now and in the future when the investment strategy may change.

The subsequent technical assistance on financial issues was built over the underlying fiscal policy assumptions and the savings plan under the PF.<sup>5</sup> Hence, TA in this area used the existing corporate plan of the BPA as a starting point. The BPA was clearly suffering from a

---

<sup>5</sup> This savings policy should provide "the right balance between current expenditures—that can help deliver economic growth, social services and political stability over the medium term—and the entitlements and choices of future generations." The PF Law seeks to preserve the real value of petroleum wealth and also limits the budgetary use of petroleum revenue to the permanent sustainable income from that source.

dearth of skills in general and in asset management in particular among its staff. Given this situation, the TA delivery objective at this stage were to (i) assist in the development of capacity to make independent investment decisions, and (ii) intensify the effort to sharpen skills in strategic asset allocation and other policy issues surrounding PF management. The assistance also involved:

- establishing a simplified set-up in the form of an indexed mandate instead of active management;
- limiting the investment universe to basic assets with relatively low risk; and
- using external managers, and not trading assets or making investment decisions internally.

It was important to be consistent in adopting such an approach and to follow the initial training of BPA's staff and the provision of initial policy advice on the way forward with the creation of basic in-house capacity for investment management. Thus, TA experts helped with the setting up of interim arrangements with the Federal Reserve Bank of New York (FRBNY) whereby the role of the FRBNY was expanded from being a correspondent bank to a custodian and manager of PF assets based on instructions from the BPA. Given the embryonic state of BPA capacity, experts helped in setting up standard investment instructions based on the nature of the PF portfolio.

The intention of TA in the investment management area is to create lasting long term capacity for this important function at the BPA in distinct phases. To this end, TA missions helped to define more clearly the need for capacity creation in different areas of investment management—front office, middle office, back office, performance measurement, selection, management and evaluation of external fund managers, etc.<sup>6</sup> During the initial phase, the focus was on ensuring that the PF is professionally managed. In subsequent phases, efforts are being aimed at building capacity for more diversified external management and in the long-run active internal management is

---

<sup>6</sup> A considerable part of every TA mission involved the provision of hands-on workshops to build the capacity of the staff of the BPA.

expected to evolve. This approach is consistent with the gradual building of requisite skills among the BPA staff. Implementing the recommendations of technical assistance missions, the BPA has successfully positioned itself to handle the management of the PF by initially establishing a front office within the Department of Investment Management (DIM).

### **Front Office**

The PF law bestows on the MoPF, as the owner of the PF, the responsibility for strategic asset allocation decisions. While the owner's investment horizon should principally guide the choice of asset classes and the duration measures for the investment mandate, it is important to take into account the evolution of investment management capacity at the BPA. To keep pace with the growing size of the PF, as well as market dynamics, the ongoing TA strategy has focused on developing capabilities initially in US government bond investments and, later, to extend this capability to other fixed-income asset classes.

Once adequate proficiency and confidence in fixed-income management is built up at the BPA's Front Office, this is expected to evolve into the selection of non-commercial fund managers – such as the Bank for International Settlements (BIS) and the World Bank – and later to the appointment of commercial asset managers with their respective mandates reflecting the future needs of the PF. As the BIS and the World Bank provide investment vehicles with similar asset classes, this approach would not only provide a healthy comparator for the BPA's PF management capability, but also also facilitate the BPA acquiring the necessary experience in fund manager selection and monitoring.

### **Middle Office**

With notable progress achieved in terms of the Front Office function, the focus of later TA was to create in-house capacity for the middle and back office functions within the DIM. Accordingly, a middle office function at the DIM was created in late 2005 and with the placement of a resident long-term advisor in PF management, the Middle Office function is now fully operative. Apart from guiding

policy formulation in this area, the placement of the resident advisor has facilitated the continual training of staff at the BPA in both the Front and Middle Office functions. The ongoing TA effort focuses on capacity creation in two key middle office functions – portfolio control and portfolio valuation. From a risk control perspective, the TA has been able to ensure that various portfolio controls, limits, portfolio valuation, and return computation, etc., are performed by the Middle Office. In addition, the independence of the portfolio valuation and control functions are ensured by these functions being closely supervised by the long-term advisor and the work itself being entrusted to different people within the Middle Office.

## **Risk Management**

At the start of the PF management activity, the BPA staff lacked the capacity to develop appropriate portfolio performance indicators in line with the transparency requirements set by the PF law as well as the management agreement. TA provided by the IMF facilitated staff training in this important risk management function and also assisted with clarifying the nature of the reporting requirements stipulated by the PF law and Management Agreement as well as internationally accepted best practices with respect to performance measurement and reporting. This was done by instituting additional reports to the MoPF and incorporating the compliance and risk-reporting dimensions of PF management. This resulted in various risk, compliance, and performance indicators being generated as important elements of market monitoring and portfolio performance reporting. In this regard, the initial training provided to Middle Office staff has been reinforced with the presence of the long-term advisor.

Recognizing that the lack of portfolio monitoring and compliance-reporting structures could be a source of risk, TA helped to highlight the rationale for key management information reports, created suitable templates for the purpose, worked with the DIM in creating these reports and trained the staff in generating them on an ongoing basis. Guidance was also provided on the production of the first PF quarterly portfolio performance report.



The lack of an effective long-term cash management strategy was recognized as a potential source of operational risk for the PF. Thus, appropriate technical assistance was provided and an institutional interface for information sharing between the BPA and the MoPF was created. This effort was able to address an issue of great concern – that the BPA does not have a clear idea of the future size of the PF cash flows (contributions and withdrawals). This resulted in the creation of the necessary institutional arrangement to formalize interactions between the BPA and the MoPF, not only on cash flows impacting the PF, but also to discuss issues related to the day-to-day management of the PF. The IMF realized that the future growth of the PF and the resultant increasing complexity of its management could bring with it heightened risks if the compliance function were to be overlooked. The IMF therefore helped to organize the compliance function as part of the broader risk-control apparatus.

### **Institution Building and Capacity Creation**

Over the 2002–2005 period, the objective of the overall TA approach was to create the necessary technical and management capacity within the BPA to handle various tasks on a sustainable and continual basis. With the maturing of the BPA's own institutional capacity and the enhancement of staff skills, the TA effort evolved into addressing pockets of skill gaps arising from the progressive widening of institutional responsibility. Initially, as discussed above, this involved creating capacity for investment management at the BPA in the context of the establishment of the PF.

Overall, Timor-Leste authorities have been highly receptive to policy advice provided through the TA interface. To-date, the BPA has also been effective in using TA resources and its record of implementation of various recommendations has been good. Particularly in this regard, TA on PF management has been well absorbed by the BPA. Future TA is expected to address issues such as the transformation of the BPA into a full-fledged central bank, further modernization of the payment and settlement systems to accommodate the needs of the growing financial sector, and enhancing financial sector supervisory competence.

In terms of the delivery strategy, technical assistance resulted in identification of the BPA's priority areas for assistance and also provided action plans in each of the priority areas as roadmap for the BPA to enhance capacity in those areas. The actions plans, in particular, were so designed as to cover the following 12-18 months and included topics for action in various areas. This served as the first phase of a capacity building strategy for the BPA.

As a counterpart to the TA delivery strategy, the BPA has been quite effective in working with the IMF and in implementing the various recommendations. It is this collaborative effort that culminated in the establishment of the PF, a process that has been reinforced through extensive consultation with national authorities and backstopping by IMF staff of the work of various experts. The appointment of Timorese nationals in all key positions and a system of support by resident experts have created an appropriate incentive framework and built confidence among the newly appointed managers at the BPA. Complementing the TA effort has also been the efforts undertaken by the BPA to guarantee a continuous improvement of staff skills through structured training involving seminars and courses, especially in basic finance. This continual training of the staff has effectively complemented TA and made it more effective.

TA was delivered through a combination of IMF staff and IMF-selected experts who generally have direct operational experience of the relevant topics from employment at national central banks, regulatory authorities or similar institutions. The frequency of IMF staff visits declined slightly during 2005. At the same time, the pace of expert visits has been maintained. This reflects the fact that the IMF staff involvement is largely to set the framework, review progress, and give guidance on strategic questions, while ongoing capacity building is largely provided by experts.

Delivery of TA was principally through hands-on involvement, one-on-one discussions, presentations and seminars for the BPA staff, meetings with the BPA management, end-of-mission reports, and subsequent final reports. The BPA has indicated that it finds the hands-on involvement particularly useful, with the meetings with the management and the final reports important for setting out and

discussing the overall frameworks. In addition, the BPA has much appreciated the remote assistance delivered largely through e-mail by some experts and backstopper at the IMF. It is evident that the continuity of relationships is an important element in the success of the TA program.

The resilience of the BPA in the wake of recent disturbances (May-June 2006) and its demonstrated ability to put contingency mechanisms and safeguards in place, constitute positive proof of the depth of the capacity building effort embedded in the TA delivery.

### **Plans for the Future**

With clear indications of capacity creation and continuing support to sustain the effort into the medium to long term, TA deployment has been scaled down. The plans for the future include focused TA missions to address critical areas that need further modernization such as the payments and settlement systems and the evolution of the BPA into a full-fledged central bank.

The IMF remains committed to assisting BPA in building in-house capacity for PF management and other important central banking functions. However, it should be noted that the IMF faces resource constraints in meeting the growing demand for TA. To address this constraint, future TA delivery will increasingly engage other cooperating institutions both as a source for accessing the necessary expertise as well as funding. That said, assistance for the BPA to evolve as a full fledged central bank is likely to require IMF presence. Into the longer term, there is likely to be a need for technical assistance on foreign currency reserves management as an important function distinct from the PF, though the capacity created in connection with the PF management would put the BPA in good stead in this regard.

### **Lessons Learned**

Overall, the Timor-Leste TA program has demonstrated some remarkable successes. These successes may be linked to certain key elements in the design of the TA program and the responsiveness of the BPA. Some of the lessons that might be learned include:

- **The importance of the interrelationship between TA and policy** formulation, in the sense that a sound economic policy environment lays the foundation for efficient TA delivery.
- **Strong efforts made by the BPA to ensure institutional ownership of** the underlying work. Given the initial lack of capacity at the BPA, identification of the broad areas for technical assistance by the IMF, together with specific details in the TA delivery action plan proved particularly useful
- **TA delivery consistent with the absorptive capability of the recipient institution.** Particular effort was made early on in the process to take into account in-house institutional capability and skill gaps. TA was then tailored to bridge the skill gaps.
- **Continuity in both IMF staff and expert involvement in the TA** delivery. The benefits of this continuity are clear in the good relationships that have developed between staff and experts, and their BPA counterparts, as well as in the general consistency in successive action plans.
- **Substantial continuity of counterparts at the BPA.**
- **The predominant focus of the TA on the transfer of knowledge to the** BPA staff. This has been achieved through the various action plans requiring the BPA staff to undertake specific actions, while IMF staff and experts maintain only advisory roles. The fact that the experts have visited peripatetically, rather than being assigned on a long-term basis, has served to emphasize that the BPA staff themselves have to implement the policies.
- **Coordination between the various suppliers of technical assistance.** Excellent coordination between the various suppliers of TA helped ensure the success of the Timor-Leste TA program.
- **The need to start at a rudimentary level due to capacity constraints.** This may be necessary in order to get a TA program going.
- **Formalization of the process for taking a program forward,** for example, through a steering committee made up of all key participants that would meet regularly. This could help maintain the momentum, including during periods when missions and expert are not in the country.
- **Explicit assertion of ownership by senior management at the principal** TA recipient institution. This could help motivate the staff and encourage decisive action.

- **The strategy of selective deployment** of long term resident advisors to advise managers at the recipient institution.
- **The collaborative nature of TA effort.** Partnership is important for delivery of TA in post-conflict situations. While the IMF has been the principal supplier of TA to the BPA, there has also been assistance delivered through bilateral links between the BPA and other agencies such as the UN, the Bank of Portugal as well as experts financed through the FIRST Initiative.
- **Capacity creation at the BPA has been negatively impacted by the** continuing capacity gaps in other governmental agencies like the MoFP.

Major challenges and opportunities remain for the BPA to consolidate what it has accomplished so far. While substantial progress has been achieved in TA delivery to Timor-Leste, risks to the further enhancement of capacity at the BPA still remain. A particular risk related to TA delivery concerns the possible tenuousness in the transfer of skills in some areas. The enhanced capacity at the BPA will only be sustainable if the newly-acquired skills are passed from the individuals directly involved in the training to the institution as a whole. In that regard, the preparation of some written manuals, guidelines, and documentation is a central element of the TA program. In the absence of these, past enhancement in capacity will be particularly vulnerable to staff turnover.

In some regards, the Timor-Leste TA delivery strategy may serve as an excellent example for other intensive TA programs designed to enhance institutional capacity in key areas. Needless to say, the BPA's achievements have earned it the reputation of being the most efficient and effective agency in the country. This relative success tends to burden the institution with increasing demands on its limited capability.

**Enhancing Financial Stability  
Through Consolidated Supervision:  
The Case of the Philippines****BARBARA BALDWIN**

In contrast to several of its neighbors, the Philippines did not exhibit the same degree of economic weakness in the direct aftermath of the Asian crisis. However, the large amount of nonperforming assets that accumulated on banks' books during the crisis had not been aggressively addressed until the full implementation of the Special Purpose Vehicle (SPV) Law in 2005. Thus, the effects of carrying such a high percentage of nonperforming assets for an extended period had weighed heavily on the banking sector. In addition, the effect of these nonperforming assets on banks' capital adequacy had not been transparently reported. Banks were holding repossessed real estate for very long periods, often with very little provisions having been taken against them.

However, the Bangko Sentral ng Pilipinas (BSP) has begun to move aggressively to address these issues. The adoption of International Financial Reporting Standards (IFRS) has been undertaken in earnest, and in the process the reported financial condition of banks has become more transparent. Corporate governance reforms in banks were also introduced. Furthermore, the strengthening of the regulatory framework and its alignment with Basel and other international standards, coupled with enhancements to enforcement mechanisms, have led to a strengthening of the sector. This paper highlights some of the specific actions taken by the BSP to help bring about these changes.

The Philippines participated in the Financial Sector Assessment Program (FSAP) in late 2001, at which time it was determined that there were a number of vulnerabilities in the financial system. Among these, the banking sector was exposed because the supervisory framework was not well matched to the prevalence of large banking conglomerates.

The Philippines' regulatory and supervisory framework, while generally comprehensive in coverage, was quite complex and some weaknesses in enforcement were noted. This complexity was due to the fact that the financial industry and services had over time become increasingly conglomerated and universalized, but functional regulation combined with fragmented regulatory agencies created opportunities for regulatory arbitrage.

Based in part on the findings of the FSAP, the BSP determined that enhancing financial sector supervision capacity was an immediate priority. Given that complex conglomerates remain prevalent in the Philippine financial sector, implementing a consolidated risk-focused supervisory framework was necessary for the BSP to better identify and address the risks associated with these complex groups. At the BSP's request, the IMF agreed to support the BSP's efforts by providing a resident advisor, whose work has been supplemented by periodic missions comprised of IMF staff and outside experts, as well as shorter-term visits by advisors with specialized expertise.<sup>1</sup> In the past several years, the BSP has made important progress in aligning its supervisory programs with international best practices, as described below, and a number of initiatives are in progress in order to ensure that the supervision framework can effectively address the complex issues that result from the existing structure of the financial sector.

## **Background**

### **Structure of the Financial Sector**

The Philippine financial sector has been progressively reformed from one primarily tasked with a developmental role, as characterized in the 1970s by a high degree of state-directed lending to priority sectors, interest controls and subsidies, to a more modern market-oriented system. The transformation was facilitated by a program of sustained reforms, mergers, promotion of competition, and the

---

<sup>1</sup> Advisors have included current or former staff of the U.S. Federal Reserve System, the Bank of England, the Basel Committee on Banking Supervision, the Swedish Financial Supervisory Authority, the Reserve Bank of New Zealand, and the South African Reserve Bank.

opening of the banking and insurance sectors to foreigners. The program was also supported by improvements in regulatory oversight.

However, a legacy of uncoordinated reform efforts produced an incentive framework that favored the establishment of conglomerate structures exploiting the possibilities for supervisory arbitrage and prevented some key reforms that would bring the Philippines more in line with good banking practices. It also resulted in a bias against peso intermediation, favored particular instruments designed to circumvent taxes or supervision, slowed the growth of the domestic debt market, and discouraged resolution of troubled institutions.

As a result, the financial system is dominated by banks that form part of larger corporate conglomerates which own trust, investment, securities, and insurance companies, as well as foreign currency deposit units and thrift subsidiaries. The subsidiaries can be used to book transactions to minimize the costs associated with raising different classes of deposits and to exploit regulatory differences across the institutions. The fact that the conglomerates are invariably the dominant clearing banks in the Philippine payments system increases the potential systemic risks, as the banks are vulnerable to problems in their subsidiaries and affiliates. To address this matter, contain regulatory arbitrage, and improve systemic oversight, consolidated supervision would need to be strengthened and cross-sectoral supervisory cooperation enhanced. In one effort to strengthen this cooperation, a memorandum of agreement has been drafted between the BSP and the Securities and Exchange Commission (SEC) to govern the oversight of financial conglomerates. In July 2004, the Financial Sector Forum (FSF) was established, which institutionalized the cooperative arrangements in supervision, information exchange, and consumer protection of four principal financial regulators: the BSP, the SEC, the Insurance Commission (IC) and the Philippine Deposit Insurance Corporation (PDIC).

### **Conditions in the Banking Sector**

The interaction of weakening macroeconomic conditions following the Asian crisis with this incentive framework had amplified the vulnerability of the financial system. GDP recovery after the Asian crisis slowed in late 2000, and investor confidence declined. These



developments adversely impacted the Philippine corporate sector and translated into a significant deterioration in the asset quality of the banking sector.

This fragility in the banking sector was further complicated by the fact that some systemically important banks that form part of larger corporate conglomerates were under severe stress. In the context of declining profitability and asset quality, the system appeared undercapitalized at the existing level of provisioning for bad assets. Adjusting the aggregate capital of the commercial banks for various factors – including increased provisioning for nonperforming assets and deductions for deferred charges and equity investments – would have significantly reduced the effective level of capitalization being reported. Around half of the banks' NPL volume was held on a limited number of important groups and individuals; and the NPL distribution pattern illustrated the existence of worrisome concentrations in a handful of systemically important banks.

The conglomerate structure hindered the ability of the regulators to measure the degree of the interconnectedness and/or concentration of the financial system. In part, this was due to the way in which related party lending was defined and reported. The definition of related party lending excluded corporations that were subsidiaries or associates of the banks themselves.

From a systemic standpoint, vulnerability in the banking sector was heightened, given the limited options for resource mobilization by corporates and risk mitigation through non-bank financial institutions. With risks concentrated in a few large banking groups, issues of the soundness and arrangements for the oversight of the financial sector assume greater importance. As such, the increasing importance of a strong comprehensive consolidated supervision program was well documented.

### **Gaps in the Existing Supervisory Framework**

The assessment of compliance with the Basel Core Principles for Effective Banking Supervision (BCP) conducted as part of the FSAP identified a number of issues that the BSP would need to address, and

provided a framework for strengthening the supervision program. Some of the issues lie in preconditions that are not fully under the BSP's control, such as weaknesses in the legal framework governing banking and bank supervision. The BSP has been innovative in designing implementing regulations that aim to achieve international supervision standards despite the legal impediments. However, the need for accommodating these impediments has introduced inefficiencies and vulnerabilities in the supervisory framework.

The BSP progressively introduced supervisory approaches inspired by the Basel Committee on Banking Supervision and the best practices of the leading banks in the local market. The Philippine accounting system was not fully in line with international standards, but initiatives were underway to move to International Accounting Standards from the existing US GAAP-based standards. While a number of procedures for the resolution of problems in banks existed, experience showed that their application could be severely hampered by the absence of coercive legal instruments, and the possibility of judicial interventions. Under the circumstances, a certain degree of prudential forbearance was being accepted as a pragmatic necessity.

Several weaknesses in the legal framework for bank supervision were noted, the most significant of which was the inadequate legal protection for supervisors. Amendments to the New Central Bank Act that would address this issue have been stalled in Congress for several years, and it is not clear that the amendments will pass in the current political environment. However, recent rulings by the Supreme Court have strengthened case law in this area.

### **Initiatives to Strengthen the Supervisory Framework**

As a result of the FSAP, in late 2003 the BSP adopted achievement of compliance with the Basel Core Principles as a part of its formal five year rolling strategic plan. Other objectives included: (i) strengthening market discipline, including the full adoption of IAS; (ii) strengthening corporate governance; (iii) creation of an early resolution framework to address weaknesses in the banking system; and (iv) reform and strengthening of the local capital markets.

The BSP has embraced a comprehensive plan to strengthen its supervisory program, and it is being aggressively implemented. The main components of the plan include: (i) a complete reorganization of the Supervision and Examination Sector (SES); (ii) establishment of specialized examination teams for capital markets, information technology, trust operations, and microfinance; (iii) creation of a specialized unit dedicated to problem bank resolution; (iv) revisions to a number of banking circulars to strengthen regulations governing large exposures, connected lending, internal control, and internal audit; (v) revisions to regulatory reports to better capture consolidated banking data, and implementation of international accounting standards; (vi) introduction of a revised examination program, including establishment of permanent dedicated teams for all large conglomerates; (vii) introduction of a revised examination report; (viii) intensive coaching of examiners on the new approach and procedures; and (ix) establishment of a formal Examiner Development Program that includes intensive structured training, mentoring and eventually, formal testing for commissioned examiner status. MCM advisors have been able to work with the BSP on a number of these initiatives.

Advances on each of these objectives are clearly evident, although as of this writing, some are still very much a work in progress. Implementation of the reforms has been ambitious, especially since early 2005. It should be noted that aggressive corrective actions are being taken in an environment where legal protection for supervisors is still uncertain.

### **Reorganization of the Supervision and Examination Sector**

The existing organization structure was identified by senior BSP management as an impediment to change. Specifically, the structure tended to reinforce the concept of individual self-contained examination units operating independently of one another. SES was structured around four examination departments: large commercial banks, smaller commercial banks, thrift banks, and rural banks. The relative independence of these departments gave rise to the development of multiple examination practices and procedures and impaired quality control. Institutions under common ownership or control were not necessarily assigned to the same department,

hampering consolidated supervision. The structure also had proven to be an impediment to recognizing and promoting junior staff who are motivated and accepting of change. Creation of a more flexible structure would have the benefit of allowing staff from across all sectors to apply and compete for any available promotion and to develop multiple skill sets.

The BSP determined that a major reorganization of the Supervision and Examination Sector (SES) would be necessary to successfully implement the transition to consolidated risk-focused supervision and to institutionalize the process. The objectives of the reorganization included: (i) strengthening operational controls by segregating basic functions; (ii) instituting continuous monitoring and examination follow-up; (iii) enhancing resources dedicated to certain key competencies such as information technology, capital markets and trust operations; (iv) centralizing repetitive processing related duties, such as reviewing applications; and (v) facilitating the reassignment of staff to enhance efficiency and promote full utilization of promising employees whose potential advancement had been constrained in the existing rigid organization structure. SES management drafted a comprehensive but phased reorganization plan addressing these issues, which was then formally approved by the Monetary Board.

To facilitate implementation of the plan, a senior management team was appointed to lead the transition process. The team consisted of the Deputy Governor for Supervision and three Managing Directors who assumed responsibility for the following units: Supervisory Examinations Unit; Central Point of Contact (CPC) Unit; Audit and Specialized Examination Unit; and the Central Supervisory Support Unit. This structure essentially created two primary supervision divisions, one dedicated to continuous supervision, particularly of large complex banking organizations and more intensive off-site surveillance, and one dedicated to on-site examination. The CPC Unit will essentially perform an off-site surveillance role. The Supervisory Examinations Unit will perform on-site examinations and will contain the specialty “key competency” units described below. The work of these units will be complemented and supported by the Audit and Specialized Examination Unit, which will provide forensic examinations and hold responsibility for resolution management of higher-risk banks. Finally, the Central Supervisory Support Unit holds

responsibility for supervisory policy development, the supervisory data center, centralized applications and licensing, centralized scheduling, and consumer affairs.

Once the basic structure was established and key positions identified and staffed, the composition, hierarchies and reporting structures of the individual units were designed. Mission statements, objectives, goals, and operating procedures have been established for each of the units, and new job descriptions have been written. Staff members were interviewed to determine their interests; and assignments were then made reflecting an assessment of staff skills, experience, and their stated interests. SES senior management recognized that the reorganization was a major undertaking, and would need to be implemented in carefully coordinated phases. Substantial resources were dedicated to both organizational design and the implementation of the plan. MCM advice was sought on both organizational structure and change management issues. The new organizational structure strengthens the planning function, introduces an enhanced risk-focused supervisory process, establishes a more focused problem institution process, introduces stronger quality control, and centralizes certain supervision support functions. The result has been a supervisory structure that better supports the conduct of risk-focused consolidated supervision and streamlines the supervision process.

### **Establishment of Specialty Examination Units**

As part of the SES reorganization, a decision was made to segregate certain “core competencies” into separate units that could be called upon to join examinations as necessary based on the risk profile of the organization. As it is not feasible or economical to train a large number of examiners quickly, segregated units were established with select groups of examiners to develop advanced skills on assigned topics. The current units include: (i) Information Technology; (ii) Capital Markets; (iii) Trust; and (iv) Microfinance. The units have been staffed with examiners chosen on the basis of skills, aptitude, and an expressed desire to participate. Additional units are planned, dedicated to specialized credit risks and anti-money laundering. In general, these units are expected to take a lead role in the areas of expertise they cover. Specific areas of responsibility will include:

development and revision of examination guidance, training, input to policy formulation and applications, as well as input to the Sector's strategic planning process.

### *Information technology and capital markets*

The information technology and capital markets “core competency” units were the first to be formed. Participation in the IT unit was competitively screened through the acquisition of the Certified Information Systems Auditor (CISA) designation. Candidates for the Capital Markets unit were expected to be working toward their Chartered Financial Analyst (CFA) certification. This screening is in line with initiatives to strengthen the link between pay and performance. It was understood that those examiners showing aptitude and expressing interest in obtaining advanced training in the various core competencies would be eligible for additional compensation.

Advanced training for those in the information technology and capital markets units was provided via a World Bank grant. For each subject, consultants created and delivered structured training programs, as well as developing examination manuals, mission statements and staffing models, a recommended organizational structure, and a set of job descriptions and related performance criteria. On the latter, it was necessary to develop job evaluations that would fit within the civil service structure but yet tie pay and promotion to performance.

The market risk training has resulted in examination practices that are quite different from previous BSP practice. With external guidance, the market risk group developed a detailed set of working papers and examination guidelines based on sound international practices and local operating practices. These local practices were endorsed both by the BSP and the Bankers Association of the Philippines. Staff who attended the training classes received not only technical knowledge, but also instruction on how to apply the knowledge through case studies and demonstrations of how the working papers would be used to support the examination findings. Following conclusion of the consulting projects, responsibility for teaching the advanced information technology and market risk courses has been assigned to the newly established key competency units.

The information technology training has similarly resulted in enhanced supervision of the risks inherent in banks' technology framework. This group is responsible for building the IT supervision capacity of the BSP, and members are expected to continually upgrade their knowledge regarding IT supervision from both a local and international perspective. This unit will also take a lead role in maintaining and upgrading the IT related examination procedures, work documentation programs, and training materials.

To support the work of both units, draft circulars were prepared and issued to the industry for comment. The circulars covered the BSP's expectations for risk management overall, and in particular with regard to the specific subject matter relative to either information technology risk or market risk. These circulars have since been approved by the Monetary Board.

### *Trust operations*

Trust operations were identified as a potentially underestimated weakness in the industry. Improprieties were noted in the administration of individual trust accounts, including the potential for loans or other transactions with insiders that may not serve the best interests of trust customers. A lack of restrictions on permissible investments in the rules governing common trust funds made it possible for banks to extend loans from customers' trust accounts. Given that loans, which are not actively traded, cannot be readily valued, there was concern that the common trust funds could actually be worth less than the amounts reported to customers.

To address these issues, the BSP issued a circular establishing the Unit Investment Trust as a replacement for the Common Trust Funds (CTF). This trust instrument differs significantly from the CTF in that eligible investments are specified by regulation and limited to government debt and other securities that are actively traded. Purchases and redemptions must be transacted at market value; and a third party custodian must be used to physically hold the securities.

In addition, the BSP is currently establishing a segregated Trust Examination specialty unit, and revisions to trust regulations are underway. The supervisors in the Trust Examination unit will be highly specialized in examining a bank's exposure arising from

offering fiduciary services to its clients. These exposures may result from a bank offering any of the following services: asset management, security custody services, personal trust services, corporate or local governmental bond registration services, and collective investment schemes. As with the capital markets and IT units, the members of the trust examination unit will be expected to develop and maintain examination manuals, a trust rating system, and related work documentation programs.

### *Microfinance*

In line with its advocacy for microfinance as a means to make the financial system more relevant to the large segment of low-income people in the country, the BSP created a specially trained microfinance examination unit to ensure that microfinance is practiced by banks with appropriate risk management mechanisms in place. The BSP recognized that banking with the poor is socially desirable, potentially profitable, and sustainable, provided rigorous credit discipline and sound practices are maintained.

### *Problem bank management*

As part of the overall reorganization of the SES, a segregated unit is being set up to oversee and supervise problem banks. The unit will include a CPC section, an examination team section, and a segregated team to house legal and forensic examination experts. The purpose of this unit will be to deal with highly problematic banks that represent elevated legal, financial, and reputational risk. It will focus on expeditious and least cost resolution strategies, and on establishing evidence trails to strengthen the BSP's position in any legal action brought by, or against, the BSP.

## **Strengthened Regulations**

In the review of Basel Core Principles for Effective Bank Supervision conducted as part of the FSAP, the regulatory framework for banking was deemed to be fairly robust, though specific weaknesses were noted. Of particular concern from the standpoint of consolidated supervision, regulations were generally not required to be enforced on a consolidated basis, despite the prevalence of financial conglomerates in the Philippine financial sector. This meant



that important regulations governing banks' risk profiles were not adequately capturing the true risk profile of the complex banking groups, as exposures could be divided between various group entities, which were then not reviewed on a consolidated basis.

The BSP has undertaken several initiatives to reduce the level of credit risk in the banking system, including through enhancements to the regulatory framework. In particular, in March 2004 the regulations governing single borrower limits and related-party lending were strengthened and made to apply on a consolidated basis. The single borrower limit, set by law at 25 percent of capital, was tightened by including guarantees, debt securities issued by the obligor, and exposures arising out of market risks. The related party lending rules were strengthened by broadening the definition of related interests, which now include entities under common control or with interlocking directorships or officer positions. Direct and indirect subsidiaries of the bank were also added as related parties.

Since January 2005, banks have also been required to implement internal credit risk grading. The BSP prescribed a minimum 10-grade framework that must be implemented initially by all commercial banks and eventually by all banks. The framework has more granularity than the BSP's loan classification framework, forcing the banks to more carefully and explicitly grade the risks inherent in the loan portfolio. BSP tests the banks' application of the framework during its examinations.

The prompt corrective action framework (PCA) was strengthened in March 2006 in order to enhance BSP's enforcement capabilities. The BSP has had a PCA framework in place since 1998. However, the original framework limited the application of the regulation to cases of capital deficiency relative to the prescribed minimum level applicable to a particular bank category. However, experience has shown that significant damage can be done to the financial condition of a bank well before the capital condition falls precipitously. In addition, questionable accounting practices that may go undetected for a period could result in reported capital figures well below true levels. Therefore, a PCA framework based solely on capital deficiency unnecessarily limits the options of the supervisor. The BSP's new framework strengthens the capital deficiency criterion by evaluating it

against the risk-based capital adequacy ratio (CAR) instead of minimum capital levels. Moreover, it allows explicit supervisory action to be taken also in cases where the composite CAMELS<sup>2</sup> rating or the Management rating falls below three. Furthermore, action can be taken in cases where unsafe or unsound banking practices are noted that place the bank at a higher risk of failure. An additional enhancement involves the explicit specification of penalties that can be imposed should a bank fail to adhere to its PCA plan. The fact that PCA plans must be drafted by the bank's management and confirmed by its board of directors, for approval by the BSP, eliminates the argument that a more rigid framework does not take account of a bank's specific condition. This approach also promotes greater bank ownership of internal reforms. Finally, BSP believes that aggressive implementation of PCA will strategically limit its legal risks, on the principle that a bank with higher perceived franchise value will tend to be more cooperative with the supervisory authority to preserve the bank as a going concern. On the other hand, a bank in advanced deterioration may be more belligerent as it faces drastically reduced options.

Looking forward, the BSP intends to implement the new Basel II capital standards with effect from July 1, 2007. Implementing guidelines have been issued describing the plans for phased adoption of the rules. From 2007 onward, banks will be expected to apply the standardized approach for credit risk as prescribed in Basel II, as well as either the basic indicator or standardized approach for operational risk. By 2010, the banks may be allowed to move to the foundation internal ratings based (IRB) approach or advanced IRB approaches for credit risk, and advanced measurement approaches for operational risk. The new standard will be applied to universal and commercial banks (and their subsidiaries), while stand-alone thrift banks, rural banks, and quasi-banks will continue to be covered by the existing Basel I-type regulations with selected enhancements for improved risk sensitivity and greater disclosure. The more extensive disclosure requirements, along with the adoption of international accounting standards, is expected to enhance market discipline.

---

<sup>2</sup> The CAMELS rating system for banks contains individual ratings for capital, asset quality, management, earnings, liquidity, and sensitivity to market risk.

## Regulatory Reporting Revisions

The Philippines adopted International Financial Reporting Standards (IFRS) on a phased basis, with full adoption essentially achieved in 2005. International Accounting Standard (IAS) 27, which governs consolidated reporting, was adopted in 2002, but there was a lag in amending the BSP's prudential reports to reflect the adoption. The comprehensive review and revision of prudential reports described above also served to incorporate the changes necessary for the transition to International Accounting Standards. In particular, extensive revisions were necessary to facilitate the adoption of IAS 39.

Specifically, a review of the regulatory reporting framework determined that enhancements were needed both to strengthen the data available to supervisors and to reflect the adoption of IFRS.<sup>3</sup> The existing prudential reports were capturing data on a bank-only basis, and were "consolidated" only in the sense that they included the bank and all branches.<sup>4</sup> External resources were tapped to conduct a review of the existing reports as well as the chart of accounts, and to make recommendations for collecting prudential data on a consolidated basis. Based on the recommendations, the BSP established a new chart of accounts to support the introduction of a strengthened prudential report. The revised report, which was constructed not only for prudential purposes but to accommodate reporting requirements for other departments in the BSP,<sup>5</sup> while quite lengthy, has been fairly well received by the banks given that a number of other reports would subsequently be eliminated.

To enhance the financial data available to supervisors, the BSP undertook an ambitious data warehouse project. The database contains information derived from the banks' regulatory reports. The reports

---

<sup>3</sup> The IFRS have subsumed IAS and provide the new international accounting framework. However, the individual standards are still referred to as IAS.

<sup>4</sup> Only annual reports submitted to the BSP were true consolidated statements.

<sup>5</sup> One objective of the BSP's review of reporting requirements was to reduce the regulatory burden on banks by streamlining the reporting process, which had involved the submission of in excess of 80 reports on a periodic bases ranging from weekly to annually.

use a standardized general ledger structure mandated by the BSP to ensure consistency of reporting. External assistance was retained for the development of a Bank Performance Report (BPR) that provides comparative statistical analysis of banks' financial condition based on data contained in the warehouse. The data is updated quarterly in line with the banks' prudential reporting requirements, and the system can produce both standard and custom reports, which contain peer and historical data against which a bank's performance can be assessed. These reports have become an important component in off-site surveillance and the examination planning process. BSP also plans to revise the new regulatory reporting framework, and efforts are already underway.

### **Revised Examination Program and Examination Report**

The examination framework that existed at the time of the FSAP was considered insufficient to fully identify the true risk profile of large complex banking groups. The examinations tended to be compliance-oriented, with the examiners more focused on completing the numerous schedules and appendices required for the examination report than conducting a comprehensive analysis of an organization's financial condition, risk profile, and risk management capabilities. As a result, the reports tended to be long and cumbersome, containing the facts gathered during the examination as opposed to concise conclusions. According to industry representatives, they reflected a scattered, non-focused approach that included all types of information, regardless of whether it was material or relevant to the principal risk issues. Also, there appeared to be little flexibility to tailor the report to the specific nature of the institution being examined. The ongoing transition to risk-focused examination techniques initially resulted in an increase in workload for examiners rather than reducing the utilization of resources in areas of lower risk, as these new risk-based examination techniques tended to be an overlay on pre-existing examination procedures rather than a substitute for them. That is changing as the pilot examination program (discussed in the next pages) proceeds and staff, as well as the Monetary Board, become more comfortable with the new procedures.

At the request of SES, in late 2004 the Monetary Board approved a pilot program to test a new examination process and report format. For the initial pilot, an examiner-in-charge and an examination team were selected based on experience and a demonstrated willingness to take a risk and try new methods and procedures. The target (foreign) bank was contacted and the country manager agreed to cooperate fully with the BSP's efforts to improve the examination process. The examination started with an expanded "pre-exam visitation" in which discussions were held with bank management to aid in setting the scope of the examination. In addition, the new Bank Performance Report was available for use in analyzing the bank's financial condition and developing the preliminary risk assessment.

A formal process to be followed during the examination was prepared and agreed by all parties. It outlined specific reports that would be prepared, as well as the format of the proposed reports and the specific authorization process that would be used. In addition, a schedule was drafted to ensure that the on-site and report processing phases would be conducted with the discipline of established time frames. An enhanced consolidated scope proposal was prepared that contained an integrated financial analysis as well as a more thorough preliminary assessment of the various risk management processes. During the examination, the team was able to use many of the draft procedures and work papers that had been developed with the advisor's assistance over his tenure.

The initial pilot exam was completed in early 2005; one report covering the two entities in the consolidated organization, totaling approximately 65 pages, was issued within 60 days of the close of the exam.<sup>6</sup> This was the first truly consolidated examination report produced by the BSP, and included an analysis of the organization on a consolidated basis<sup>7</sup> as well as a historic comparison of consolidated classified assets relative to group capital. In addition, risk management systems were reviewed on a consolidated basis, which

---

<sup>6</sup> Existing practices would have likely produced two full examination reports totaling approximately 300 pages.

<sup>7</sup> To the extent possible, as the BSP was not yet collecting prudential reports which have been consolidated on a line-by-line basis.

contributed to a more rational allocation of resources.<sup>8</sup> The team made several presentations to senior management of both the BSP and the bank. These briefings focused on higher-level systemic issues and enabled senior BSP management to open a dialogue with the bank very shortly after the examination was completed.

The report was favorably received by the Monetary Board, which then mandated a substantial expansion of the pilot program. The initial pilot was conducted on a well run foreign banking operation. Subsequent pilots included various bank types, including large local banks, problem banks, thrift banks, and larger rural banks. Executive summaries are now prepared for the Board after every examination. In addition, the training program described below has been linked with the “on-the-job” training taking place in the pilot examination program. Examiners graduating from the training program are able to perform many of the pre-examination planning tasks on their own, enabling an expansion of the number of pilot examinations. This process is producing seasoned instructors who have had exposure to both the training and the hands-on experience of actually performing the new style examination. The pilot program has largely been a success; and it is anticipated that the new examination framework will be formally adopted for all banks as enough trained examiners and reviewers become available.

As a complement to the new examination framework, an abbreviated examination program for well-run small banks is also under consideration. Implementation of this new approach to the supervision of noncomplex institutions that are in satisfactory financial condition would allow the BSP’s limited examination resources to be directed to the areas of greatest risk. The framework would allow longer periods between full-scope on-site examinations, relying on an enhanced off-site surveillance function as a mechanism to facilitate the early detection of developing weaknesses.

---

<sup>8</sup> In anticipation of efficiencies afforded by the new approach, examination resources were reduced by about one-third.

## **Establishment of a Formal Examiner Development Program**

To institutionalize all the changes being undertaken to implement a comprehensive consolidated supervision program, and to ensure uniform training and skills development for examiners, the BSP has established a formal Examiner Development Program. An effective banking supervision program requires extensive specialized training, much of which is normally conducted “in-house” by the various regulatory agencies. While most of the BSP examiners have an accounting background, an initial diagnostic of the supervision function found that few had received specialized examination training. The BSP did not have a comprehensive in-house program, and training opportunities tended to be ad hoc and not uniform. Therefore, a large part of the advisor’s time was initially dedicated to establishing institutional training programs. At the outset, this involved mainly targeted seminars on specific topics to enhance examiner skills. Eventually, however, SES senior staff approved the establishment of a formal Examiner Development Program.

External resources funded by the FIRST Initiative were utilized for development of the core program, which included courses on financial analysis, credit analysis, market risk, operational risk, and assessing management. The core courses are delivered over a 12 to 18 month period, and are coordinated with on-the-job training. After completion of a module, participants are required to pass a proficiency test before moving on to the next module. Graduates of the program are being given priority consideration to lead pilot examinations and to serve as central points of contact in charge of supervising large complex banking organizations.

The project to develop the core examiner training program was launched in October 2004 and designed to run the series of courses three times over a one year period. During the first session, external experts taught each of the courses. During the second session, BSP staff selected to serve as in-house trainers taught the courses jointly with an external consultant.

During the final session, the BSP in-house trainers taught the courses themselves, with the external consultants observing and providing feedback. As such, the program contained an important

“train-the-trainer” component, which has allowed the BSP to fully institutionalize the program. Following the completion of the FIRST Initiative project, the series of courses has been run several times by the in-house trainers.

### **Effects of the Strengthened Supervisory Program**

Improvements in the supervisory function are already evident. The Monetary Board has endorsed the new examination format, noting that it provides a more complete but yet concise overview of a bank’s condition and concrete recommendations for corrective action when necessary. The commercial banks have commented on the significant change in the examination format, noting that discussions are focused on risk identification and control, and are more thoughtful and thorough. They seem to have a greater appreciation for the examiners’ knowledge and skills.

The prudential regulatory framework has been strengthened, particularly in the areas of large exposures, connected lending, and prompt corrective action. This has enabled the BSP to develop a more comprehensive view of the true risk profile of the complex groups. This knowledge strengthens the BSP’s ability to maximize the effectiveness of its supervisory resources by streamlining procedures where reasonably possible and dedicating more resources to the areas of greatest risk.

Evidence of more consistent enforcement of prudential requirements is also noted. The BSP has relied on what it considers strengthened case law governing legal protection for supervisors, as well as a stronger PCA framework, to demand greater corrective actions by banks, including the provision of additional capital. Nonperforming assets are being recognized and addressed. In recognition of the continuing weakened condition of some institutions, forbearance on recognition of losses is being allowed under the Special Purpose Vehicle Act designed to encourage resolution of problem assets. However, recourse to this forbearance must be disclosed in the audited financial statements; this requirement appears to have limited the number of banks electing this option.



The effects of the various steps taken by the BSP to enhance the supervisory program will evolve over time. Weaknesses in the legal framework will continue to prevent BSP from achieving full compliance with the Basel Core Principles, as amendments to the New Central Bank Act are required before the legal framework will fully meet the preconditions outlined in the Principles. However, despite these limitations, important advances are being made toward achieving good practices in banking supervision.

**KARL DRIESSEN**

In April 2005, the Bank of Albania (BoA) hosted a three-day Workshop on Stress Testing for Banking Supervisors. The workshop drew over 30 participants from 14 central banks and supervisory agencies from Central and Eastern Europe (CEE). The workshop program was developed and presented by a panel of IMF staff and experts.<sup>1</sup>

Workshops are effective capacity building tools for larger audiences. They can supplement existing in-house training programs, in particular on more specialized topics for which it is difficult to develop training material. Hands-on exercises facilitate implementation of the course material in the local environment, and encourage deeper understanding. Regional workshops provide the additional benefits of sharing experiences, establishing professional networks, and fostering peer dynamics. The IMF has increasingly made use of workshops for delivering its technical assistance on monetary and financial issues. IMF-organized workshops can take different formats, including: (i) workshops delivered through a regional training institute, such as the Joint Vienna Institute (JVI) or the Singapore Training Institute (STI); (ii) regional workshops co-hosted by a central bank or supervisory agency; or (iii) workshops benefiting one central bank or agency.

The objectives of the Workshop on Stress Testing for Banking Supervisors were to familiarize bank supervisors with basic stress testing techniques and advocate its use in a risk-based supervision

---

<sup>1</sup> The workshop team consisted of Marcos Pineschi Teixeira (Central Bank of Brazil), Marco Sorge (Bank for International Settlements), Gudrun Johnsen (formerly IMF), and Karl Driessen (IMF).

environment. The workshop—the first specifically targeted to banking supervisors—was intended to de-mystify stress testing as a possible extension to offsite analytical tools. Bank supervisors are often not involved in stress testing exercises, even if the data used for stress tests typically are collected through regulatory reporting mainly for banking supervision purposes. The workshop was also intended to buttress the risk-based approach to supervision by using a tool that centers on risk and its financial consequences. Although banking supervisors do not necessarily put financial stability on the top of their agenda, but rather the soundness of individual institutions, stress testing can be used both for monitoring system-wide and individual institution exposure to risk.

The workshop consisted of a series of presentations and exercises on stress testing topics. Several country representatives made presentations on stress testing practices in their respective agencies. A roundtable at the end of the workshop provided an opportunity for all participants to describe and comment on their practices. Each day featured a group exercise session focusing on stress testing one major risk (see Box 13.1).

Although participating countries had different transition experiences, their respective financial systems shared many common features. Some participating countries had recently been admitted as members of the European Union (Czech Republic, Estonia, Hungary, Lithuania, Poland, Slovak Republic). Others were still in an earlier stage of transition, and continued to have a sizeable state presence in the economy.

At the time of the workshop, most countries had participated in the joint IMF/WB Financial Sector Assessment Program (FSAP), and had encountered stress testing in that context. Financial systems in most countries shared some of the following common traits: (i) a significant presence of foreign banks; (ii) a moderate to high degree of dollarization/euroization; (iii) continued state presence in the banking sector; and (iv) the presence of banks with poorly performing loan portfolios with exposure to state- or socially-owned enterprises.

### Box 13.1. Stress Test Exercises—General

The exercises used during the workshop were based on the fictional financial system of Bankistan developed by IMF staff.<sup>1</sup>

The spreadsheets contain partial balance sheet data for a set of financial institutions. These institutions are grouped in the following categories: state-owned banks, foreign-owned banks, and domestic private banks.

The worksheet develops stress tests for the following risks: (i) credit risk; (ii) interest risk; (iii) foreign exchange risk (direct/indirect); and (iv) interbank contagion.

<sup>1</sup> Martin Čihák. “Stress Testing 101: A Hands-On Exercise,” IMF paper/unpublished. The exercise file and the accompanying documentation are available upon request from [mcihak@imf.org](mailto:mcihak@imf.org).

This chapter provides an overview of the workshop contents, highlighting the effectiveness of workshops in technical assistance delivery. The second section, “Overview of Stress Testing,” provides an introduction to stress testing. This is followed by the identification of the vulnerabilities in financial systems that form the basis for stress testing.

The next section, “Implementing Stress Testing,” covers the main risks for which stress tests are usually deployed: market risk (interest and exchange rate risk) and credit risk. Principal approaches (*bottom-up*—using individual financial institution data as a starting point, or *top-down*—using a more aggregate econometric approach) are also described. Last section concludes.

## Overview of Stress Testing

Stress tests can be defined as a set of statistical techniques to help assess the vulnerabilities of financial institutions and financial systems to exceptional but plausible events. The commonality of the techniques is that they address some “what if” questions: “*What happens if interest rates suddenly increase?*” “*What if the exchange*

*rate suddenly depreciates?*” There is no best practice for stress testing. Stress test techniques (i) range from very simple to quite complex in methodology; (ii) have different coverage; (iii) differ in how they claim plausibility.<sup>2</sup>

Stress tests differ in terms of their methodological complexity. Broadly speaking, one can identify the following three methodologies:

- *Sensitivity analysis*, where the effect of varying one parameter (e.g., interest rates) on a (set of) financial indicator(s) (e.g., capital adequacy) is observed.
- *Scenario analysis*, where the joint effect of varying multiple parameters (e.g. interest rates, GDP growth rates, etc.) on a (set of) financial indicator(s) is observed.
- *Contagion analysis*, where the effects of varying parameters are traced through a financial system based on cross-institution exposures.

Stress tests differ in their degree of aggregation. To analyze systemic risk, a significant part of the financial system must be included in the analysis. However, for banking supervision purposes, it would be useful to include all supervised institutions. Most often, stress tests are limited to the banking system, although in highly developed financial markets, where banking and life insurance products are sometimes sufficiently similar and integrated banking and insurance conglomerates dominate, the coverage of stress tests may be wider. For system-wide stress tests, there are two broad approaches: (i) “*bottom-up*,” where the stress test effects are aggregated over individual financial institutions; and (ii) “*top-down*,” where the focus is on correlations between more aggregated variables such as system-wide nonperforming loans (NPLs) and GDP growth. Often, data availability determines the approach followed.<sup>3</sup>

The risks that are typically stress-tested include credit and market risk, but other risks are also analyzed if relevant and feasible. The

---

<sup>2</sup> The literature on stress testing is vast and growing. Recent surveys include Jones, Hilbers, and Slack (2004), and Sorge (2004).

<sup>3</sup> Coverage can also be extended to financial institutions on a consolidated basis, including foreign branches and subsidiaries.

principal market risks—unforeseen changes in market prices for asset classes on banks’ balance sheets that affect asset valuation as well as income streams—that are identified in stress tests are (i) interest rate risk; and (ii) exchange rate risk. Credit risk includes both the direct credit risk embedded in the default probabilities of the loan portfolio, and indirect credit risk, which depends on the market risk carried by the bank client, but will affect the default probabilities if not properly hedged (e.g., a large devaluation will significantly increase the repayment obligation of a foreign-exchange denominated loan, and thus reduce the repayment capacity in domestic currency if not hedged).

There are different views on what constitute “exceptional but plausible” events. Perhaps the simplest way is to use a standard shock size (e.g., 100 basis point increase in the yield curve) for an interest rate stress test. This works well in a straightforward stress-test model where the effect of the shock is proportional to the size of the shock. Such an approach facilitates comparison across time, institutions, and different shock sizes.

An alternative method is to use a specific historical outcome (e.g., the largest depreciation witnessed in the last decade); this is sometimes referred to as a “worst-possible case”. A third possibility is to construct hypothetical scenarios based on analysis of past volatility and correlations, which is particularly useful if more than one parameter is varied, or the effects of a range of possible parameter values are desired.

Stress tests are by now part and parcel of the financial stability toolbox. With the growing interest in financial stability in the aftermath of the Asian Crisis of the late-1990s, and the widespread participation in the FSAP, many central banks and supervisory agencies now perform stress tests on a regular basis. They have also encouraged, or at times regulated, that commercial banks integrate stress testing into internal risk management practices.

Results of stress tests are now regularly reported in financial stability publications. Čihák (2006), in a study on how central banks report on financial stability, finds that over half of the Financial

Stability Reports (FSR) examined publish the results of stress testing.<sup>4</sup> Stress test results can be presented along various dimensions; the most common are the effect of the shock on the capital adequacy ratio, and on earnings.

Stress testing is a multi-stage process, and is continuously evolving. In the initial stage, the main macroeconomic and market risks as well as the main exposures to these risks need to be identified (see upcoming section on implementing stress testing). This is followed by a determination of the coverage of and the data needs for the proposed stress tests. A methodology must be selected, and the size of shocks for the sensitivity or scenario analysis must be determined. After running the stress test, the results must be analyzed and interpreted. Stress testing has developed over time: during FSAPs, authorities have become more involved in its implementation; commercial banks are also being increasingly requested to run stress test scenarios, not just as part of internal risk management, but as part of a system-wide stability exercise on the basis of parameters provided by the supervisory authorities; lastly, the scope of stress tests has increased, and including nonbank financial institutions has become more common.

As an analytical tool, stress testing has advantages and limitations, and should be used in conjunction with other analytical methods and information. Its principal strengths are its ability to provide a forward-looking assessment of risks and greater analytical precision—typically at the level of the individual financial institution—than alternative approaches such as the analysis of Financial Soundness Indicators (FSIs). The drawbacks include the robustness of the results with respect to the assumptions that have been made, the view of financial institutions as static portfolios rather than dynamic risk managers, and the omission of non-quantifiable factors. Therefore, it is prudent to combine the use of stress testing with further analysis, including of

---

<sup>4</sup> Čihák (2006), in Table 7 of his article, reports that 55 percent of the FSRs examined contained the results of stress testing, with credit risk stress testing being the most frequently reported (in 55 percent of the cases), followed by interest rate risk (in 45 percent of the cases), and exchange rate risk (in 33 percent of the cases).

FSIs and of nonquantitative information such as the legal, regulatory, accounting, corporate governance, and tax frameworks.

### **Box 13.2. Stress Testing and Basel II**

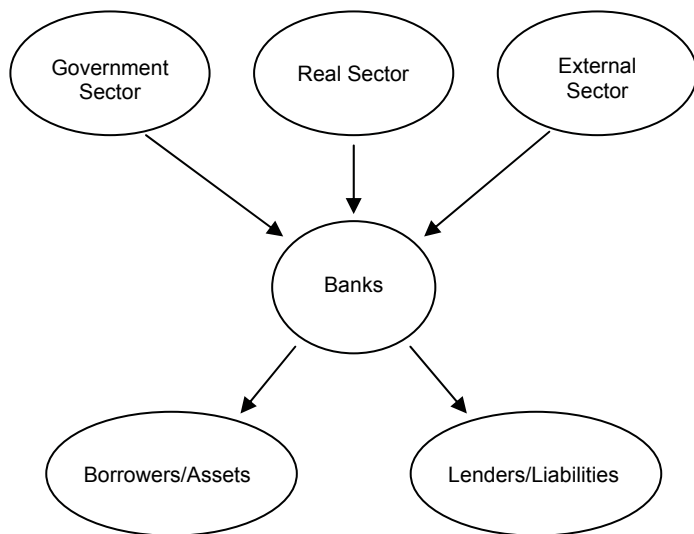
Stress testing is becoming increasingly relevant for banking supervisors. With the gradual move toward Basel II comes a more risk-based framework for supervision, which is fully compatible with stress testing. Some instances of where the Basel II Accord refers to risk include the following: (i) the framework's inclusion of market risk requires stress testing to assess capital needs; (ii) supervisors should consider how a bank provides for unexpected events in evaluating capital levels (para. 750); (iii) banks are expected to stress-test their internal risk models (para. 527j); (iv) there are explicit references to concentration risk (para. 775), and liquidity and credit risk (e.g., see para. 158).

## **Identifying Vulnerabilities**

What are the risks that banks and other financial institutions are exposed to? Banks are in the business of taking and managing risks, and thus minimizing exposure to risks is not the objective, neither for banks nor for supervisors. Rather, the level of risk should be proportional to the buffer that can be used if risks materialize—capital—and risks should be properly managed. Figure 13.1 illustrates the sources of risks to banks. Shocks can emanate from the real economy (real GDP growth, inflation, etc.), from government policies such as taxes and government payment behavior, or through the relations with the rest of the world (exchange rates, terms of trade, capital flows, etc.). Shocks can also originate with those that lend money to banks (withdrawal or rollover behavior), and with borrowers (repayment behavior).



Figure 13.1. Origins of Shocks to the Banking System



Banks' exposure to different risks is illustrated in Table 13.1. The exposure to interest rate risk depends on the maturity mismatch of assets and liabilities, both on- and off-balance sheet. Exposure to exchange risk is limited to the net open position (assets minus liabilities) in each currency. Exposure to other market risks (e.g., stock prices) is a function of the net holdings of non-interest bearing securities. Credit risk exposure depends on the quality of the borrowers, and other factors that influence default probabilities. The exposure to liquidity risk depends on the predictability of asset and liability flows, which in turn are related to asset quality and interest rate volatility, among others.

During the workshop, regional data were presented to indicate the ranges of exposure to various risks. Average capital adequacy ratios of banking systems varied widely (from 12 to 32 percent at end-2003 for a sample of eleven participating countries), suggesting a different ability to withstand large shocks.

Several banking systems showed a rather high degree of maturity transformation, with long-term loans funded by short-term deposits; this points to a growing importance of interest risk—although maturity mismatches leave open the crucial question of whether interest rates are fixed or floating, which determines who (bank or borrower) carries the interest risk. Some banking systems had still largely underdeveloped lending activity (at least, to the private sector), limiting credit risk exposure. NPLs also varied greatly, leading to different assessments of asset quality.

Table 13.1 Banks' Exposure to Different Risks

Interest Risk	Exchange Risk	Other Market Risk	Credit Risk	Liquidity Risk
Maturity mismatch; interest rate sensitivity	Net open position by currency	Non-interest bearing securities position	Defaults	Maturity mismatch; cash flow; asset quality

Exposure to exchange risk depends to a large extent on the exchange rate regime. Figure 13.2 shows the exchange rate regime classification of a sample of CEE countries in 1999 and 2003. Managed float was the preferred regime followed by a conventional peg, and currency board regimes. Since managed float regimes tend to reduce exchange rate volatility and hence underprice exchange risk, both banks and their clients are encouraged to take larger open positions, increasing the exposure to exchange risk. Since pegs are vulnerable to speculative attacks, similar exposure build-up may take place over time.

Figure 13.2. Exchange Regimes for Central and Eastern European Countries, 1999–2003

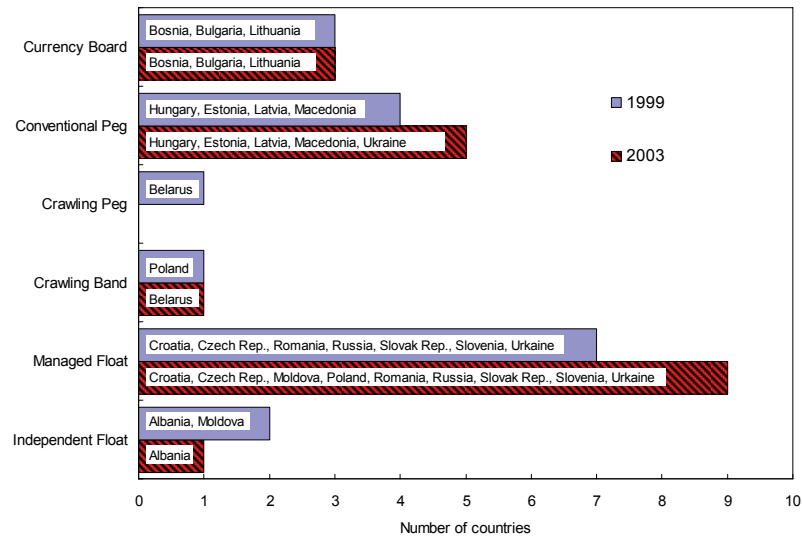
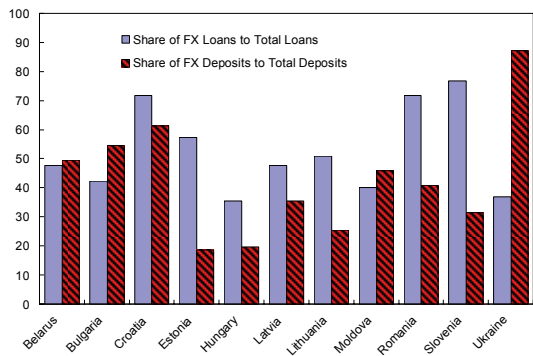


Figure 13.3 Share of Foreign Exchange Loans and Deposits, End-2003



Sources: IMF Country Reports, *World Economic Outlook*, and *International Financial Statistics*.

Another indication of exposure to exchange risk is the degree of dollarization/euroization. Figure 13.3 shows the share of foreign exchange loans (deposits) as a share of total loans (deposits) at end-2003 for a sample of eleven countries. High shares may be indicative of exchange risk in bank products which could eventually hurt banks through deteriorating credit risk resulting from increased default probabilities of bank borrowers.

### **Implementing Stress Testing**

The mechanics of stress testing depend on the methodology used. In the simplest form, where one starts with a financial institution balance sheet, the effect of a stress test is the product of (i) the shock that is applied and (ii) the balance sheet exposure. This will be illustrated below for foreign exchange risk.

#### **Market Risk**

Market risk encompasses all risks related to the fluctuation of prices of assets. This includes changes in (i) the exchange rate (foreign exchange risk); (ii) interest rates; and (iii) prices of quoted securities. Financial institutions have traditionally employed stress testing to manage their trading portfolios, which are exposed to these risks. The value-at-risk (VAR) model is a widely used method that calculates what the maximum losses on a portfolio are during a given period, given a confidence interval of, for example, 95 or 99 percent.<sup>5</sup> Since CEE banks do not typically hold significant amounts of traded shares, this section will only discuss foreign exchange and interest risk. An example of market risk stress test practices—including on foreign exchange risk—performed in Albania is provided in Box 13.3.

---

<sup>5</sup> For a survey of bank stress testing practices, see Committee on Global Financial Stability (2005).

**Box 13.3. Stress Testing at the Bank of Albania—Market Risk**

The Bank of Albania has gradually gained exposure to stress testing, including through various technical assistance and FSAP missions to Albania that took place just before the Workshop in 2005. The Banking Supervision Department conducts quarterly stress test exercises for all supervised banks.

**Foreign exchange risk:** Banks' portfolios carried a high share (80 percent) of dollar/euro loans in total loans. Foreign exchange risk stress tests are applied with prospective devaluation of the Albanian lek versus the U.S. dollar (50 percent) and the euro (40 percent). Since banks limit their open position, and generally maintain a slightly long position in foreign currency, the exposure is limited, although there is some exposure to adverse dollar-euro movements.

**Interest risk:** An important source of risk in the Albanian banking system is interest risk: at end-2004, over 50 percent of assets were held as fixed-rate treasury bills. This was due to a prohibition in lending by the largest bank—Savings Bank—imposed after large-scale lending problems. The standard interest risk stress test calculates the effect on the capital adequacy ratio of a 300 basis point shift in the yield curve.

**Credit risk:** Since in early 2005 levels of credit were still very low, credit risk was not considered an important source of risk. However, there has been rapid credit growth since, and stress testing practices must evolve as risk exposures change. It was estimated that 63 percent of borrowers taking out loans denominated in foreign exchange were unhedged in 2005. However, no indirect credit risk stress test was performed that would gauge the effect of a devaluation on the repayment capacity of (unhedged) borrowers.

*Foreign exchange risk*

The net open position in foreign exchange determines the direct foreign exchange risk exposure of a financial institution. For each currency, long positions (assets) are netted against short positions (liabilities) to calculate the net open foreign exchange position in that currency. Since most regulatory frameworks impose prudential requirements in this area, this information is typically readily available to banking supervisors for all banks. If the data are available for each currency, separate shocks (e.g., for the U.S. dollar and the euro) can be set in a stress test. Alternatively, the stress test can analyze the effects of a depreciation or appreciation of the domestic currency against all other currencies. Typical shock sizes that are used in sensitivity tests are (i) a ten percent depreciation against all currencies; (ii) the largest observed historical devaluation over some time period;

(iii) a shock that will deplete capital for the most exposed banks. In addition to the direct foreign exchange risk that banks take on, often more important is the indirect foreign exchange risk that banks' borrowers are exposed to. Since this impacts the repayment capacity of borrowers, it is classified under credit risk.

### *Interest risk*

The exposure to interest risk depends on the maturity mismatch of assets and liabilities of financial institutions. The first step in an interest rate stress test is to group assets and liabilities (both on- and off-balance sheet) into a number of "maturity buckets" (e.g., 0–3 months; 3–6 months; 6–12 months; over one year) corresponding to their remaining maturities (if the assets and liabilities have fixed interest rates), or until they are repriced (if the assets and liabilities are subject to variable interest rates). In a typical bank case, most liabilities are relatively short-term, and assets are longer-term. When interest rates rise, banks will suffer losses, since they face higher interest expenditures on deposits, but must wait before they can increase lending rates. To limit exposure to interest risk, banks may pass on the risk to customers by shortening the repricing period. This creates indirect interest risk that will be borne by bank borrowers.

### **Credit Risk**

Credit risk—and hence associated stress testing—is gaining in importance in CEE countries as financial deepening continues. At the same time, credit risk is quite difficult to model, as willingness and ability to repay is determined by many different factors, including the legal framework, credit culture, and liquidity of collateral, as well as macroeconomic factors such as economic growth, interest rates, and fiscal policy.

A simple approach to credit risk stress testing simulates a worsening credit portfolio. The scenario may indicate that all classified assets move down in some pre-determined way. For example, if there several classes of NPLs, the stress test may assume that a proportion of loans transition to the next lower class; this affects the need for provisioning and write-offs, and capital adequacy.

As noted above, credit risk can be a function of interest and foreign exchange risk borne by borrowers. However, these are difficult to quantify using bottom-up methods, and lend themselves better to top-down stress tests. In top-down stress tests for credit risk, macroeconomic data are used to estimate a relationship between real economic activity and credit quality. One of the advantages of the top-down approach is that one can use models of the economy that are built to maintain internal consistency, which allows for their use with a range of macroeconomic policy (e.g., monetary and fiscal) scenarios. Box 13.4 describes aspects of the modeling approach of the framework used in the United Kingdom.

**Box 13.4. Credit Risk Stress Testing—An Example  
from the Bank of England**

In the context of the United Kingdom FSAP in 2002, the Bank of England developed a framework for top-down stress testing, which is documented in Bunn et al. (2005).

The stress test consists of six steps: (i) an initial shock; (ii) its impact on macroeconomic variables; (iii) the impact on borrowers; (iv) the impact on loss rates; (v) the impact on earnings; and finally (vi) the impact on profit and loss accounts of financial institutions.

Step 2 generates the consistency between the correlation of variables that impact credit quality. It is performed using a Bank of England macro forecasting model. Steps 3 through 5 use different estimated models of aggregated household and corporate balance sheets, and the banking sector, including the preponderance of credit card and mortgage arrears, corporate liquidation rate, and write-off rates, as functions of variables such as the unemployment rate, retail prices, and sectoral leverage (“gearing”) rates (debt-to-income ratios).

The scenarios used in the FSAP were (i) a 35 percent decline in global equity prices; (ii) a 12 percent decline in UK residential and commercial property prices; (iii) 1.5 percentage point unanticipated increase in average earnings growth; and (iv) 15 percent unanticipated depreciation in the trade-weighted exchange rate.

## **Conclusions**

Stress testing can be seen as an extension of the risk management framework that is becoming increasingly important for purposes of bank supervision. To a large extent, this reflects the advent of Basel II, with its references to banking as a risk management business, and the need for banking supervisors to have a thorough understanding of risk management principles. Deeper understanding of stress testing by supervisors will also benefit those involved in financial stability analysis, as it will allow a more technical dialogue that may result in more accurate systemic analysis, as well as provide a basis for supervisory action against specific vulnerable institutions.

Workshops are convenient forms of technical assistance: they reach a wide audience, permit dissemination of recently gained insights by industry practitioners, and allow for country experiences to be shared. This holds true particularly for fast-moving topics such as stress testing, whose analytical frameworks still have to fully crystallize.

## **References**

- Blaschke, Winfred, Matthew T. Jones, Giovanni Majnoni, and Soledad Martinez Peria, 2001, "Stress Testing of Financial Systems: An Overview of Issues, Methodologies, and FSAP Experiences," IMF Working Paper 01/88 (Washington, DC: International Monetary Fund).
- Bunn, Philip, Alastair Cunningham, and Mathias Drehmann, 2005, "Stress Testing as a Tool for Assessing Systemic Risk," Financial Stability Review, June 2005 (London: Bank of England).
- Čihák, Martin, 2004a, "Stress Testing: a Review of Key Concepts," Czech National Bank Internal Research and Policy Notes 2004/2.
- \_\_\_\_\_, 2004b, "Designing Stress Test for the Czech Banking System," Czech National Bank Internal Research and Policy Notes 2004/3.



- \_\_\_\_\_, 2006, “How Do Central Banks Write on Financial Stability?” mimeo (Washington, DC: International Monetary Fund).
- Committee on the Global Financial System, 2005, “Stress Testing at Major Financial Institutions: Survey Results and Practice,” (Basel: Bank for International Settlements).
- Jones, Matthew T., Paul Hilbers, and Graham Slack, 2004, “Stress Testing Financial Systems: What to Do When the Governor Calls,” IMF Working Paper 04/127 (Washington, DC: International Monetary Fund).
- Sorge, Marco, 2004, “Stress Testing Financial Systems: An Overview of Current Methodologies,” BIS Working Paper 165 (Basel: Bank for International Settlements).

STEVEN SEELIG

Uruguay, in 2002, experienced a severe banking crisis that caused it to borrow about US\$1.3 billion from the IMF. Relative to GDP this was the largest exposure the IMF faced. In the four years since the crisis, Uruguay has completely restructured its banking sector. Two state banks were restructured and recapitalized, four private banks were liquidated, and a new government owned bank with the good assets of three of the failed banks was created and then privatized. Uruguay also enhanced the financial safety net through the introduction of deposit insurance and legislation to broaden bank resolution powers. During this period, the IMF has provided significant technical assistance in the areas of bank supervision, bank restructuring, and deposit insurance.

### **Condition of the Banking Sector at End-2001**

At end-2001, financial indicators for the Uruguayan banking sector were mixed. Inasmuch as the economy had been in recession since 1999, bank earnings had turned negative and two private banks were insolvent. Operating results varied significantly across banks and the specific problems of the state banks tended to dominate the aggregate numbers. While the overall capitalization and liquidity of the banking system appeared sound, other indicators were clearly negative.

The banking system was highly dollarized and thus vulnerable to exchange rate depreciation. Total deposits were relatively high by regional standards, close to 85 percent of GDP at end-2001, with dollar deposits amounting to 93 percent of total deposits. Bank exposures to exchange rate fluctuations were not insignificant. While 83 percent of total loans were denominated in dollars, approximately half represented loans to borrowers who had no dollar earnings.

Table 14.1 Uruguay: Banking Soundness Indicators, 2001  
(In percent)

	Total	Public	Private
<b>Asset quality</b>			
NPLs/Total loans	17.0	37.8	5.6
Provisions/NPLs	49.7	39.2	88.0
<b>Capital adequacy</b>			
Capital/Assets	6.1	8.2	4.5
Capital/Risk-adjusted assets	14.9	16.0	13.0
<b>Profitability</b>			
R.O.A. (after tax)	-1.9	-2.5	-0.3
R.O.E. (after tax)	-19.8	-17.4	-4.5
<b>Liquidity</b>			
Loans/Deposits	95.4	89.5	99.0
Liquid assets/Deposits	15.9	20.9	12.4
<b>Memorandum items</b>			
Total assets (share)	100.0	40.9	59.1
FX deposits/Total deposits	91.0	57.0	93.0
FX loans/Total loans	68.6	52.7	83.4

Sources: BCU and Fund staff estimates.

The corporate sector and households also held large net foreign debt positions, generally without hedging these positions owing to what appeared to be a fixed exchange rate.<sup>1</sup> However, foreign banks were generally more prudent, internalizing the risks and avoiding exposure to the non-tradable sector.

Gross international reserves of the central bank at end-2001 were small relative to its short-term liabilities. Although gross reserves amounted to nearly US\$3.1 billion, usable reserves were much smaller at US\$ 1.4 billion. The difference is accounted for by the counterpart of banks' required reserves and the central bank's other short-term liabilities, mainly deposits of the pension funds and other nonfinancial institutions.

The banking system was highly segmented. It consisted of two large state banks, Banco de la República Oriental de Uruguay (BROU) and Banco Hipotecario del Uruguay (BHU). Together, these

<sup>1</sup> In a strict sense, the authorities used a crawling band that was widened before it was abandoned in June 2002.

banks accounted for about 33 percent of total deposits and assets. Foreign banks (branches and subsidiaries) held 45 percent of deposits, and private domestic institutions held the remaining 22 percent.

State-owned banks engaged in directed and subsidized politically-motivated strategic lending and legislated bank loan restructuring and other debt relief schemes for distressed bank borrowers. Partly because of this, state banks had weaker balance sheets with larger than system-wide nonperforming loans (NPLs), higher costs, and lower profits. Private banks mostly had low reported NPLs. However, bad assets in the private banks were rising, and some banks were suffering losses.

The system was also characterized by substantial regional dependence, particularly to Argentina, as Uruguay had increasingly become an important regional offshore center since the 1980s, with some 45 percent of dollar deposits in the banking system held by nonresidents abroad. Of these deposits, nearly 80 percent were in foreign branches or subsidiaries, while resident deposits were mainly held in the public banks (50 percent) and in local private banks (31 percent).

Foreign banks mostly held these nonresident deposits in liquid assets abroad, and lending to the domestic sector was mainly limited to trade credits. Domestic banks were the chief providers of credits to the rest of the economy, including the agricultural and mortgage sectors.

There was no formal depositor safety net, and Uruguay had no deposit insurance scheme. However, the public banks were, and continue to be, fully guaranteed by the government. The affiliates of large international banks were expected to finance any liquidity needs out of their own resources and to stand by their operations in Uruguay. For the remaining banks, there was an implicit government guarantee, as the government already had a history of bailing out depositors in earlier instances of bank distress (particularly during the 1980s banking crisis).

## **The 2002 Crisis**

The banking crisis developed in three distinct phases: runs by non-resident depositors on foreign banks, a deterioration in domestic sentiment, and the imposition of a bank holiday.

The first wave of bank runs (February-March) was marked by non-resident depositors' withdrawals mostly from foreign banks, but in particular from two large private banks with strong links to Argentina. The second wave (April-June) developed amidst growing uncertainties stemming from a further deterioration in market sentiment and a lengthy bank holiday in Argentina. This phase was also characterized by problems in other domestically-owned banks, with the outflows spreading to resident depositors, which led to significant liquidity shortages in all domestic banks. The third wave began in late June. By end-July, with the fragile situation of domestic banks and critically low levels of official international reserves, the central bank was forced to declare a bank holiday on July 30, 2002.

The crisis was led by developments in Argentina. Following the introduction of a deposit freeze in Argentina in late 2001, financial distress soon extended to the Uruguayan banking system, as cash-strapped Argentine depositors began to withdraw their funds in Uruguay to meet immediate liquidity needs. Especially the two largest private banks in Uruguay, Banco Galicia Uruguay (BGU), a subsidiary of Banco Galicia Argentina and Banco Comercial (BC), came under stress.

While legally an on-shore bank, BGU operated fully off-shore, capturing deposits from Argentines and lending them in turn to enterprises and local governments in Argentina. It began to lose deposits in December 2001, with liquidity provided by its affiliated bank in Argentina. However, by February, the parent was unable to support its Uruguayan subsidiary and the bank was intervened.

The problems of BC originated in alleged fraudulent practices by its management with a bank in Argentina, which depleted its capital.

The news about the fraud triggered a wave of deposit withdrawals from the bank. During the first two months of 2002, the bank lost over US\$400 million in deposits (22 percent of its deposit base). Most of the deposit withdrawal was satisfied with the bank's own liquidity, including its excess reserves at the central bank, but the bank also received limited liquidity support from the government (US\$50 million). The management of the bank was replaced, and the government reached a recapitalization agreement with three shareholders of the bank (Dresdner, Credit Suisse First Boston, and J. P. Morgan-Chase), who injected US\$100 million in March 2002. The government, in its turn, contributed an additional US\$33 million to the equity of the bank. These two occurrences led to generalized fears that problems would spread to the rest of the banking system with the loss in confidence compounded by a downgrading of Uruguay's investment grade status.

In the second phase, domestic sentiment began to deteriorate in earnest starting in the second half of April. Outflows surged following the reinforcement of the deposit freeze in Argentina, this time with outflows spreading to residents. Domestic depositors were concerned that the Uruguayan government would also impose a freeze. In addition, since the banking system was almost completely dollarized, it was clear to the public that the central bank did not possess sufficient international reserves to provide banks with the liquidity required to cover large deposit withdrawals.

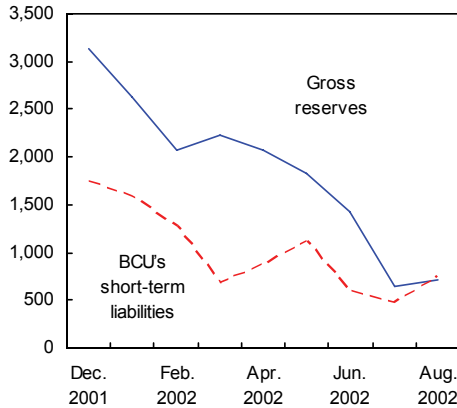
By end-May, outflows had surpassed those observed in the previous phase. Mounting problems in a second large Uruguayan bank (Banco de Montevideo) and the delays in the government's response helped to further fuel outflows. Reflecting these trends, market confidence sagged, with the exchange rate weakening to the edge of the crawling band, government bond spreads nearly doubling, and other ratings agencies rushing to mark down Uruguay to sub-investment grade.

Banco de Montevideo was intervened in mid-June. This intervention was followed by a floating of the exchange rate. Political

turbulence also heightened concerns of an Argentina-like scenario, especially after the abrupt resignations of the central bank governor and finance minister. Uncertainty fueled emerging problems with the remaining two large private domestic banks (Banco La Caja Obrera and Banco de Crédito).

The outflows caused the central bank's international reserves to steadily decline as the central bank provided liquidity support, and as banks withdrew the required reserves associated with dollar deposits. Gross reserves at end-June were US\$1.5 billion—down US\$1.6 billion since end-2001 (Figure 14.1).

Figure 14.1. Reserve Coverage  
(Millions of U. S. dollars)



Source: BCU.

During the third and final phase in June and July, the outflows primarily concentrated on resident deposits. The state-owned BROU, which had thus far been relatively unaffected by the run, began to experience significant drains and mounting difficulties in meeting deposit withdrawals. Domestic private banks continued to receive large liquidity assistance from the central bank to finance their outflows.

As a result, gross reserves fell to US\$630 million by end-July, only slightly above the short-term reserve liabilities of the central bank (about US\$500 million), leaving “freely available reserves” at virtually zero.

The sizeable system-wide liquidity losses and the erosion of the central bank's reserves culminated in a week-long bank holiday at end-July. The holiday was lifted on August 5 as a new strategy was put in place (see section on addressing the crisis).

During this period and in the subsequent months, Uruguay developed a plan to address the problems affecting the banking system. The IMF was actively engaged in providing technical assistance to Uruguay throughout this period.

### **Addressing the Crisis**

The policy responses for dealing with the bank run evolved as the crisis deepened. The severity and restrictiveness of each policy response intensified as the runs accelerated and the drains on international reserves became more critical. Initially, on the premise that contagion would be temporary, the government urged banks to resort to their own liquid resources and credit arrangements to meet withdrawals. In the beginning, with withdrawals centered on foreign banks, this directive was workable since a large part of the counterpart to non-resident deposits was invested in short term liquid instruments abroad. As the outflows became sustained and intensified while spreading to domestic banks, the central bank (BCU) began to provide several forms of liquidity assistance to support the banking system. BCU's policy for liquidity support deliberately differentiated between the needs of a group of core banks (mostly domestic banks) and the other banks (mostly foreign bank branches and subsidiaries).

The BCU had taken several monetary and exchange rate actions in response to the deposit withdrawals and associated loss in international reserves. In January 2002, the exchange rate crawling band was widened to 12 percent and the slope of the band increased to 33 percent on an annual basis, thus allowing for greater exchange rate flexibility and a faster rate of peso depreciation in response to the persistent capital outflows. The exchange rate was allowed to float in June. With the high degree of dollarization and the limited monetary actions available to it, the BCU increased interest rates on banks' holding of excess reserves to levels that were competitive with interbank rates abroad, in an attempt to encourage the repatriation of



liquid assets and to shore up reserves in order to enhance confidence. With the floating of the exchange rate, the BCU had to develop a new monetary framework and additional monetary instruments. The focus of policy switched from the exchange rate to a base money target. IMF technical assistance helped in the design and introduction of open market operations, which initially were conducted in short-term BCU peso securities of various maturities. These were subsequently switched to government securities and were expanded to include short-term dollar securities and longer-term peso instruments that were inflation indexed.

The main policy response to the bank runs was nevertheless through the provision of liquidity support. Initially, there was the reliance on the normal lender of last resort (LOLR) facilities available at the BCU. When this proved insufficient, other mechanisms to provide support were developed as described in the following section.

### **Liquidity Assistance**

Under BCU's Organic Law, the central bank's ability to provide liquidity support was severely restricted by safeguards designed to discourage excessive lending by the central bank.<sup>2</sup> In practice these safeguards were not fully adhered to, for example because regulatory forbearance allowed the affected banks to hold large overdrafts at the central bank for periods longer than permitted under the norms. But as the outflows intensified, it became apparent that the LOLR facilities did not allow sufficient scope to provide further liquidity support nor capital support, as assistance was limited to illiquid but solvent domestic banks.

The Fund for Fortifying the System of Banks (FFSB), a U.S. dollar facility, was developed in June 2002 to complement and reinforce the BCU's LOLR facilities. It was envisaged that the FFSB would have

---

<sup>2</sup> For example, payment system overdrafts had to be repaid in 24 hours or the bank would be suspended from the payment system; banks determined to be solvent could borrow against eligible collateral (high quality securities) up to the amount of the bank's capital; and the aggregate maximum amount of government paper that the BCU could discount was limited to 10 percent of the government's expenditures (excluding debt service) in the previous year.

an authorized capital of US\$2.5 billion, which would provide liquidity loans or equity support mainly for core banks. Up to US\$1 billion was contemplated for providing liquidity support.<sup>3</sup> At that juncture, the size of the FFSB, equivalent to about 40 percent of domestic banks' dollar deposits, was judged to be adequate to meet the projected needs.

The initial resources of the FFSB came, at end-June, from the first augmentation of the IMF arrangement. Additional resources were to be provided by other multilateral institutions and the government. The original plans for the establishment of FFSB required the drafting and approval of legislation, which would make it an independent legal entity to facilitate accountability and transparency in the use of the resources. This aspect was especially important as the FFSB entailed the use of public funds to provide banks with liquidity and capital support. Due to the urgency of the situation, in the interim period before legislative approval was to be completed, a presidential decree empowered a steering committee (SC) nominated by the President to implement the provisions of the FFSB. However, the FFSB legislation was never completed as the crisis deepened and culminated with the bank holiday.

The SC issued regulations for the interim operations of the FFSB, which provided for the following:

- A role for the National Development Corporation (CND).<sup>4</sup> Pending the legislative approval of the FFSB, the CND was to be the conduit of the assistance to be provided by the interim FFSB under the direction of the SC. The CEO of the CND was a member of the SC.
- Liquidity support. To obtain liquidity, banks needed to be solvent. In addition, they were required to provide a stand-by guarantee from a highly rated international bank or high quality collateral, together with a pledge of an equivalent amount of bank equity shares. The interest rate on

---

<sup>3</sup> The capital of the FFSB was to be provided by the government in the form of dollar resources or dollar-linked bonds. If it were determined that a bank should receive support for recapitalization in addition to liquidity support, the FFSB would utilize the bonds for this purpose. It was envisaged that the bonds could be exchanged at BCU for cash if banks needed additional dollar liquidity.

<sup>4</sup> The CND is an existing government owned corporation established under private law.

liquidity loans was to be costly at LIBOR plus 500–800 basis points. Upon approval by the SC, such support would be channeled by BCU on behalf of the government to the banks, through the CND. Support was provided to four domestic private banks.

- **Capital support.** Working with the superintendency of banks (SB), the SC would determine the eligibility of a qualifying bank for capital support. To obtain this support, a plan for the restructuring to regain viability agreed with the SB was a required condition. The implementation and compliance with the objectives of this plan was to be monitored and certified by the SB in coordination with the SC. The CND would be the repository of shares for the government's equity participation in the qualifying banks but would have no management responsibility for the qualifying banks, which would continue to fall under the purview of the SC. This element of the FFSB was never used.
- **Repayment terms.** For liquidity support, repayment was expected over a reasonable period, negotiated on a case-by-case basis. Since banks were expected to be solvent and penalty interest rates were charged, this period was expected to be short. Failure to repay would result in the forfeiture of collateral.

By end-July, the FFSB had provided US\$449 million in liquidity support but no capital support. The four domestic banks to which support was granted became insolvent, were intervened, and not reopened. The acceleration of deposit withdrawals and the low remaining level of international reserves led to a reassessment of the optimal policy for the utilization of scarce liquid resources. This led to the replacement of the FFSB by another bank restructuring fund. This new fund would aim to support the continued functioning of the payment system, while dollar deposit outflows of core banks would be dealt with through administrative measures.

### **Stopping the Deposit Run**

Two critical measures were taken to stop the deposit run. First, sufficient funding was provided to cover all sight and savings deposits, which were made available to the public with the lifting of the bank holiday. Second, time deposits at the state bank were reprogrammed once they came due. Time depositors at the suspended banks had to look to the resolution of these banks for their recovery.

The Fund for the Stability of the Banking System (FSBS) was a part of a new policy response associated with the lifting, in early August, of the bank holiday. In addition to the continuation of selective liquidity support to core domestic banks, the policy response included administrative measures to stop deposit withdrawals at state banks and the restructuring of the intervened domestic banks. The key objectives of liquidity support were to safeguard the payment system, to underpin economic recovery, and to reestablish confidence in the Uruguayan banking system. Preserving the payments system required that no restrictions be placed on access to all sight and savings deposits of banks, which stood at US\$2.7 billion (including peso deposits) at that time. The policy on liquidity support continued to require that foreign bank branches and subsidiaries would seek to finance their liquidity requirements themselves. In return, the government would not apply to them any restrictions or administrative measures on the conduct of their banking business.

The law to establish the FSBS was enacted on August 4, 2002 and provided resources to fully back all dollar sight and savings deposits at core banks (about US\$1.4 billion), defined to include the two state-owned banks and four domestic banks under intervention. BCU provided peso liquidity assistance where needed outside the context of FSBS to sustain the payment system. The FSBS law also provided for the reprogramming of the maturities of dollar time deposits of the state owned banks. No restrictions were placed on peso deposits and the operations of foreign bank branches and subsidiaries, nor on the remaining domestic banks, mainly cooperatives.

While the availability of FSBS liquidity assistance was aimed at restoring some level of confidence, it was nevertheless expected that substantial withdrawals would follow the lifting of the bank holiday until such time as depositors were reassured that sufficient resources were there to back up deposits. In addition, it was always expected that the sight and savings deposits at the four suspended banks covered by the FSBS would definitely be withdrawn so long as they remained closed. Most of the eligible deposits of the suspended banks were withdrawn. Following the large outflows in the wake of the lifting of the bank holiday, banking system deposits stabilized and a

system wide reflow of deposits began to be seen by October 2002. The reflow reflected in part the lodging of some of the deposits withdrawn from the suspended banks financed by FSBS resources in foreign bank branches and subsidiaries and other domestic banks, including BROU.

Additional policy actions were taken to restore confidence in the banking system. Reserve requirements were adjusted to strengthen the liquidity positions of all banks. A special 100 percent reserve requirement was imposed on new dollar sight and savings deposits of BROU, consistent with the full backing by the FSBS of similar deposits.

### **Reprogramming U.S. Dollar Time Deposits at Public Banks**

The FSBS law allowed for the reprogramming of all dollar time deposits in the state banks, BROU and BHU, which extended maturities by up to three years as deposits matured. The reprogramming covered some US\$2.2 billion of dollar time deposits, which, together with the suspension of the four domestic banks, contributed to halting the bank run. The four private domestic banks (Banco Comercial, Banco de Montevideo, Banco La Caja Obrera, and Banco de Crédito) suspended operations except for paying out sight and savings deposits with FSBS funds. Following protracted discussions on their restructuring, they were placed into liquidation in early 2003 (see this chapter's section on public bank restructuring).

The terms of the reprogrammed dollar time deposits included a partial repayment of 25 percent of principal at the end of the first year, another 35 percent after two years, and the remaining 40 percent by the third year. Reprogrammed time deposits were to carry interest rates slightly above market interest rates for similar maturities and were to be payable quarterly, with an interest rate initially set at 6 percent per annum. Depositors had the option of converting their claims into CDs or into a bond that would be freely tradable in the secondary market. These securities could also be used to cancel loans, at face value, contracted with BROU and the BHU before July 30, 2002.

## The Cost of Stopping the Runs

A total of US\$2.4 billion had been injected by the government in various forms of liquidity support in response to the banking crisis through end-August 2002, equivalent to about 20 percent of 2002 GDP (including US\$33 million for the capitalization of Banco Comercial). Some US\$376 million of this amount was not utilized for liquidity support by the FSBS. In addition, BCU provided the equivalent of US\$33 million in pesos as liquidity support.

Table 14.2. Uruguay: Total Government Assistance to Banks as of August 2002<sup>1</sup>  
(In millions of U.S. dollars)

	Total	Public Banks	Private Banks
<b>Total assistance</b>	<b>2,417</b>	<b>1,228</b>	<b>1,189</b>
Of which: In pesos	33	10	23
Capitalization	33	0	33
Central bank	563	258	305
Article 36/37	391	258	133
Overdraft	173	0	173
FFSB (Jun. 2002)	449	0	449
FSBS (Aug. 2002)	1,373	970	403

Sources: CBU and Fund staff estimates.

<sup>1</sup>Includes assistances in pesos evaluated at Ur\$28.8/US\$.

The government has recovered only a fraction of its outlays. The recovery of the outlays for domestic private banks, with the exception of the sale proceeds from Nuevo Banco Comercial (NBC) (see below) will not be significant since they are dependent on recoveries from the liquidation of NPLs and other nonperforming assets. The US\$33 million capitalization of Banco Comercial was written off upon its liquidation. The amendment to the banking law that facilitated the resolution of the four suspended banks provided for the transfer of the claims of BCU on these banks to the government and the utilization of the government's proceeds from the liquidation of these banks to increase the recovery of depositors from these banks (estimated to be about US\$215 million).<sup>5</sup>

<sup>5</sup> BROU repaid its obligations to the FSBS of US\$432 million by reducing claims it had on the government (Treasury bonds and other government debt).

## **Restructuring the Four Suspended Private Banks**

The government recognized that a prompt and appropriate resolution of insolvent banks was important to sustain the stabilization of the banking system. The government also accepted the principle that for any new bank emerging from the resolution of the failed banks, the new or restructured bank would need to (i) have a sound business plan that assures its viability; (ii) meet all prudential requirements; and (iii) not pose a potential risk to the rest of the banking system.

It was recognized that restoration of banking services previously provided by the suspended banks was important for the resumption of economic growth. At the same time, depositors needed to be reassured that they would not be expected to bear all of the costs of a bank resolution. These considerations led to protracted discussions among the different stakeholders, including the shareholders, depositors and other bank creditors, bank borrowers, the powerful bank employees union, politicians, other interested economic agents, and the government. It was only at the end of December that the government reached consensus on an initial way forward.

One problem was that the existing laws severely limited the options for dealing with bank failures. The existing bank resolution process largely followed the normal commercial bankruptcy procedure, which was subject to legal challenges by interested parties and could take many years to complete. As a result of previous experience with extremely protracted liquidations, the government had in the past tended to make capital infusions in banks rather than let them fail.

Based on information provided by IMF technical assistance, the government recognized that their existing framework would not allow for an orderly resolution of the four private banks that had been suspended. In particular, insolvent banks needed to be liquidated, and any sale of assets required shareholder approval. These provisions prevented the use of resolution techniques such as purchase and assumption transactions. Consequently, the government moved to amend the relevant statutes.

## **Amendments to Banking Laws**

In December 2002, the congress approved an amendment to the banking laws which among other objectives aimed at facilitating the legal process for merging and liquidating intervened banks, defined more precisely the role of BCU in the liquidation of banks, and established guidelines for the utilization of the proceeds of government recovery from bank resolution. Specifically, the amendments included a provision as to how the government should use its recoveries to benefit depositors who would suffer losses. To address the ability of shareholders to block certain actions by liquidators, the new law provided for the establishment of trust funds to assume the assets of each of the liquidated bank, with the funds having full discretion as to the disposal of assets. The general creditor liabilities also were transferred to the trusts, with the subordinated creditor and shareholder claims remaining in the liquidations. The trust fund mechanism was designed to insulate the assets disposal and sales process from litigation and other residual claims against the legacy banks.

The new law also authorized the government to top up the recovery of depositors in the affected banks up to a maximum of US\$100,000. This implied that the government would forgo the proceeds from its claim from the liquidations process. The government share of the proceeds would be large because it had secured claims from the FFSB and a position as a preferred creditor stemming from support through the FSBS and the assumption of the claims of the BCU for LOLR support (described above).

The new law provided the legal basis for the resolution strategies for the suspended banks. After considering a number of options, the government focused on two: (i) the so-called Three-in-One proposal aimed at creating a new bank from the assets of three suspended banks (Banco Comercial, Montevideo, and Caja Obrera); and (ii) the reopening of Banco de Crédito (previously 51 percent owned by the government) as a private bank, with the former minority shareholder recapitalizing the bank and becoming the sole owner.



### **The “Three in One” Plan**

In January 2003, the government placed three of the four suspended banks into liquidation using the new law. The effect was to create three liquidations, one each for Banco Comercial, Banco Montevideo, and Banco de Caja Obrera. Trust funds were established to manage the assets of each of the three liquidated banks. The plan was to create a new bank under the private bank law whose shareholder would be the government. This *de novo* bank would then enter into a purchase and assumption transaction with the trust funds. However, since the law did not allow for the assumption of the liabilities of a trust or liquidation, a more creative approach was called for.

The government initially provided the minimum initial paid in capital (US\$4 million) necessary to receive a charter for a new bank. A new bank, NBC was created in February 2003, with the government as its sole shareholder. In mid-February, the liquidators offered to sell packages of loans from the failed banks. In late February, NBC purchased packages of assets simultaneously from the three individual trust funds in an open competitive bidding process. Some of the packages consisted of only performing loans, while others were made up of NPLs.

It was recognized that since the legacy banks had been suspended for six months, some of the NPLs, especially those for working capital and inventory finance, might be readily converted back to paying status or restructured at a slight discount. However, since the goal was to give NBC a clean balance sheet, it therefore bid on NPLs with a put option that allowed it to return to the trust funds any loan that it could not satisfactorily restructure by the end of 2003.

The balance of the assets, either those not purchased by NBC or those returned at end-2003, was to be recovered by the trust funds. However, partly owing to a lack of cooperation from the union representing the former failed banks' employees, the assets were subsequently transferred to a private asset management firm for collection.

Since NBC obviously did not have sufficient cash to purchase the assets, NBC paid by issuing a series of its own CDs that carried a 2 percent interest rate, repayable quarterly over six years. The terms of the CDs were set to both ensure that the bank would generate positive earnings, absent growth in lending, and remain liquid for the following few years.

The trust funds subsequently distributed the NBC CDs to all the general creditors, including the government, on a pro-rata basis. Since the government retained its collateralized claims, it received first payment and immediately used a portion of its proceeds (about US\$119 million) to increase the capital of NBC to an amount above the minimum capital required by prudential regulations.

To top up the recovery of depositors to the full value of their claims, up to US\$100,000, the government used about US\$215 million of the proceeds from the Three-in-One operation in exchange for additional claims against the individual trusts.

NBC opened for business on March 24, 2003, after the Superintendent of Banks declared it viable and in full compliance with prudential norms. The new bank was chartered under the commercial bank law with capital provided wholly by the government. Under its business plan, NBC was to open with about 750 employees from the liquidated banks and 43 branches—about half the size of the three liquidated banks combined.

In view of the crisis, and to maintain the highest confidence in the bank, NBC opened with a particularly strong balance sheet. It had a capital to assets ratio of 15 percent (about 18 percent risk-weighted). The total assets amounted to about US\$822 million, which included NPLs, subject to the “put” option, with a book value net of provisions of US\$460 million. Consistent with the requirement placed on BROU, the Superintendent of Banks also imposed reserve requirements of 100 percent on all new dollar sight and savings deposits at NBC.

## **The Sale of Nuevo Banco Comercial**

Despite attempts by the government to interest IFC in taking an equity stake in the newly created NBC, it continued to operate under full government ownership for three years. During this period, in part in response to concerns about governance, the Superintendent of Banks kept the 100 percent liquidity requirement against new deposits in place. The bank was profitable for most of this period and maintained sound ratios. However, after a disagreement with the Minister of Economy and Finance, the CEO was replaced. With the change in management, the original business plan was not executed, and the bank did not grow in line with expectations.

In mid-2004, the Minister decided to seek a purchaser for the bank. The IMF provided a retired investment banker to advise the government, including on criteria for the selection of an investment banking firm to handle the transaction. An investment banking firm was retained in late 2004, and efforts to find a buyer were begun.

During the Spring of 2005, three parties expressed interest and submitted preliminary bids, based on information provided to them. All three groups were considered credible bidders and were invited to conduct a full due diligence. At end-June 2005, the book value of NBC's equity capital was 4.3 billion pesos, or about US\$172 million.

Subsequently, two of the parties submitted final bids. In the second half of 2005, the government of Uruguay entered into a contract with a group led by Advent (a U.S. money management firm) that also included a Dutch investment fund and a French pension fund.

The structure of the sale transaction was as follows: (i) 60 percent of the existing equity capital was converted into ordinary shares that would be purchased at closing for US\$98.5 million; (ii) the remaining 40 percent of capital was transformed into preferred shares paying 4 percent annually; (iii) the purchaser was committed to acquiring the preferred shares within a five year time period for US\$68.9 million; and (iv) during the period prior to closing the transaction, the bank could pay the government a dividend of up to US\$3.5 million.

## **Banco de Crédito**

The fourth private bank placed into liquidation, Banco de Crédito, was jointly owned by the government and a private international nonbank entity that had other operations in Uruguay. The government believed that it could negotiate a transaction with the private investor to recapitalize and reopen the bank, with the government no longer having an interest. The plan was for the government to contribute 51 percent of the funding necessary to bring capital to zero and the investor to contribute the other 49 percent plus sufficient capital to bring the bank into line with the Superintendent's capital requirements. In addition, time depositors would agree to a reprogramming of their deposits.

The deal fell through when the investor withdrew its application rather than provide the information needed to make a "fit and proper" determination. Consequently, the depositors (and the government as creditor) had to look to the liquidation of the assets for their recovery. The liquidation of the assets proceeded well, with the majority of the assets being disposed of within two years. The government subsequently treated the depositors of Banco de Crédito the same as those in the other banks, by providing them with government bonds to top off their claims. The government received the remaining assets (mostly real property) in return.

## **Public Bank Restructuring**

### **The State Commercial Bank—Banco de República**

By mid-2003, it was evident to the IMF and the Minister of Economy and Finance that unless something was done, BROU would become insolvent. This conclusion was based on an examination of the reported financials of BROU and applying the Uruguayan provisioning rules (based on the aging of NPLs) to the existing stock of NPLs. After examining international practices for dealing with NPLs, the government determined that the best way to recapitalize BROU was to remove the stock of NPLs from the bank and replace them with government guaranteed paper.

The NPLs were transferred to trusts (fideicomisos) over the course of a year in three tranches based on the size of the loans. The loans were transferred at book value, net of provisions. In exchange, BROU received notes from the trusts guaranteed by the government. The notes pay interest at the rate that BROU was paying on the reprogrammed deposits. In the event that recoveries on the NPLs exceed the balance on the notes, the government will receive 50 percent of the excess recoveries as a guarantee fee, with the balance going to BROU.

BROU established an asset management subsidiary to manage the assets for the trusts with a mandate to maximize recoveries. Outside management was hired to manage and staff the AMC; and incentive compensation was granted to all employees to align incentives in view of its limited life. Smaller loans were turned over to collection agencies, while the AMC staff focused on negotiating with the larger borrowers (the very smallest credits were handled by the branches of BROU). If a loan could be restructured, it would remain with the trust for a period of time sufficient to demonstrate performance and then it was sold, either to BROU or another bank. To date, almost all of the performing restructured loans have been repurchased by BROU.

In addition to the recapitalization of BROU, a task force of BROU staff working with the IMF developed a model to simulate the impact of the removal of the NPLs on the bank's earnings and capital. This approach demonstrated to the staff and management of the bank that there was a need for further restructuring in the form of expense reductions. Both BROU and the IMF used this model to analyze the implications of an early release of the reprogrammed deposits.

As part of the restructuring of BROU, an internal working group identified the need to improve risk management and internal controls at the bank, and aggressively implemented changes. Using the model, the management of BROU developed a revised strategic direction for the bank that focused on efforts to attract peso deposits and extend peso loans to small business borrowers.

## **The State Mortgage Bank—Banco Hipotecario del Uruguay**

This state mortgage bank suffered from a serious structural problem: its liabilities were short-term dollar deposits, while its assets were long-term peso housing loans linked to an index of wages. Real depreciation and falling wages in the midst of sustained recession accentuated the mismatch.

In December 2002, Congress approved a new charter transforming the BHU into a “nonbank” housing institution (though it could still accept deposits that were savings for a downpayment on a house) to be supported by a loan from the World Bank. Several steps in this reform program were substantially delayed, reflecting protracted discussions surrounding political and labor issues.

Nevertheless, one major step to transform the BHU into a nonbank housing institution was put in place early in the crisis, with the transfer of all its dollar deposits in August 2002 to BROU, including those that were reprogrammed, in exchange for a BHU note guaranteed by the government (approximately US\$ 780 million). The interest payments to BROU on this note and its gradual amortization were such as to cover BROU’s acquired obligations to BHU’s previous depositors.

Given the lack of progress in restructuring BHU, and in the absence of a plan for the disposal or recovery of BHU’s loan portfolio and other assets, BHU was not able to meet its financial commitments to BROU. As a result, the government in 2003 restructured the note to extend its maturity and reduce principal payments until 2007. The bank also adopted a restructuring plan that called for steps to reduce costs, notably a halt to construction programs, a freeze on new lending (except if securitized), greater efforts at recovery, and reductions in staffing.

By mid-2005, it was obvious that the restructuring of BHU was off track. Specifically, the bank continued to report an NPL ratio of 60

percent, and many of its “promitentes” (leases with an option to purchase) were also not performing. The poor quality of the portfolio reflected the inability and unwillingness to pursue borrowers who missed mortgage payments. Given its financial condition, the Superintendent of Banks prevented the bank from making new mortgage loans. The government determined that the bank was facing negative cash flows, was likely insolvent, and that the government would probably need to honor its guarantee on the note to BROU as well as other obligations of BHU. In response to these findings, the Minister of Economy and Finance requested IMF technical assistance in restructuring the bank.

Current restructuring plans address both the capital shortfall in the bank and its future operations. The government determined that it wished the bank to begin lending again in 2007, on commercial terms. It also decided that the social and public housing policies that had been conducted by BHU should become the responsibility of the government and that a new housing finance agency would be established to take on responsibility for housing finance subsidies, while public housing would be transferred to the Ministry of Housing. The elements of the restructuring plan are:

- NPLs will be transferred to two or more trusts for management. The beneficiaries will be the government and BHU. The government will assume liabilities in an amount equal to the net book value of assets acquired, plus any additional amounts needed to capitalize the bank to a level sufficient to meet the requirements of the Superintendent of Banks.
- In recognition of the resulting smaller size of BHU, and the need to streamline its operations, staff will be reduced through transfers to other public sector entities, including the new housing agency.
- In light of the inability of BHU to properly monitor and administer mortgage loans, a new computer system is being introduced. This system is also expected to lay the foundation for reliable mortgage securitization.
- BHU will be limited to making loans on commercial terms, rather than competing with private banks by offering below market rates.
- The bank will fund new loans primarily from securitizations and the normal cash flow on existing loans. In addition, to provide greater initial cash flows, BHU will be a beneficiary of some of the collections on nonperforming mortgages.

- To permit greater home ownership, the government is looking at programs to assist families who do not have the normal down payment (30 percent) required by BHU and private banks.

## **Safety Net Issues**

The crisis highlighted the need to address several key issues: (i) the creation of a more formal deposit protection scheme; (ii) a legal framework that provides more options for bank resolution; (iii) the capitalization of the central bank, accompanied by greater independence; and (iv) the improvement of bank supervision.

In 2005, in response to the insolvency of a small cooperative bank, the government introduced limited deposit insurance by presidential decree. The levels of coverage were significantly lower than during the crisis—the equivalent of US\$10,000 for peso deposits and US\$5,000 on deposits in foreign currency. The deposit insurance scheme is funded by premiums paid by banks. Since that time, much work has been done to draft legislation to create a more fully developed deposit insurance scheme that is separate from the central bank. This legislation was included in a broader draft financial sector reform law.

The proposed law gives the deposit insurer the full range of bank resolution powers found in other countries. The draft allows the deposit insurer to transfer liabilities and assets to another bank to resolve a failed bank, in a manner that is minimally disruptive and that reduces losses to the deposit insurance fund and bank creditors. These new powers are expected to make it easier politically to close insolvent banks.

During 2006, the deposit insurer paid insured deposits of a small institution that was intervened. The timely repayment of depositors and the professional way in which it was done served to bolster confidence in the banking system. This was in stark contrast to depositor reaction to the bank insolvency in 2005, when outflows were briefly experienced at almost all banks.



Throughout the crisis and post-crisis period, the Superintendency of Banks has made marked strides in improving bank supervision in Uruguay. With assistance from the IMF and the Inter-American Development Bank, new regulations, aimed at addressing risk management issues and foreign exchange risks were issued, staff has received training, and there has been an increase in staffing. The recent FSAP report for Uruguay noted these improvements. Perhaps equally important has been the increase in transparency and availability of public information on the banking sector.

The draft financial sector law mentioned above also includes a restructuring of the supervision functions of the central bank. A new Superintendency will provide unified supervision of banks, capital markets, pensions, and insurance. In addition, the board of the BCU will be enlarged, so that half of the members will focus on monetary policy and macro issues and the other half on the activities of the Superintendency. The draft law also delegates more routine supervisory actions affecting individual institutions to the Superintendent. The draft law also calls for the recapitalization of the central bank and increases its independence in conducting monetary policy.

**DAVID HOELSCHER AND CHARLES R. BLITZER**

**I**n the mid-2000s, a variant of the avian flu affecting large numbers of wild and domestic birds began to appear in the human population. Although avian influenza refers to a large group of different influenza viruses that primarily affect birds, on rare occasions these bird viruses infect other species, including humans. An influenza pandemic happens when a new subtype emerges that has not previously circulated in humans and can be easily transmitted among humans.

Health officials stress the importance of making a clear distinction among different types of influenzas. There are three types of influenzas, each with very different characteristics and economic impacts: (i) seasonal influenza viruses, (ii) flus circulating primarily in animals such the avian (H5N1) virus, and (iii) a human influenza pandemic virus. Seasonal influenza circulates every year, spreads easily from person to person and has a limited health and economic impact. The avian influenza (H5N1) virus affects primarily the bird population and has had only limited spread to humans. A pandemic virus could some day emerge from the current or another avian or other animal flu virus and be spread easily from human to human. The health and economic impact of such a new, mutated virus is unknown and would depend on the virus' characteristics, as well as the state of preparedness.

If a human influenza pandemic were to emerge, its spread would be independent of its previous spread among animal populations. A pandemic occurs when a new influenza virus for which there is no immunity emerges and starts spreading as easily as normal influenza—primarily by coughing and sneezing.

Because the virus is new, the human immune system will have no pre-existing immunity, which is why a pandemic has much more

serious health effects than seasonal flu. Health experts believe that the spread of a human-to-human form of the virus would follow trade and transportation paths, not the flight paths of birds. Once a fully contagious virus emerges, its global spread is considered inevitable. Countries might delay arrival of the virus through measures such as border closures and travel restrictions, but such measures will not stop the spread. The pandemics of the previous century circled the globe in six to nine months, even when most international travel was by ship. Given the speed and volume of international air travel today, the virus could spread more rapidly, possibly reaching all continents in less than three months.

It is difficult to make an accurate assessment of the risks and potential impact to the global economy and financial system. If the pandemic were severe, the economic impact would likely to be significant, though predictions are subject to a high degree of uncertainty. The severity of a pandemic will depend on its attack and fatality rates, its duration, and the behavior and preparedness of households and firms, as well as the capacity and preparedness of health care systems. It is difficult to predict with any certainty the economic and social conditions that would prevail during a pandemic. They will be heavily influenced by the way in which behaviors of people and institutions change, advance preparations, and the extent to which people panic.

Economic disruptions on the supply side would come directly from high absenteeism, as people may be asked to stay at home, or may choose to do so to care for sick relatives or because of fear of being exposed themselves. There may also be disruptions to transportation, trade, payment systems, and major utilities, exposing some financially vulnerable enterprises to the risk of bankruptcy. Moreover, demand could contract sharply, with consumer spending falling and investment being put on hold. Financial repercussions could further exacerbate the economic impact.

Quantifying these effects remains highly uncertain. Analysts have come up with a wide range of estimates (involving a loss of world

output of between 1 percent and 13 percent of a year's GDP).<sup>1</sup> These estimates are largely based on traditional macroeconomic models, the differing impacts being explained by alternative assumptions about morbidity/mortality rates and associated reactions of consumers and employees. It is accepted that the economic decline would be much sharper than the yearly average during periods when the pandemic is at its peak.

Once the pandemic has run its course, economic activity should recover relatively quickly. Both consumption and average hours worked might even overshoot the pre-pandemic level temporarily. The pace of the recovery would depend, *inter alia*, upon business and consumer confidence, the speed of resumption of international trade, and the recovery of asset values. Countries with weak fiscal and health systems are likely to be more exposed and more severely affected, as they lack the financial resources and the capacity to purchase and distribute drugs and vaccines, treat victims in a timely manner, and provide for health security measures.

In this environment, the IMF role is limited and focused on helping members prepare their economic and financial systems for a possible human pandemic. The policy recommendations focus on steps to mitigate risks from high absenteeism.

### **Potential Financial Impact**

The possibility of a human influenza rising from the avian flu virus has serious implications for both humans and the global economic and financial system. A flu pandemic could affect the global financial system through (i) operational disruptions caused by a sharp increase in worker absenteeism; (ii) a surge in demand for liquidity and cash;

---

<sup>1</sup> See Congressional Budget Office:

(<http://www.cbo.gov/ftpdocs/69xx/doc6946/12-08-BirdFlu.pdf>),

the European Commission:

([http://ec.europa.eu/economy\\_finance/publications/economic\\_papers/2006/economicpapers251\\_en.htm](http://ec.europa.eu/economy_finance/publications/economic_papers/2006/economicpapers251_en.htm)),

the Lowy Institute:

(<http://www.lowyinstitute.org/Publication.asp?pid=345>), and

the International Monetary Fund:

(<http://www.imf.org/external/pubs/ft/weo/2006/01/index.htm>).

(iii) an increase in risk aversion, resulting in a reassessment of exposure to emerging markets; and (iv) a decline in asset prices.

## **Operational Risks**

Operational risks in financial sectors constitute a serious risk in the event of a human influenza pandemic. An influenza pandemic could result in significant absenteeism over a period lasting several weeks or longer, which may arise from the illness itself, from official or autonomous attempts to limit its spread, from the need to care for the ill, because of forced closing of schools, and from unwillingness to risk going to work. Projections are difficult, and absenteeism may vary widely across the cycle of the pandemic. Possible disruptions caused by such absenteeism could affect the critical functions and services of the financial system, including payments, clearing and settlement, and trading. Specifically, these could be disruptions to financial systems' information technology or communication infrastructure. Absenteeism could become so widespread that staffing for the most critical operations may become inadequate, and succession plans may no longer provide for continuity.

An influenza pandemic may also result in major disruptions to transportation, electricity production, and telecommunications, and may severely stretch even basic services, including police, fire, and emergency medical care. A financial institution's risk assessment and management plans, therefore, may have to be expanded to cover the possibility of widespread economic and infrastructure disruptions, rather than focusing exclusively on the impact of absenteeism in the institution.

Operational risks can be mitigated by adequate preparations. In recent years, financial institutions, central banks, and regulators have devoted significant effort to strengthen their business continuity plans (BCPs) to deal with terrorism and natural disasters. However, planning for a pandemic, with widespread staff absenteeism and health concerns, has been limited. In some cases, difficulties in evaluating the trade-offs between the costs of preparation for an unquantifiable pandemic and the costs of reduced services have slowed preparation.

The level of preparedness among countries varies greatly. In a few countries, particularly in major financial centers and those countries affected by the 2003 SARS outbreak and the avian flu, preparations are well advanced and comprehensive. Also, several have built up stockpiles of cash and medical supplies, but uncertainties about the severity and course of a human influenza pandemic have hampered further preparations. Providers of payment services (Euroclear, TARGET) also appear to be among the best prepared, having established redundant computer systems and means of operating with skeleton staffs. Preparations by most central banks and supervisory agencies are more limited, however. Cross-country coordination is also lagging, although both the Financial Stability Forum and the Joint Forum have established a formal working group, and the topic is addressed in their regular meetings. The IMF is actively involved in promoting greater awareness and encouraging cross-country communications.

### **Market Disruption Risks**

The outbreak of a flu pandemic poses risks to the global financial markets. A sharp increase in risk aversion is likely to lead to corresponding increases in demand for liquidity, specifically for cash, and for low-risk assets. The “flight to quality” would lead to declines in equity values and a widening of credit spreads, both for corporations and emerging markets. Given the rapid spread of a human influenza pandemic, similar asset price adjustments will occur across regions. Commodity prices would be expected to decline reflecting weak aggregate demand, but this could be offset by potential supply disruptions for key commodities such as oil.

Such asset price declines could put the balance sheets of many financial institutions under stress and below regulatory norms. Market disruptions could occur if there is a breakdown in the market infrastructure leading to a halt in trading.

Risk managers even in some large financial institutions are not yet focused on market-related risks of a human influenza pandemic. An influenza pandemic would affect the whole economy, resulting in price volatility and possible shifts in liquidity. A financial institution’s risk assessment and management plans may have to be expanded to

cover the possibility of widespread economic disruptions and their impact on loan and other assets' performance. Most financial institutions are only beginning to incorporate market and operational contingency planning. Exceptions include some in the insurance industry and financial institutions that were affected by SARS. However, even here, risk management plans have focused primarily on a mild pandemic that would have a relatively modest and temporary impact on the global economy.

## **Preparations for a Possible Influenza Pandemic**

### **Financial Sector Continuity Planning**

Business continuity planning has become a critical component of operational risk management in the financial sector. The focus of revised or expanded continuity planning is turning to continuity management rather than continuity planning for specific scenarios. The issue was how to sustain business over the cycle of a pandemic. Specifically, there was a need to (i) identify decision points; (ii) understand who makes decisions; (iii) have a clear idea about the specific steps that would be taken at each phase of the pandemic; and (iv) determine what is communicated to whom at each stage. Once a general framework is identified, detailed business continuity plans must be developed. Some common elements of such plans are emerging. Pandemic measures are an overlay to traditional and mature BCP measures. Specifically, most contain some combination of (i) command and control, (ii) human resources issues, (iii) BCP elements, and (iv) communications mechanisms.

Based on discussions with country authorities and financial institutions, several trends have emerged concerning the preparation for a possible human influenza pandemic. First, it would appear that the most experienced participants—both public and private—are developing similar responses to the threat of a human flu pandemic and there is an emerging set of common principles. Institutions are shifting from developing detailed responses for specific low probability/high impact scenarios to identifying responses for any operational disruption, irrespective of the cause. For example, businesses are planning for sharp increases in absenteeism irrespective of the cause of the absenteeism. This shift is, in part, a response to the

limited support from senior management for preparing for specific low probability/high impact events. Command and control frameworks are becoming more detailed, with clear responsibilities given to senior management. Finally, high priority is being given to the preparation of detailed communication strategies, both for inside and outside the institution.

A second trend is that the relatively less prepared countries have become aware of the dangers and are moving to develop and strengthen their own preparedness plans. The potential threat from human influenza is increasingly recognized and the authorities are no longer asking why they should prepare but, rather, how they should prepare. Authorities in these countries have made it clear that they would like help in developing business continuity strategies and learning how to test them. Private sector institutions have offered some assistance and requests have been made for continued help from international organizations, including the IMF.

Notwithstanding the efforts to spread information on possible responses, the significant uncertainties about the timing and impact of a human influenza pandemic are hindering the ability of some emerging countries to prepare. Concerns about the cost of preparations and the difficulty of including a human pandemic are among countries' chief concerns. In response, countries are examining alternatives.

Specifically, countries are beginning to see (i) that preparations should be for market volatility and high levels of absenteeism in general, rather than for a narrow scenario of human flu pandemic; (ii) that low cost steps can be identified for addressing the impact of high absenteeism; and (iii) that a significant amount of material is already available to guide preparations. As a result, countries are moving to identify ways to incorporate pandemic preparations into broader efforts for cost reductions and profit maximization.

### **Macroeconomic Policy Planning**

A pandemic will likely put substantial pressure on the fiscal balance, due to increased spending on health, public safety, social



welfare, and subsidies to businesses and lost revenues. The appropriate response will depend on the specific characteristics and conditions of the affected countries. In that sense, it is difficult to pre-establish the macroeconomic framework appropriate in the event of a severe human influenza pandemic.

Nevertheless, given the pandemic's temporary nature, some easing of the country's macroeconomic stance might be warranted. The fiscal needs of heightened health and security services may require public support and a temporary easing in the fiscal stance would be appropriate in most cases. The monetary stance may be eased temporarily to accommodate the expected surge in liquidity demand and shock-related price increases. In particular, central banks will need to ensure an adequate supply of cash notes and capacity to deliver them to financial institutions in a timely fashion and to ensure that banks can meet a sudden increase in the demand for liquidity.

As soon as the acute phase of the pandemic is over, the magnitude of more lasting supply and demand shocks will need to be assessed. In many countries, the shock may be self-correcting; in others, further steps may be needed to restore macroeconomic stability and fiscal sustainability. This may entail adjusting monetary policy to prevent a sustained increase in inflation, withdrawing fiscal stimulus, particularly in countries facing debt sustainability issues, as well as ensuring external viability, including through a rebuilding of international reserves and greater exchange rate flexibility.

## **Risks and Challenges**

Although progress has been made in developing and expanding contingency plans, risks remain. One of the principal concerns is that risks from a pandemic may be underestimated. Business continuity plans focus largely on the impact of supply shocks arising from absenteeism and do not incorporate market risks arising from asset price volatility. Financial firms claimed that their market risk groups found it difficult to evaluate such low probability events as a pandemic flu, and regulators were reluctant to disclose their views on emergency liquidity or regulatory forbearance that could be needed in the face of significant market volatility.

A second risk involves important limitations to many of the common options used for maintaining business activities. Remote access and work-from-home options are increasingly being seen as having only limited applicability because of legal, regulatory, and technical problems. Regulatory and legal constraints may also prevent cross border transfer of business operations, a common element in many of the plans of global financial firms. Remote or duplicate office sites may also provide limited protection if the pandemic is severe or widespread. As a result, some financial firms are concerned that a pandemic could result in a sharp reduction in activities. Impact estimates of this scenario have not been made.

Third, regulators differ on the extent to which they would provide explicit guidance on “good practices.” There is a growing recognition that some form of regulatory forbearance during a pandemic will be needed. In response, regulators have begun discussions with financial institutions to identify regulations that can be relaxed. Differences among regulators do exist, however, on the degree of transparency of such relaxation, with some being quite explicit, while others seek to retain some constructive ambiguity on the specifics. Some regulators have provided considerable details on the elements they expect to be included in a pandemic plan. Both the Hong Kong Monetary Authority and the Monetary Authority of Singapore, for example, not only offer detailed guidance on the elements of business continuity but also encourage banks to allow easy refinancing or restructuring of loans during a pandemic.

Other regulators expressed concerns about announcing forbearance in advance. They have left the development of good practices guidance to industry groups or merely said that they will review plans on a case-by-case basis.

Finally, risks exist because of wide differences between global and local financial institutions. While awareness of the importance of preparing for a pandemic has increased, many countries are at a loss on how to proceed. Lack of interest by senior government officials and concern about costs may slow preparations. In addition, some countries lack the technical capacity to develop and then test plans.

### **Role of the IMF**

The need to help prepare for a pandemic is becoming an important focus for many governments and international organizations, including the IMF. At the Beijing International Conference, \$1.9 billion was pledged by the World Bank, the World Health Organization, the Food and Agriculture Organization, and the World Organization for Animal Health, who are helping members in surveillance and control that focus primarily on human and animal health. The IMF's role complements these efforts. The main effort is in helping members to prepare for a possible pandemic, in facilitating cooperation across the membership, and, should one emerge, advising members on appropriate macroeconomic and financial sector policies and helping to support them with balance of payments financing where this is needed.

The IMF is actively involved in encouraging member countries to prepare business continuity plans, particularly in the financial sector. Staff have been organizing regional seminars that bring together central banks and supervisory authorities, health experts, and business continuity planners from private financial institutions. These events serve to share knowledge on key issues related to pandemic preparedness. By mid-2006, eight regional seminars had been held, with a total of almost 140 representatives from 109 countries participating in the seminars. In addition, the IMF has prepared and disseminated a paper outlining common elements of business continuity plans to the membership to help mitigate operational risks related to a pandemic. IMF country mission chiefs, in the context of their meetings with member authorities, are also discussing preparedness efforts, particularly in the financial sector, and collect information on business continuity plans.

In response to numerous requests made at and since the seminars, the IMF staff is exploring various alternatives for the IMF to continue to play a catalytic role. Among the options under consideration are (i) facilitating cross-country communications among financial sector officials involved in continuity planning; (ii) disseminating relevant material on evolving "good international practices" to assist less-prepared countries in their initial efforts at continuity planning and, if warranted; (iii) holding additional regional seminars.

MARC QUINTYN

**T**raditionally, the IMF's focus of technical assistance (TA) in the monetary and financial areas has been on central banking (monetary policy) and the banking system (regulation and supervision). While capacity building in the area of monetary operations and policy has been one of the IMF's long-standing areas of TA, the heightened focus on banking regulation and supervision is of more recent date.

TA in the field of banking regulation and supervision grew in the 1990s in the wake of worldwide financial system liberalization. Liberalization, accompanied by the adoption of indirect instruments of monetary policy, made it necessary to focus on the soundness and efficiency of banking systems around the world, as banks entered new areas of business and became subject to new forms of risk. The growing emphasis in the IMF's work on achieving and preserving financial stability (both domestically and globally) in the aftermath of the systemic banking crises of the 1990s was a further development that made TA in banking regulation and supervision an integral part of the IMF's core TA programs

While banks had been the central focus of earlier financial sector liberalization, attention recently has been on a broader set of institutions. One of the more significant developments of the past decade and a half has been the growing importance of nonbank financial institutions (NBFIs).

This heterogeneous sector includes several types of deposit-taking NBFIs, securities market participants, pension funds, and insurance companies. The liberalization of several of these subsectors has

stimulated their growth and has increased their significance from a financial stability point of view.

The development of the NBFIs sector has differed across advanced, middle-income (MIC), and low-income countries (LIC). However, whatever shape and form their development has taken, the IMF—given its mandate for safeguarding financial stability in its membership—has had to respond to this new trend. This response is being reflected in the attention given to these institutions in the IMF’s surveillance work—FSAP and annual consultations—as well as in its TA and capacity-building work. The latter type of involvement is the topic of this chapter.

This chapter first reviews the background of the IMF’s involvement in TA on NBFIs supervision, and subsequently discusses the types of assistance delivered in this area and the policy issues to be addressed in relation to this TA work. Since the IMF’s involvement in this area is still in its early stages, any consideration of results could only be tentative.

## **Background**

### **Trends Within the Sector**

To analyze the IMF’s role with respect to the sector, it is useful to make a distinction between *deposit-taking NBFIs* (such as credit cooperatives, credit unions, and deposit-taking microfinance institutions—MFIs) and *nondeposit-taking NBFIs* (such as finance companies and other similar types of institutions, but, more importantly, insurance companies and pension funds).

In advanced countries—where any requests for TA typically are focused on narrowly specified issues—and in some MICs, insurance companies and pension funds have become an important group of market players. The formation of large financial conglomerates and the blurring of boundaries between them and other types of financial institutions have made it necessary to regulate and supervise these institutions more effectively than before.

On the other hand, in several MICs and LICs the dominant development is the growth of deposit-taking NBFIs. The insurance and pension fund sectors are still in their infant stages, and often are still in state hands. The emergence of deposit-taking NBFIs in LICs is facilitating access to finance as they lower the threshold for access to financial services, particularly for the rural population. In some countries, these institutions are gaining systemic importance, despite the fact that the sector's balance sheet is typically still less than 10 percent of the banking system's balance sheet. In the eyes of uninformed customers, the distinction between them and commercial banks is vague, which makes spillover from a possible crisis in some of these segments to the banking system a real risk.

Hence, the emergence of these institutions poses a two-fold challenge: (i) to establish a regulatory framework for this formerly unregulated sector; and (ii) to build up the agency charged with their regulation and supervision.

### **The IMF's Involvement**

While it is obvious that these new trends are important from both a financial stability and a developmental point of view, the question needs to be addressed as to why the IMF gets increasingly involved in TA in these areas in which several other TA providers may have longer-standing background. Several reasons have led to IMF involvement:

- In some cases, countries express a preference for IMF involvement, for instance, as an immediate follow-up to FSAPs—where NBFIs form part of the analysis and hence, receive greater visibility—or because the work is seen as complementary to TA provided by the IMF in other areas, or because the central bank is involved in NBFI supervision and sees the IMF as the “natural” TA partner.
- In other cases where there is IMF lending to a particular country, IMF TA is sought to ensure that it is consistent with, and supports, the IMF's macroeconomic advice. In some cases, achievements in the NBFI sector (legal and regulatory framework, setting up supervisory structure) were

part of the conditionality of IMF-supported programs, and ensuring timely implementation is easier when TA is provided by the IMF; related to this, the systemic importance of some sectors/issues is a reason for the IMF to take the job upon itself.<sup>1</sup>

In response to these calls, the IMF has been developing capacity along three complementary lines. First, a number of experts, for instance, in insurance, have been hired to work at the IMF's headquarters in Washington D.C. Second, the IMF's TA expert roster has been expanded with reputable experts in the respective areas. Finally, the IMF has been calling upon other funding sources with which it can coordinate closely. Among these, FIRST Initiative has been important.<sup>2</sup> Specific FIRST-projects are jointly supervised by FIRST, the IMF, and the World Bank. This feature allows the IMF to monitor implementation closely, while obtaining the synergies of operating with an outside party with additional resources and expertise.

### **IMF Technical Assistance in the NBFI Sector—An Overview**

Table 16.1 shows that member countries' requests for TA and capacity building cover the entire range of regulatory and supervisory issues that accompany the emergence of new financial sector segments.

The table shows the different levels of involvement, starting from a comprehensive approach to involvement on more a selective basis. The comprehensive approach (top row) involves cooperation with the host country at all levels of the supervisory framework, i.e., (i) policy decisions about setting up or modifying the institutional structure for supervision; (ii) deciding on the governance structure and strategy of the agency; (iii) establishing regulations for the supervised sectors; and (iv) capacity building in the actual supervision. Many MICs and LICs only have a bank supervisory structure in place (in the majority

---

<sup>1</sup> In this context, for a discussion of the role of the IMF regarding microfinance, see International Monetary Fund (2005).

<sup>2</sup> FIRST Initiative is a donor group consisting of bilateral donors, the World Bank, and the IMF. It provides TA for capacity building, focusing on post-FSAP work.

of cases housed in the central banks), while other types of supervision are nonexistent or not functioning.

Table 16.1. Overview of IMF Technical Assistance Involvement in NBFI Supervision<sup>1</sup>

Type of Activity	Countries
Supervisory structures, governance and operations, and regulatory frameworks encompassing all sectors	<u>Africa</u> : Botswana, Malawi, Mauritius, Namibia, and Swaziland  <u>Asia</u> : Sri Lanka  <u>Europe</u> : Moldova
Governance and operations, legal frameworks, and supervisory capacity	<u>Middle East</u> : Sudan (MFI)  <u>Western Hemisphere</u> : Trinidad and Tobago (all)
Regulatory framework(s)	<u>Western Hemisphere</u> : Peru (all),  <u>Europe</u> : Bulgaria (I), Kosovo (I),, Moldova (all), and Serbia (I)  <u>Pacific Islands</u> : Federated States of Micronesia (I), Fiji (P, I), Samoa (I), and Solomon (I)  <u>Western Hemisphere</u> : Mexico (sofoles), Peru (all), and Trinidad and Tobago (I&P)
Supervisory capacity	<u>Western Hemisphere</u> : Peru (all)

<sup>1</sup> I is Insurance; P is pension funds; MFI is microfinance institutions; Sofoles (Mexico) are Sociedades Financieras de Objeto Limitato, nondeposit-taking NBFIs.



The countries in the second row of Table 16.1 already have an institutional structure, but requested assistance in all or some of the other areas. The countries in the two bottom rows requested assistance in the regulatory and supervisory areas. The cooperation with these countries ranges from upgrading outdated insurance regulations to reflect the principles promulgated by the International Association of Insurance Supervisors (IAIS), to establishing a regulatory framework for previously unregulated (or nonexistent) sectors, such as microfinance. The last row follows from the previous one: once a regulatory framework has been adopted, capacity building in risk-based supervision (both off-site and on-site) is needed.

Not every request fits into these categories. For instance, the Pakistan government requested assistance in 2005 in developing a strategy to promote the insurance industry. The insurance industry in Pakistan is highly regulated and mainly in state hands, but the government wanted to give fresh impetus to contractual saving and insurance. The result was a detailed action plan built around two axes: (i) liberalizing the market (by creating a level playing field between state-owned and private insurance companies as a first step, preparing for privatization of the state-owned companies, and facilitating access to insurance products); and (ii) creating supervisory capacity. Pakistan is in the first phases of implementing this ambitious plan.

## **Defining Supervisory Structures**

### **Context for reform**

In the last 15 years, the institutional structure for financial sector supervision has become a topic of intense debate. Countries are revisiting their supervisory structures and aligning them with the needs of their financial systems. A number of countries, including the United Kingdom and the Scandinavian countries, brought all sector supervisors under one roof (integrated or unified supervisors), but since the turn of the century, the reorganization efforts have resulted in a variety of institutional arrangements.<sup>3</sup>

---

<sup>3</sup> For an overview, see, for instance, Čihák and Podpiera (2006) and Courtis (2005).

Adopting a unified supervisory structure—or, more broadly, revisiting the institutional structure—rests on three sets of consideration:

- To ensure the effectiveness of regulation and supervision in response to the convergence of previously distinct banking, securities, and insurance sectors, due to the formation of financial conglomerates (the “industry change” argument, or the “blurring of boundaries” argument);
- To achieve economies of scale in regulation and supervision, particularly in small countries with small financial systems, and thus to achieve regulatory goals more effectively (the “economies of scale” or the “small country” argument); and
- More recently, to build supervisory capacity, in particular in the wake of systemic crises, where such capacity was tested and appeared weak (the “institutional strengthening” argument).

Additional justifications for restructuring have emerged, particularly, in the euro area. The transfer of monetary policy authority to the European level has prompted a number of countries to reorganize the responsibilities of financial sector oversight. Lastly, reorganization in some countries can also be seen as following the latest fashion.

### **Focus on sub-Saharan Africa <sup>4</sup>**

Until recently, the institutional restructuring effort was limited to industrialized countries and MICs, where some or all of the above justifications applied. As indicated above, not just unified but a larger variety of supervisory structures has emerged from that effort. More recently, the debate has taken off in LICs, in particular Sub-Saharan Africa (SSA), and several countries are looking for external assistance to guide them through the process. This form of cooperation is holistic in the sense that it requires the development of a vision, a strategy covering the institutional structure, the new agency’s governance

---

<sup>4</sup> The focus of this section is on work done, and under way, in SSA, because that is where the IMF has had the greatest involvement thus far in this area. Recently, Moldova has requested assistance in reorganizing its supervisory structure.

structure, regulatory and supervisory strategy, the regulatory framework(s), and the building of supervisory capacity as well.

The origin of the debate in SSA is rather different from that in the other parts of the world. SSA has the least-developed financial sectors in the world. However, the situation is changing, albeit at a slow pace.<sup>5</sup> A common feature among several SSA countries is the growth of deposit-taking NBFIs. Credit cooperatives, credit unions, and MFIs are starting to play significant roles in the financial system. On the other hand, growth in the pension fund and insurance industry is still limited and confined to a few countries.

The overview of supervisory structures in SSA in Quintyn and Taylor (2007) shows that (i) central banks are the dominant supervisors, particularly in Eastern and Southern Africa;<sup>6</sup> (ii) in several countries, central banks also supervise deposit-taking NBFIs, and often also other NBFIs; and (iii) there is an impressive number of unregulated sectors.

Confronted with a growing financial system, many countries rightly feel that this situation needs to be addressed. Among the three justifications for restructuring given above, the “economies of scale” argument and the “institutional strengthening” argument argue against setting up sector-specific supervisors. Thus, the quest for a model that fits the individual country needs in a forward-looking manner (i.e., taking into account future growth of the sector) starts from here.

Several countries have called upon the World Bank and the IMF to guide them in that search. In the case of the IMF (often in conjunction with the FIRST Initiative), work has been undertaken, or is underway, in Botswana, Namibia, Swaziland, and Zambia. The IMF’s strategy (not only in SSA, but more generally) has consisted in leaving the choice of the institutional model to the country. Cooperation is meant

---

<sup>5</sup> For an overview, see Gulde et al. (2006), Quintyn and Taylor (2007), and Honohan and Beck (2006).

<sup>6</sup> The *Communauté Economique et Monétaire de l’Afrique Centrale* (CEMAC) and the *Union Economique et Monétaire Ouest Africaine* (UEMOA) have regional banking and insurance supervisory agencies outside the central bank.

to guide and facilitate the process of finding an appropriate model. Once the choice is made, assistance and training in setting up the agency—or restructuring an existing agency—is provided.

The IMF's role as facilitator in such cases often consists in discussing pros and cons of models adopted in other countries in light of the country's specific circumstances.<sup>7</sup> In the final analysis, the choice of an appropriate supervisory structure rests on the way the country wants to deal with two LIC-specific features: capacity constraints and the role and position of the central bank:

- Capacity constraints are a major hurdle in LICs in general and in SSA in particular. Most supervisory agencies lack skilled and trained staff, as well as equipment and infrastructure. Salaries are low, making staff retention a challenge. Capacity constraints argue against establishing separate sector supervisors. Achieving economies of scale is needed. So some degree of integration of sector-specific supervision is desirable.
- In response to capacity constraints, TA suggests a two-step approach: (i) first, to prioritize the need for regulation of the various subsectors;<sup>8</sup> and (ii) to decide on the intensity of regulation and supervision of the selected sectors. In other words, the countries need to decide at which point during their development a financial subsector needs to be brought under the supervisory umbrella and once a sector has been identified as needing supervision, what the intensity of regulation and supervision should be. Economies of scale and scope can be realized by adopting and modifying existing rules and regulations and supervisory techniques from similar sectors.
- In the case of LICs, there are some compelling reasons to keep the central bank involved in the supervisory process. First, in these countries banks will remain the dominant financial institutions for some time to come. Information advantages point in the direction of keeping monetary policy

<sup>7</sup> See for instance, FIRST, 2004.

<sup>8</sup> Carmichael and Pomerleano (2002) suggest that prioritization take place by ranking the nature of the risks of the particular financial promises being made by given groups of financial institutions. Those segments with the highest intensity of promises (highest risks), should be captured first under the supervisory umbrella, once they too become systemically important. See also Quintyn and Taylor (2007).

and banking supervision under one roof. Second, given capacity constraints in most agencies other than central banks, the latter are in the best position to handle and coordinate crisis management, should a country be hit by a banking crisis. Third, in most LICs, central banks are arguably the strongest and most reputable institutions in the country, with a reasonable degree of independence, which brings several advantages.

Against these arguments in favor of central bank involvement stand some well-known disadvantages such as (i) the potential conflict of having monetary policy and banking supervision in one institution; (ii) the moral hazard problem that, e.g., insurance companies could think that they are also covered by the central bank's lender-of-last-resort facility; and (iii) the view that the central bank could become too powerful an institution if it covers monetary policy as well as financial sector supervision. However, these arguments seem to carry less weight in the case of LICs than the potential advantages listed above. The conflict of interest argument has never clearly tipped in one direction or the other. The moral hazard problem can be addressed by sending clear signals about the lender-of-last-resort facility, and appropriate accountability arrangements should take away fears of having too powerful an institution.

On the basis of these considerations, various models with varying degrees of central bank involvement can be weighed and a decision taken. Such a decision-making process has thus far led to a situation whereby in Mauritius, Namibia, Uganda, and Zambia the respective central banks have kept their banking supervisory responsibilities and have agreed to take onboard supervisory responsibilities for deposit-taking NBFIs. Each of these countries has established a separate supervisor (one or more) for nondeposit-taking NBFIs. Such an arrangement seems to achieve economies of scale and scope for the supervisory function in the central bank. A key role for the central bank is also guaranteed in The Gambia, Lesotho, and Malawi, where the central bank houses the unified supervisor.

Work is still underway in Botswana and Swaziland, and more initiatives are expected in other Southern African Development Community (SADC) countries in the near term, as part of a joint Bank-IMF-FIRST Initiative project. Botswana has opted for the model

with banking supervision in the central bank and an NBFIs regulator outside the bank. Swaziland initially opted for a similar model, but decided recently to bring insurance supervision under the central bank (and, most likely, credit cooperatives supervision as well).

This is clearly a topic in flux. Nonetheless, there seems to be a convergence toward keeping a significant role for the central bank, which is important from a financial stability point of view. Once the structures have been set up and governance arrangements agreed upon, the regulatory and supervisory frameworks need to be defined.

Finally, it is worth noting that many countries outside SSA are facing similar issues. In Sri Lanka, for instance, the central bank has requested the IMF's views on whether it should take on the role of supervisor of MFIs or propose to create another agency for the purpose.

### **Agency Organization and Supervisory Capacity**

A number of countries have decided on a new institutional structure without external assistance (Fiji, Trinidad and Tobago), or are not considering any changes in the existing structure (Mexico, Peru, Sudan), but nonetheless are seeking guidance in defining the institution's supervisory strategy, governance structure and/or organization. In some cases, this has also resulted in a revision of the regulatory framework and supervisory practices.<sup>9</sup>

#### **Fiji**

Like many countries of similar economic size and level of development, the island has a large government-owned pension fund, the Fiji National Provident Fund (FNPF), which has become a major player in the financial system. In addition, the FNPF had remained largely unregulated up until November 2003. Given the risks for financial stability, the government wanted to establish a regulatory framework and thus assigned the supervision of the FNPF to the central bank. The first step of this ongoing cooperation effort

---

<sup>9</sup> The case of Mexico is not discussed in detail in this chapter, as it is presented in chapter 18 of this volume.

consisted in establishing an appropriate regulatory framework. The next steps focused on capacity building in risk-based practices for the prudential supervision of the FNPF and in conducting on-site inspections. To date, the Reserve Bank of Fiji (RBF) has made good progress in fulfilling this assignment.

The type of cooperation provided to the RBF was one of the first of its kind, but more are expected to emerge. Several small open economies confronted with capacity constraints have tended to assign the supervision of nonbank financial activities to the central bank, although these activities may be fairly remote from the central bank's core functions. In those cases, where sectors such as pension funds and insurance were largely unregulated (and, hence, not supervised at all), these new assignments required the building up of a host of new skills inside the central bank.

Typically, the effort to build up capacity for risk-based supervision has two sides. One is the training of central bank staff. The other is to familiarize the pension fund with the techniques and approaches used by the supervisors. Such a pension fund now needs to prepare a new range of documents and reports for the supervisors; the pension fund managers have to get accustomed to the risk-based approach that the supervisors are taking. More generally, a new culture of cooperation and exchange of information needs to be built between the supervised and the supervisor, two agencies that in the past had no dealings with each other. These critical aspects need to be part of the capacity-building efforts on both sides of the fence.

### **Trinidad and Tobago**

In 2002, the decision was taken in Trinidad and Tobago to establish a unified supervisor under the wing of the central bank. The driving force behind this decision was the fact that contractual savings had replaced banking as the largest segment in the country's financial system—combined with the fact that insurance and pension fund regulation was weak. While the central bank had a long tradition in

supervising the fairly developed and diversified banking sector, the transfer of supervisory responsibilities in the insurance and pension fund sectors posed a new set of challenges.

In 2003, the authorities wanted the IMF to review the steps taken to establish the supervisory function within the central bank; determine areas where capacity building in supervision was needed; and review the legislative framework. Plans to strengthen the function found their way into the “2004 White Paper on the Financial System.”

This paper outlines the government’s intentions for a far-reaching overhaul of financial sector laws, strengthening of regulation and supervision, implementation of consolidated cross-border supervision of financial conglomerates, bringing less regulated and supervised institutions under closer supervision, enhancing disclosure requirements, and developing market infrastructure. This paper received further input during the FSAP process, and implementation is under way.

## **Sudan**

The IMF was invited to assist the Central Bank of Sudan in developing its vision on microfinance. An FSAP in 2005 had identified the development of this sector as an important component of financial system development, given the concentration of the banking industry in only a few parts of the country.

It was agreed that among the many areas in need of technical assistance—in particular training in microfinance methodologies for the central bank, the industry, and the beneficiaries—the IMF would assist in those areas that are closest to its core work, i.e., (i) assist the central bank in developing an appropriate regulatory and supervisory framework for microfinance (banks and nonbanks); (ii) advise on incorporating the MFI function within the central bank organization through a long term expert; and (iii) advise on measures to improve the effectiveness of the existing deposit-taking ‘specialized’ banks. Work in all these areas is ongoing at this stage.



## Peru

In Peru, the importance of MFI was discussed in detail in the FSAP (2001), which recommended stronger supervision of this sector. Subsequently, SBS (the bank supervisory agency entrusted with MFI supervision) requested assistance in improving its supervisory function in the MFI sector, along with the more conventional follow-up issues that arose from the FSAP.

The IMF considered it important to be involved in the capacity-building effort in this area because banks were increasingly moving down into this business, while MFIs were upscaling to become banks or regulated nonbanks, thus blurring the borderline.

Since the regulation and supervision of cooperatives, and other community-based banks is also within the mandate of the agency in charge of bank supervision, there is scope for synergies and scale economies if responsibility for the NBFIs falls to this agency as well.

### **Establishing Regulatory Frameworks and Building Supervisory Capacity**

Until very recently, insurance in many MICs and LICs was a “neglected sector.” Typically, the few companies operating in the sector were concentrated in the nonlife segment and were often government-owned. When there was a private-sector presence, regulations were light and supervision was absent. As indicated in the background section, this situation is changing, albeit slowly.

Nowadays, insurance sectors are being liberalized (state monopolies are terminated), interest in life insurance is growing (or contractual saving, more generally), and countries are adapting their regulatory framework to the IAIS Principles and introducing risk-based supervision approaches. These efforts require drafting regulatory frameworks and capacity building in supervisory practices, which needs to start from scratch in many countries. As such, requests

for technical assistance cover all the areas, such as regulations for life and nonlife insurers, and on solvency rules, as well as risk-based off-site supervision and on-site inspections.

## **Conclusions**

The operations of the NBFIs have come closer to those of the banking sector in the past decade. This movement is taking different forms. In industrialized countries, the boundaries between banks on the one hand and NBFIs on the other are blurring and large financial conglomerates are active in a wide range of financial activities and services. In LICs and MICs, the most visible movement is that deposit-taking NBFIs are coming closer to the commercial banks' field of operation. Whatever the movements might be, the common thread is that they can potentially have an impact on financial stability and, therefore, need to be caught by supervisory operations.

Given the novelty of several of these developments, many countries are requesting guidance and TA from the IMF in addressing these issues. Whereas some of these requests have a highly technical content—such as establishing a regulatory framework or aligning the regulatory framework with internationally accepted principles—other requests cover supervisory policies and strategies.

Given the emergence of new financial sector segments in need of regulation and supervision, the issues of establishing supervisory infrastructures, developing a strategic vision regarding regulation and supervision, and capacity building in supervisory techniques form a continuum. In other words, cooperation with countries in this area is a combination of developing policies and building capacity. The policy element in this work is to set priorities as to which segments need to be regulated and supervised in the first place (issues regarding regulatory scope) and to decide on the intensity of regulation and supervision. Once a view on these issues has been developed, an appropriate institutional framework can be set up. While most of the requests so far have come from SSA, it is expected that these issues will be tabled more frequently in the near future.

## References

- Carmichael, Jeffrey, and M. Pomerleano, 2002, “The Development and Regulation of Non Bank Financial Institutions” (Washington DC: The World Bank), p. 230.
- Čihák, Martin, and R. Podpiera, “Is One Watchdog Better Than Three? International Experience with Integrated Financial Sector Supervision,” *IMF Working Paper*, WP/06/57, (Washington: International Monetary Fund).
- Courtis, Neil, ed., 2005, “*How Countries Supervise Their Banks, Insurers, and Securities Markets 2002.*” (London: Central Banking Publications), p. 266.
- Cuevas, Carlos, and K. Fischer, 2005, “Governance, Regulation and Supervision of Cooperative Financial Institutions,” Notes from Lecture at IMF, 11/17/2005.
- Das, Udaibir, Nigel Davies, and Richard Podpiera, 2003, “*Insurance and Issues in Financial Soundness*” IMF Working Paper WP/03/138 (Washington DC: International Monetary Fund).
- FIRST Initiative, 2004, Botswana: Nonbank Financial Institutions—Supervision and Strategy (Carmichael Consulting Pty Limited).
- Gulde, Anne-Marie, C. Pattillo, and J. Christensen, with K. Carey and S. Wagh, 2006, “Sub-Saharan Africa. Financial Sector Challenges” (Washington DC: International Monetary Fund, World Economic and Financial Surveys).
- Hardy, Daniel, Paul Holden, and Vassili Prokopenko, “*Microfinance Institutions and Public Policy*” IMF Working Paper WP/02/159 (Washington DC: International Monetary Fund).
- Honohan, Patrick, and Thorsten Beck, 2006, “Making Finance Work for Africa” (Washington DC: the World Bank).
- International Monetary Fund, 2005, “Microfinance: A View from the Fund,” p. 25.
- Quintyn, Marc, and Michael W. Taylor, 2007, “*Building Financial Supervisory Structures in Sub-Saharan Africa—An Analytical Framework*” IMF Working Paper (forthcoming).

**CHRISTIAN DURAND AND AMADOU SY**

In contrast to the findings of the literature on optimal currency areas, monetary union in the Economic and Monetary Community of Central Africa (CEMAC) has preceded economic integration. With the advent of political independence in the 1960s, the CEMAC, with the Bank of Central African States (BEAC) as its central bank, replaced the previous arrangements which dated back to the colonial era.<sup>1</sup> The CEMAC has a fixed exchange rate, the franc CFA which is pegged to the Euro and whose convertibility is guaranteed by the French Treasury. The CEMAC zone is characterized by free capital mobility between its members and France, and the pooling of its foreign exchange reserves. In addition, the CEMAC is required to maintain a foreign exchange cover of at least 20 percent and the BEAC has to deposit at least 65 percent of its foreign assets in the operational account open with the French Treasury.

Regional institutions in the CEMAC have a number of key responsibilities but some are shared with national governments. The BEAC's main function is to issue the common currency and ensure its stability.<sup>2</sup> The BEAC implements monetary policy for the region while domestic governments are responsible for their individual fiscal

---

<sup>1</sup> The CEMAC comprises Cameroon, Central African Republic, Congo, Equatorial Guinea, Gabon and Chad. See "*L'Intégration Monétaire et Financière en Afrique Centrale: Bilan et Perspectives*," Communication de Monsieur Jean-Félix Mamalepot, Gouverneur de la BEAC, au Forum Diplomatique de l'IRIC, Yaoundé, 13 Janvier, 2005 for a historical review of monetary and financial integration in Central Africa.

<sup>2</sup> The Governor of the BEAC also serves as secretary for the meetings of the Ministerial Committee of the Monetary Union of Central Africa (UMAC). He participates in meetings of the Economic Union of Central Africa (UEAC).

policy. The BEAC monitors, however, a number of macroeconomic convergence criteria, including fiscal ones. In contrast to a number of monetary unions such as the European Union, since 1990 there has been a regional banking commission, the COBAC, which is responsible for bank supervision at the regional level. Prudential norms are therefore set at the regional level, but the licensing and delicensing of banks is a shared responsibility with national governments. Finally, there is no deposit insurance scheme.

Table 17.1. CEMAC: Compliance with Convergence Criteria  
(With criteria in parentheses)

	2004 est.
<b>Basic fiscal balance/GDP (greater than 0 percent)</b>	
Minimum	-2.5
Maximum	12.8
Number of countries violating	1
<b>Average consumer price inflation (less than 3 percent)</b>	
Minimum	-4.8
Maximum	8.0
Number of countries violating	1
<b>Total debt/GDP (less than 70 percent)</b>	
Minimum	2.4
Maximum	90.1
Number of countries violating	1
<b>Change in governmental arrears (less than 0 percent)</b>	
Minimum	-114.2
Maximum	2.9
Number of countries violating	1
Total number of criteria violations	4
Number of countries violating at least one criterion	2

Sources: IMF *World Economic Outlook* database; and IMF staff estimates and projections.

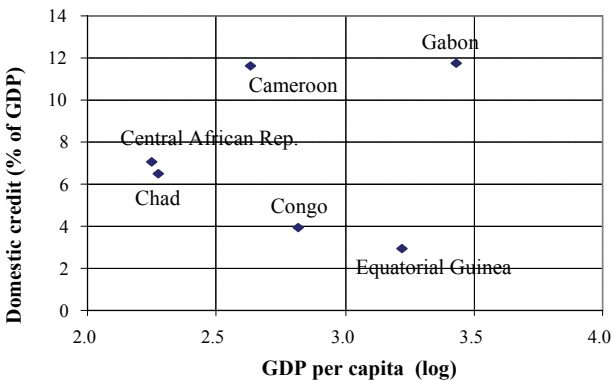
The existing regional arrangements have helped achieve a number of macroeconomic results. The maintenance of the peg with the French franc and subsequently the Euro has ensured exchange rate and monetary stability since 1994, when a 50 percent devaluation took place. Inflation has been historically low with an average of 2.5 percent in 2000–04. Compliance with macroeconomic convergence

criteria has also improved over time (see Table 17.1). However, intra-regional trade remains low at 1.4 percent of total trade, lower than that of other African regions.

The regional financial system is small, even when compared to other African regions, and the potential for intermediation remains large (Figure 17.1). In the CEMAC, Cameroon and Gabon represent 67 percent of GDP and 77 and 82 percent of domestic credit. The relatively large economy of Congo (15 percent of regional GDP) accounts only for 5 percent of domestic credit, which is comparable to domestic credit in the smaller Chadian economy (8 percent of regional GDP).

Financial convergence has lagged macroeconomic results. In part, as a result of the limited development of the financial sector, indicators of financial integration remain mixed. Although the dispersion of spreads across member countries has decreased over time and the foreign presence in the banking sector is high, the interbank market is shallow and capital mobility remains relatively low in spite of free transferability of capital under Franc Zone rules.

Figure 17.1. CEMAC: GDP Per Capita and Domestic Credit, 2003



Source: IMF, *International Financial Statistics*.

## **Institutional and Macroeconomic Reforms**

The severe economic and banking crises in the late 1980s and early 1990s highlighted weaknesses in the institutions and financial infrastructure in the CEMAC. The negative consequences of a sharp deterioration of the terms of trade—following the collapse of commodity prices—in conjunction with a rapid expansion of domestic credit, including to government and public enterprises, led the BEAC to consider a set of reforms starting in 1991 aimed at building or reinforcing the Union's institutions and infrastructure. It was clear that the existing set of monetary instruments was ineffective in dealing with such shocks and the proliferation of bank failures highlighted shortcomings in bank oversight<sup>3</sup> as well as weak governance.

The BEAC played a key role in spearheading reforms to address infrastructure and institutional problems. These included (i) a refocusing and modernization of monetary policy to overcome the limitations and ineffectiveness of its instruments, (ii) a reform of banking oversight mechanisms and a bank restructuring program to establish effective tools for crisis prevention and resolution, and (iii) the adoption of common foreign exchange regulations to facilitate the external financial transactions of member countries.

At the same time, monetary stability was designated as the priority mandate of the BEAC's monetary policy (Article 1 of the Statutes). The direct control of credit was discontinued and replaced by indirect instruments. In addition, individual country conditions were taken into account in the framework for regional monetary policy. Finally, a regional monetary market with an interbank component was initiated.

Problems in bank oversight were addressed through the establishment of a regional regulatory and supervisory framework. The BEAC put in place a regional regulatory framework defining the conditions under which banking activities could be conducted and supervised. In particular, the Banking Commission of Central Africa (COBAC) was established in 1990, and banking regulations were

---

<sup>3</sup> Eighteen out of the 24 active banks in 1990 (i.e., 75 percent) were insolvent and some countries had no viable banks at all.

harmonized in 1992.<sup>4</sup> These reforms aimed at providing an independent, effective, and credible instrument for banking oversight and defining managerial practices in line with international standards. In addition, a single accreditation arrangement for credit institutions was put in place. The BEAC was also instrumental in managing the banking crisis, in particular through bank restructuring operations and the provision of lender of last resort support.

Foreign exchange regulations were harmonized to reinforce the joint currency mechanism and help expand the external financial transactions of member countries within a context of liberalized foreign exchange. The goal of these regulations was to remove all restrictions on current payments, in accordance with the provisions of Article VIII of the Statutes of the IMF and pledges made by the CEMAC countries. Although the Harmonized Foreign Exchange Regulations are under the purview of each country's Ministry of Finance, the role of the BEAC was strengthened with regard to certain provisions, such as the repatriation of export receipts.

In order to reinforce the results from first-generation reforms and address a number of remaining issues, the BEAC has also embarked on a set of second-generation reforms, most of which are already under way. These include the following:

- **The issuance of Treasury bills by national governments.** This aims at eliminating the monetary financing of governments. The reduction of such financing would increase the efficiency of monetary policy and stimulate the regional monetary market, as these securities are used in the conduct of monetary policy.
- **The establishment of a regional securities market.** The regional financial market project is an attempt to address firms' long-term funding needs. The establishment of the two basic entities of the regional financial market, i.e., the Financial Market Oversight Commission for Central Africa (COSUMAF), and the Central Africa Regional Stock Exchange (BVMAC-SA), is ongoing. In spite of plans for a regional financial market, two independent stock markets are developing in the CEMAC.

---

<sup>4</sup> Responsibility for maintaining banking stability is currently borne jointly by the BEAC and COBAC (cf. Articles 20 and 29, paragraph 5, of the new Statutes of the BEAC).



- **The modernization of the payment and settlement systems.** The modernization of the payment systems within the CEMAC is motivated by the need to make them more efficient, more secure and in greater conformity with international standards. The completion of the payment and settlement systems reform is expected to deepen the financial sector and economic integration in the region. The reform should improve the speed and security of the payment system, and improve the access to banking services for a large part of the population. The BEAC expects access to banking services to increase from 3 percent to 8–10 percent of the population within 4 years. The more modern payment and settlement system should also facilitate the conduct of monetary policy. The project has four modules: a Real Time Gross Settlement System, or large-value payment system; an automated interbank funds transfer system; an interbank system; and a payment incident center.
- **A regional monetary programming exercise.** The establishment of a regional monetary programming exercise aims at defining monetary and credit objectives at the regional level, in addition to subsidiary goals on a country-by-country basis. This has contributed to the enhancement of the credibility of the common monetary policy, in furtherance of the objective of monetary stability.
- **The establishment of a financial records reporting center.** The Financial Records Reporting Center (*Centrale de Bilans*) will be an economic information tool available to economic actors and investors.
- **Anti-money laundering and combating the financing of terrorism (AML/CFT).** The regional Action Group Against Money Laundering in Central Africa (GABAC) is the main tool to address AML/CFT issues. A regulation concerning the prevention and elimination of money laundering and the financing of terrorism was approved in 2003 and GABAC was established in the Central African Republic (CAR). The remaining task now is to create, within each member country, a financial intelligence unit that would be attached to the respective ministry of finance.
- **The management of foreign exchange reserves.** The BEAC has developed a foreign reserves management capability to invest the share of reserves that is not deposited with the French Treasury. Although this share is currently 35 percent, it is going to be increased to 50 percent. The BEAC is also planning to provide assistance to member countries looking for longer term investment of their oil proceeds.

## Obstacles to Financial Integration

A number of initiatives have been undertaken to promote regional financial integration in the CEMAC region. These include:

- **Introduction of the single banking license (*agrément unique*).** A single banking license (*agrément unique*) has been sufficient to set up banking operations in the CEMAC since 2001. The decision to grant or withdraw a banking license involves both the banking commission and the relevant national finance minister.
- **Regional supervision of insurance companies.** Under the agreement reached at the 1992 Inter-African Conference on Insurance Markets (Conference Interafricaine du Marché des Assurances—CIMA), insurance companies in the African franc zone countries are being supervised by a single regional authority (Commission Régionale de Contrôle des Assurances—CRCA). There is also a regional re-insurance company (CICA-RE).
- **Establishment of a regional commercial legal framework.** With the assistance of the Organisation pour l'Harmonisation du Droit des Affaires en Afrique (OHADA) a regional commercial legal framework has been in place since 1996.
- **Harmonization of accounting standards.** Accounting standards for corporations have been harmonized in the context of a regional accounting system (Système Comptable Ouest Africain—SYSCOHADA).

Notwithstanding its small size, there are a number of key obstacles to the integration of the regional financial system in the CEMAC. The BEAC's second-generation reforms include policy measures to address a number of these obstacles.

- **The macroeconomic environment is not supportive of increased financial integration.** In the current small financial system, access to banking services is limited and most loans go to a few large corporates, given the limited diversification of the economy. Typically, financial integration increases as corporates demand more financial services to accompany the growth in cross-border transactions. However, the CEMAC's intra-regional trade is limited; apart from a few exceptions

(e.g., the border of Chad and Cameroon) bank flows are negligible and point to low trade integration.

- **The CEMAC interbank market is thin and illiquid (Table 17.2).** In the context of a monetary union, the common currency and the associated money market play a very important role as a catalyst for financial integration. Complete integration in the markets closer to the common currency, such as the interbank money markets, can be achieved rapidly with clear benefits for the conduct of monetary policy. An integrated interbank market can ensure the even distribution of central bank liquidity and a homogenous level of short-term interest rates across the union. Obstacles to the development of the interbank market include the absence of appropriate collateral (as most transactions are not collateralized), a network to match supply and demand, and a counterparty risk assessment framework. The excess liquidity in the banking system is also an impediment to further interbank transactions.
- **The CEMAC payment system is not yet fully operational.** A well functioning payment system is a key determinant of integrated money markets. For instance, money market integration was made possible in the EU due, inter alia, to the establishment of the pan-European payment infrastructure (TARGET system). In the WAEMU, a reform of the payment and settlement system is well underway with the setting up of an RTGS system (STAR-UEMOA), an interbank settlement system (SICA-UEMOA) and plans for an interbank payment system for bank cards (GIM-UEMOA and CTMI-UEMOA). However, the CEMAC still has a lot of work to do to make the payment system fully operational.

Table 17.2. CFA Franc Zone: Interbank Market Transaction Volumes, 1997–2005  
(Monthly averages, in billions of CFA francs)

	1997	1998	1999	2000	2001	2002	2003	2004	2005
WAEMU	105.6	152.4	199.6	155.6	126.8	105.6	52.8	48.0	66.0
CEMAC	3.9	19.4	21.2	14.7	23.6	13.1	9.2	7.5	...

Sources: BCEAO and BEAC.

- **Limited information on debtors complicates credit assessment.** There are no credit ratings for corporate and retail borrowers and bank ratings are not made public. With limited information, banks typically focus on

the largest corporate borrowers. Similarly, intra-group transactions dominate the interbank market (see Box 17.1).

### **Box 17.1. SYSCO Rating**

In 2000 COBAC introduced a CAMEL type rating system for commercial banks. Five factors are used in assessing the standing of a credit institution: capital adequacy, liquidity, quality of loan portfolio, management and internal control systems, and profitability.

These components are building blocks that, when evaluated in quantitative terms, make it possible to determine the institution's profile. The weighting of these factors reflects their importance for banking supervision. When a ranking pertains to quantitative data, the score obtained depends upon the gap between the ratio observed and the standard determined by the regulations in force or by sound management practices.

For assessing qualitative aspects, a grading scale has been developed whereby quantitative values can be assigned to the on-site assessments of the internal control and management system. Under this new system (the SYSCO rating), capital adequacy counts for 30 percent; quality of the portfolio, 20 percent; quality of management and internal control, 20 percent; earnings, 10 percent; and liquidity, 20 percent. On the basis of the assessment, banks are placed in one of four categories: 1) strong, 2) good, 3) fragile, and 4) critical. When all regulatory minima have been observed and the control mechanisms and profitability level are acceptable, the institution receives a rating of 2.

## **Main Conclusions of the CEMAC Experience**

Notable results have been achieved in the CEMAC after several decades of reforms, including the introduction of the common currency, and establishment of a comprehensive and well-structured regional institutional set-up. There are, however, a number of areas where progress regarding first-generation reforms has been limited. Furthermore, the results from second-generation reforms have still to

materialize. Finally, changes in the macroeconomic environment—given the predominance of oil-exporting countries in the CEMAC—may require a flexible policy response, leading to a review of the reform agenda.

The involvement of the national authorities in some aspects of financial supervision limits the overall effectiveness of the regional supervisory framework. National finance ministries play a central role in the granting and withdrawal of national bank licenses in spite of the existence of a single license for the CEMAC since 2000. Applications for national licenses have to be submitted to national finance ministries, which forward them to the COBAC for approval. However, national authorities are not bound by a time limit. Similarly, appeals by national finance ministries can suspend the decision by COBAC to withdraw a bank license. Also, the absence of a mechanism to protect depositors causes difficulties, in that it seems to increase the reluctance of national authorities to intervene in case of weak banks.

Challenges regarding systemic liquidity management need to be addressed. The high dependence on oil for some of the CEMAC countries, combined with the existence of a fixed exchange rate regime, leads to macroeconomic volatility and excess liquidity in the banking system and possibly fiscal surpluses during periods of high oil prices.<sup>5</sup> Monetary policy operating procedures and cash management practices by CEMAC governments are not well suited to the prevailing excess liquidity in the banking sector. In particular, the insufficient centralization of government deposits at the BEAC, together with weaknesses in the monetary policy framework, limits the absorption of the current excess liquidity and increases financial sector vulnerabilities. As a result, there is a need to set a target for international reserves, better centralize government cash balances at the BEAC and reinforce the use of market-based instruments for monetary and public debt management.

---

<sup>5</sup> Five of the six CEMAC countries are oil producers and the sector accounts for 40 percent of the region's output, 80 percent of export earnings, and 50 percent of tax revenues. Deposits in banks have increased by nearly 25 percent in 2005 due to increased government deposits and the clearance of government arrears following oil related windfalls.

The implementation of the payment system reform project is taking longer than originally planned. Delays can be attributed to a lack of experience, weak coordination capacity, and some divergences with the commercial banks regarding the interbank card system component of the project. The creation of a payment system management unit at the BEAC responsible for the implementation and supervision of the new system with the assistance of sub-units in each country will help to overcome these difficulties. Consultation, communication, and dissemination of information on the reform program will also need to be strengthened, and a Coordination and Monitoring Committee has been recently created to this effect.

### **Policy Lessons and the Way Forward**

The IMF's technical assistance experience in the CEMAC points to two key lessons:

First, in a regional setting, the common currency and institutional arrangements are necessary to implement the reform of monetary and financial systems, but they are not sufficient. In the context of the CEMAC, the regional central bank, the BEAC, has played a key role in spearheading and implementing reforms. The experience in the EU with the Lamfalussy process shows that the setting up of a regional supervisory framework is not a trivial exercise. However, the pace of implementation and the success of the reform agenda are also dependent on the role of the national authorities. Institutions and arrangements can exist *de jure* but national authorities play a key role in making them effective *de facto*. In the case of the CEMAC, the effectiveness of financial supervision is hampered by the blocking power of national finance ministries when sanctions or more drastic steps need to be taken, thus leading to regulatory forbearance.

Second, the infrastructure for financial markets plays a key role in the success of the reform of monetary and financial systems. The experience in the CEMAC offers a useful example of how political will has facilitated the rapid implementation of a well-functioning regional institutional set-up underlying a monetary union and the associated progress towards macroeconomic convergence. In contrast, the lack of financial integration in the CEMAC can be, in part,

attributed to the slower progress in building the underlying infrastructure for the proper functioning of financial markets. Building the infrastructure for financial markets is not always a rapid process as it has a multi-dimensional aspect. For instance, in addition to problems in the implementation of a number of reforms discussed above, there are flaws in the legal and judicial framework in the CEMAC. Although, the regional OHADA legal framework has led to a number of improvements, there remain significant deficiencies at the implementation stage of the framework. For example, debt collection and foreclosure on collateral remain inefficient because of complex procedures established by OHADA, uncertainties in each country's civil procedure, and weak capacity and problems of governance in the judicial systems.

### **The Role of the IMF**

In addition to the surveillance exercised at the country level by IMF teams, regional consultations held on a yearly basis provided an opportunity to discuss relevant policy issues while at the same time identifying technical assistance needs in the areas of financial supervision, monetary policy, payment systems, and AML/CFT.

Amongst other projects to foster intermediation, a Payment System Reform Project, initiated by the authorities and financed by the World Bank, received IMF technical advice, including the presence of an expert with experience of the European Committee for Banking Standards system.

To protect the integrity of financial markets, the IMF supported the BEAC's initiative to adopt at a regional level an AML/CFT directive. Moreover, when the BEAC decided to develop the capacity to manage directly the regional foreign exchange reserves, the IMF provided, in close cooperation with the Bank of France, the expertise needed to create the new department and train its staff.

Over this period, a specific effort was made to strengthen the banking system. This effort took different forms:

- Monitoring the restructuring of banks by the regional authorities with the support of the World Bank.

- Developing COBAC's capacity to perform its duties through advice on organization and staff training.
- Reviewing draft regulations through the presence of a permanent advisor, with the aim of bringing COBAC in line with international standards.

Finally, the IMF answered on an as-needed basis any request for advice from BEAC to strengthen its internal organization and governance structure.



*This page intentionally left blank*

## **Section III**

### **Advanced Topics in Technical Assistance**

*This page intentionally left blank*

ALAIN IZE

Whether the public sector should be directly involved in financial intermediation is a controversial matter that continues to be strongly debated.<sup>1</sup> A related issue that is equally important but has received less attention is whether public funding (or guarantees) to financial intermediaries should necessarily be supervised prudentially. Should official oversight be warranted, the question also arises of whether its objectives and modalities should be the same as for other types of financing. For example, while it is often taken for granted that all banking activities should be similarly supervised, the rationale for supervising second-tier public banks is not obvious. Moreover, the skills and methods involved in doing so are likely to be substantially different from those that apply to first-tier banks.

This chapter addresses these issues from the perspective of recent technical assistance provided by the IMF to two Latin American countries, Mexico and Colombia. While generally on the decline, public sector intervention in banking activities continues to be important in many countries of the region. However, its role and the modalities of its oversight are under increased scrutiny.

In Mexico, the supervisory authority, the Comisión Nacional Bancaria y de Valores (CNBV), requested IMF technical support to review the oversight framework of the nonbank (non-deposit-taking) finance institutions (NBFIs), called “Sociedades Financieras de Objeto Limitado” (Sofoles).

---

<sup>1</sup> While the traditional literature has tended to promote the view that less public banking is always better, there has been some resurgence of arguments in favor of public banks. On recent discussions of underlying issues, see Hart, Shleifer and Vishny (1997), De la Torre (2002), and IDB (2005).

Although private, a substantial fraction of the Sofoles benefit from the public funding and guarantees provided by Sociedad Hipotecaria Federal (SHF), a second-tier public bank. The main question the supervisors wished to address was whether they should modify the supervision framework applicable to the Sofoles.

In Colombia, technical assistance was requested by the Ministry of Finance to review strategic options for two large first-tier public banks, Banco Agrario and Granbanco (formerly Bancafe), and to propose steps to enhance their governance. The two main questions the authorities wished to address were: i) whether these banks should be privatized; and ii) if not privatized, what steps could be taken to enhance their governance and official oversight so as to limit possible downside risks to the State. In this context, the IMF team was naturally drawn into reviewing the role, structure, and supervision of public funding and guarantees to financial intermediaries. These were channeled through two second-tier development banks, Fondo para el Financiamiento del Sector Agropecuario (FINAGRO) and Bancoldex, and two guarantee funds, Fondo Agropecuario de Garantías (FAG) and Fondo Nacional de Garantías (FNG).

This chapter is structured as follows: the first section briefly describes the institutional background in both countries. The second section (titled “Should public funding to the financial sector be supervised?”) addresses the need for (and role of) official oversight as regards the use of public funding and guarantees in financial intermediation. The third section (“How should public funding to the financial sector be supervised?”) discusses whether official oversight, when warranted, needs to be adjusted to suit the needs of publicly funded financial institutions. The last section concludes.

## **Background**

### **Mexico**

The Sofoles are non-deposit taking financial institutions with a sector-specific lending authorization. In 2004, Sofoles were active in mortgage and construction (65 percent of total assets), the automotive sector (26 percent of total assets), and a variety of other sectors, including consumer lending, loans to SMEs, micro credits, and loans

to the agricultural and education sectors (altogether 9 percent of total assets). In some of these sectors, mainly mortgages but also agriculture and SMEs, the Sofoles were largely funded through public development banks. In others (such as the automotive sector), their financing was fully private. It is thus convenient to differentiate between the publicly-funded Sofoles (PFS) and the non-publicly funded Sofoles (NPFS).

Sofoles grew rapidly after the 1995 banking crisis. They quickly filled up the vacuum left by banks, which, faced with a large amount of non-performing loans, low capitalization, and sweeping changes in ownership, sharply limited their lending.<sup>2</sup> In addition to a strong capacity to adapt and well-focused lending technologies and expertise, Sofoles' rapid growth also reflected public development policies. In particular, mortgage Sofoles benefited from the rapid expansion of public funding to the housing sector, mostly channeled through the SHF (Box 18.1).<sup>3</sup>

While the Sofoles covered market segments that had been mostly neglected by other credit institutions, competition was heating up, particularly with banks. Mortgage Sofoles were focused on borrowers in the middle to low income range (with yearly incomes between \$2,000 and \$35,000). They competed with public housing institutions in the lower income range (below \$6,000) and with banks in the higher income range (above \$15,000). At the same time as mortgage Sofoles (particularly the ones with private funding) expanded their

<sup>2</sup> Sofoles' share of assets in the financial system grew from 0.1 percent in 1994 to 4 percent in 2004, while Sofoles' share of total credit to the private sector grew from 0.01 percent in 1994 to 21.6 percent in 2003.

<sup>3</sup> Indeed, the very rapid growth and concentration of NBFIs in the housing industry are somewhat peculiar to Mexico. While finance companies are an integral part of the financial landscape in most countries around the world, their comparative advantages have generally been their focus on narrow market niches, low overheads, and close relationship with well-known producers or retailers. Compared to other countries, the Mexican finance companies sector is still small as a share of GDP, but fares well in terms of its participation in total private credit. However, the predominance in Mexico of housing market Sofoles is rather atypical, reflecting the boost they have received through the public funding programs.

upscale activities, banks were starting to expand credit to their lower income clientele. Similarly, banks with large excess liquidity and cheaper funding were starting to make important inroads in the Sofoles automotive market. Consumer lending Sofoles, which initially had faced only limited competition from banks (they concentrated on an income segment between \$2,000 and \$10,000 per year, which banks had traditionally found too risky and costly to service), also faced increased competition following the entry into the banking business of department stores with very active consumer lending.

While the NPFS had well diversified sources of funding (that included debt issuance, bank loans, and loans from parent institutions), mortgage PFS were just starting to access the market. SHF's prudential rules (that limited its single borrower exposure to 100 percent of its capital) were encouraging the largest PFS to do so, mostly through the sale to institutional investors of heavily enhanced, mortgage backed, securities.

There appeared to exist some lack of clarity as to the extent and modalities of Sofoles' official oversight, as well as some potential overlap. The banking law established that the Secretaría de Hacienda y Crédito Público (SHCP) was in charge of authorizing and regulating Sofoles. At the same time, the CNBV's charter included the Sofoles among the list of financial institutions under its supervisory and regulatory oversight.

However, only the SHCP appeared to be able to issue legally enforceable regulations with respect to Sofoles. Their operations also had to conform to the directives of the Banco de Mexico, which could request information and help the competent authorities in determining penalties and supervising the institutions.

As a matter of fact, the Sofoles were more lightly regulated and supervised than banks.<sup>4</sup> The discrepancy between Sofoles' de facto light oversight and the perception by the public that they were as fully

---

<sup>4</sup> Unlike banks, Sofoles were not subjected by the CNBV to capital or provisioning requirements. Nor were Sofoles subjected to regulations on corporate governance.

regulated and supervised as banks, led to the CNBV, as supervisor, being concerned that it could be held accountable for failures it was ill-equipped to prevent.

### Box 18.1. Sociedad Hipotecaria Federal

- SHF was created in 1999 to help develop the primary and secondary mortgage markets, particularly for low-income housing. It provides loans and guarantees to qualifying financial intermediaries that originate mortgages and associated credits for housing construction projects. It finances its operations through the issuance of long-term, inflation-indexed, securities (15 to 25 years) that are mostly purchased by pension funds. All SHF paper issued before 2013 is government-guaranteed but sells at a small spread (about 50 basis points) above comparable government paper, reflecting its lower liquidity. SHF's capital position at end 2004 was equivalent to 14.2 percent of its risk-weighted assets, significantly above the 10 percent regulatory minimum.
- Reflecting post-1995 problems when price-indexed (using the so-called UDI investment units) mortgage holders defaulted on their obligations, partly as a result of large declines in real wages, mortgage Sofoles were indexed to the minimum wage instead of inflation. With SHF loans to Sofoles being UDI-denominated, SHF offered to Sofoles a swap facility (between UDIs and minimum wages) through which Sofoles could close their position. SHF fully absorbed the market risk and prepayment on mortgages but included in its lending spread to Sofoles a premium (calculated with an option model) that was expected to cover the associated risk. It charged the same rate on its loans to all Sofoles but planned to introduce risk-adjusted premiums.
- Most of the financial intermediaries receiving funding (or guarantees) from SHF were Sofoles (over 80 percent of SHF assets were loans to Sofoles). Banks had access to cheaper sources of finance through customer deposits but made use of SHF guarantees in their short-term loans to Sofoles (that were mostly used to finance construction credits). In turn, funding from SHF and Fovi, the public funding scheme for low income housing (managed by Banco de Mexico) that preceded SHF, accounted for about 80 percent of mortgage Sofoles' liabilities. However, SHF is legally obliged to stop lending to Sofoles in 2009. In addition, its guarantees on loans from banks are being phased out. Some Sofoles had reached the limit of their access to SHF funding, inducing them to use market funds or divest some of their assets, including by becoming mortgage originators. In line with such trends, SHF was planning to become a mortgage insurer and prepare the ground for the entry into the market of other (foreign) mortgage insurers.



The vagueness about the extent and appropriateness of official oversight was amplified, in the case of the mortgage Sofoles, by the fact they were being subjected to the increasingly tight contractual oversight of the SHF. Mortgage Sofoles financed by SHF had to maintain a capitalization ratio above 8 percent, establish loan loss provisions, and comply with a variety of other prudential rules regarding the composition and collateralization of their assets, as well as fit and proper, rating, auditing, and reporting requirements. SHF had also started to conduct on-site inspections and was in the process of strengthening its supervision department.

There were some questions, however, as to the efficacy and timeliness of such contractual clauses in the event of serious difficulties. Failure to comply with basic prudential requirements triggered the loss of access to new loans (or guarantees) and allowed the SHF to transfer the administration of SHF-funded loans to another Sofol. However, there was no smooth legal arrangement allowing for the prompt closure of a delinquent Sofol.

International experience failed to provide a clear sense of direction. Supervisory arrangements varied widely across the world, ranging from little or no oversight in the Anglo-Saxon countries, to significant yet lighter-than-banks oversight in continental Europe, and very comprehensive oversight in some countries such as Korea. The extent of oversight of Sofoles in Mexico thus fell, perhaps unsurprisingly, somewhere in between the Anglo-Saxon world and continental Europe.<sup>5</sup>

## **Colombia**

### *Agricultural lending*

Banco Agrario was created in 2000, under a good bank, bad bank scheme according to which the former Caja Agraria retained its bad assets, as well as its labor liabilities. Following this restructuring, Banco Agrario's performance improved consistently, ranking among

---

<sup>5</sup> To reflect the variety of international experiences, the IMF team included consultants from New Zealand, a mostly hands-off country as regards the supervision of NBFIs, and Italy, a mostly hands-on country.

the top performers in the Colombian banking system (it ranked fifth in terms of size). Due to its extensive branch network in rural areas, it played a key strategic role, with an important social and political component.<sup>6</sup>

However, Banco Agrario's profitability and solvency was highly dependent on public funding and guarantees (as well as from services to the government). It funded 86 percent of its loans through the FINAGRO, a second-tier bank specializing in agricultural finance that was funded through mandatory reserve requirements on bank deposits (Box 18.2).<sup>7</sup> This had enabled Banco Agrario to build up its balance sheet and channel most of its deposits into riskless government securities. At the same time, most of Banco Agrario's agricultural lending was guaranteed by FAG, a fund managed by FINAGRO outside its balance sheet (Box 18.3) that guaranteed up to 100 percent of loans to the smaller farmers. Banco Agrario was the largest user of FAG guarantees and its primary risk originator (87 percent of FAG's net exposure was concentrated in the loan portfolio of Banco Agrario). Banco Agrario's dependence on FAG guarantees, both in the aggregate (83 percent of total lending was FAG-insured), and in terms of individual loans, was thus very high. This limited its incentives for loan discrimination, effectively transferring the risk from Banco Agrario to a public balance sheet.

At the same time, however, reflecting its off-balance sheet nature, FAG did not have an effective framework to assess and manage risk. It lacked a model for measuring risk and assessing expected losses. Its premiums for guarantees were unrelated to risk, and seemingly well below expected losses. Nor was it subjected to strong prudential regulation or supervision. It did not create reserves for expected losses and did not have a risk-adjusted capital requirement for facing unexpected losses. Its supervision by the Colombian Superintendency of Banks (SBC) was rudimentary. The transfer of risk from Banco

<sup>6</sup> In some areas and municipalities, Banco Agrario was the only visible presence of the national government.

<sup>7</sup> FINAGRO accounted for 94 percent of all second-tier funding to Banco Agrario. Conversely, Banco Agrario was the primary user of FINAGRO's funds, accounting for 50 percent of its loan portfolio.

**Box 18.2. FINAGRO**

- FINAGRO was created in 1990 to provide agricultural funding to banks and other institutions authorized by the Superintendencia Bancaria. While the majority of FINAGRO's equity was held by the central government and several public financial entities, including Banco Agrario, it was also partly owned by a private commercial bank, which subjected it to the same legal regime as any private entity.
- FINAGRO funded itself through the issue of bonds (Títulos de Desarrollo Agropecuario) that were a mandatory investment for banks (amounting to 5.5 percent of their deposits). While the Títulos de Desarrollo Agropecuario accrued interest at well below market rate, they were negotiable and, as sovereign risk, had a zero risk weight for the capital adequacy ratio.
- While FINAGRO's loan portfolio had grown very rapidly, its ability to continue feeding this growth through compulsory securities was reaching its limit by the end of 2004. FINAGRO's lending rates were capped and subsidized, particularly on short- and medium-term loans to small farmers. Eligibility requirements for FINAGRO funding included requirements on the purpose of the loans, the type of investment, and its maturity.
- In addition to funding and managing FAG, FINAGRO also administered several federal programs, including the Incentivo a la Capitalización Rural (ICR), an up-front subsidy granted to farmers making long-term investments. Both ICR and FAG equity were funded by FINAGRO's gross profits.

Agrario to FAG, a fund with weak risk management and supervision, had thereby given rise to an important, not well identified, yet rapidly growing, fiscal exposure.

*Commercial lending*

Granbanco was a newly-created bank that received Bancafé's deposits and good assets, and benefited from a capital injection by the State-owned Fondo de Garantías de Instituciones Financieras (FOGAFIN). While publicly owned, the new bank (which accounted for about 6.5 percent of Colombia's bank deposits) operated under the

legal framework of private corporations. It benefited from a clean balance sheet, flexible labor arrangements, a broad branch network, a well diversified deposit base, and good efficiency indicators. The bank's growth since its creation had been limited, however, reflecting management's immediate focus on restructuring and reorganization, as well as the uncertainty regarding its business mission and future ownership.

As public banks, both Banco Agrario and Granbanco were subjected to various layers of regulation and oversight. While the SBC was responsible for overseeing their banking operations, the Contraloría General de la República (Auditor General's Office), the Contaduría General (General Accounting Office), and the Departamento Administrativo de la Función Pública (Civil Service Administration Department) oversaw their operations as public companies.

In practice, the governance of Granbanco rested with its CEO, with only limited interference from its Board or other internal or external checks and balances. In view of the prevailing rules, which did not ensure that members of the Board had sufficient banking expertise and time to devote to Board meetings, the Board played a somewhat formal role and instead relied heavily on the CEO. Internal auditors focused mainly on operational controls and financial statements, and the Audit Committee's main task was to review the work of the internal and external auditors. At the same time, as in the case of pri-

#### Box 18.3. Fondo Agrepecuario de Garantías

- FAG was a fund created in 1990, to be managed by FINAGRO as an off-balance sheet account. Its "equity" position was increased yearly through the transfer of 15 percent of FINAGRO's profits.
- FAG could issue credit guarantees up to a multiple of its capital (with similar eligibility requirements as FINAGRO loans). Historically, the leverage limit set by the Comisión Nacional de Crédito Agropecuario (CNCA) had been three times its capital. Prior to 2003, FAG's guarantees were not extensively used and its leverage was below one. However, by the end of August 2005, exposure had almost reached its allowed maximum, reflecting Banco Agrario's strong lending growth. To continue accommodating Banco Agrario's lending needs, the CNCA raised FAG's leverage limit to 11 times its capital.

vate banks, public banks lagged best international practices as regards transparency norms. Thus, the concentration of power in the hands of the CEO raised critical issues of business continuity and vulnerability to political interference. Partly reflecting potential conflicts of authority, SBC's supervision of public banks did not, for the most part, address the risks arising from such governance weaknesses.

## **Should Public Funding to the Financial Sector Be Supervised?**

### **Some First Principles**

The failure of financial markets to produce efficient competitive outcomes, justifying regulatory action by the authorities, is typically attributed to one or more of the following market failures: i) anticompetitive behavior; ii) market misconduct; iii) information asymmetry; and iv) systemic instability.<sup>8</sup> While the first two typically give rise to market inefficiencies that need to be addressed through *market regulation*, the last two cause risks not to be properly internalized, thus justifying the need for *prudential regulation*.

To these sources of market failure, one may add the existence of guarantees, which are themselves meant to address problems of market failure. Deposit guarantees address problems of information asymmetry and systemic instability. Public guarantees on the bonds issued by development banks aim at facilitating the financing of projects that would not be funded otherwise by the market, due to excessive, non-diversifiable, risk.<sup>9</sup> Being better able to spread the risk burden across individuals and generations, governments are less risk-averse than individual market participants and may therefore require a lower risk premium.<sup>10</sup> However, by preventing the internalization of

---

<sup>8</sup> See Carmichael and Pomerleano (2002).

<sup>9</sup> Projects that are very large or exposed to substantial systemic, political, or policy risk (for example, projects whose viability is strongly dependent on the continuity of public policy) are likely to qualify, under this definition, for some type of public support.

<sup>10</sup> While governments also face revenue constraints and can (and do at times) become "insolvent," the size of their operations and their capacity to transfer obligations intertemporally by issuing debt gives them a flexibility that private  
(continued)

risk, guarantees by themselves constitute an additional, policy-induced, source of market failure.

The same dilemma applies to official oversight. Market failures should justify it only as long as the benefits of official oversight outweigh the costs of introducing yet another potential distortion. While a regulator can interpose itself to protect the small, unsophisticated depositor, there is a risk that its intervention may be perceived as an implicit or explicit seal of approval and that risks that should be borne by financial institutions or investors end up being covered by the deposit guarantee, thereby exacerbating moral hazard instead of lessening it. Similarly, official oversight of second-tier public banks can dilute incentives for market oversight by the more sophisticated investors, thereby failing to promote sound risk management practices by the public banks. Moreover, as official oversight is an inherently resource-intensive, costly activity, there is an inherent trade-off between moral hazard and supervisory costs. For these reasons, prudential regulation coverage should be limited to those institutions that truly require it. In many (although not all) countries prudential oversight is thus limited to deposit-taking credit institutions.

At the same time, a well-regulated financial system should have a level playing field. By fully internalizing risks, official oversight aims at ensuring regulatory neutrality, i.e., that all financial intermediaries lend under equivalent conditions. Unregulated (or poorly regulated) intermediaries should not be given a competitive advantage over fully regulated intermediaries. When the risk is being assumed (at least in part) by the public sector, this should be done through transparent and adequately priced guarantees or explicit subsidies that should be available to all intermediaries under uniform conditions.

## **Mexico**

Based on these first principles, the IMF team recommended that Non Publicly Funded Sofoles (NPFS) be subjected to enhanced market oversight, but freed from official prudential oversight. Fully

---

market participants typically do not have. In turn, this flexibility translates into a greater capacity to absorb risk, hence less “risk aversion.”

extending the reach of the supervisor to all Sofoles would have been expensive and could have promoted moral hazard. In particular, it could have helped propagate a vicious circle in which official oversight could have hindered the development of private oversight (such as through rating agencies), thereby justifying the need for continued official oversight. At the same time, systemic instability was not perceived to be a major source of concern.

Taking the NPFS out of the financial system altogether would have resolved the somewhat artificial distinction between financial and non-financial credit providers (many non-financial companies undertook similar activities as Sofoles without being registered as financial institutions). At the same time, it would have fully removed the seal of approval implicit in being a financial institution and clearly freed the CNBV from remaining *de facto* accountable for institutions it would no longer have overseen. However, taking the NPFS out of the financial system would have raised some legal and tax issues requiring careful review.

In contrast to the recommendation for the NPFS, the team recommended to strengthen the prudential oversight of the PFS but to conduct the oversight through the public banks rather than directly. The reasoning behind the need for strengthening the oversight was as follows (the reasons underlying the preferences for delegation are explored in the next section):

- In view of the government guarantees on the funding of development banks, there was no assurance of market discipline, i.e., that the risks assumed by the PFS would be adequately internalized by market participants. Nor would these risks be necessarily well internalized by the development banks that funded them, as such institutions typically faced potential conflicts of interest between their government-mandated social and economic objectives (in the case of the mortgage Sofoles, facilitating access to housing and promoting economic growth) and their mandate as financial institutions (protecting their capital).<sup>11</sup>

---

<sup>11</sup> Even when the penalties of losing the bank's capital are perceived to be high, there is still scope for moral hazard as one administration may follow aggressive lending policies under the expectation that problems, if they occur, will be faced by the following administration.

- The lack of market discipline and potential conflict of interests inherent to development banks clearly exposed the government to risks of fiscal losses. In itself, this was a fiscal issue that should have been the concern of the fiscal, rather than supervisory, authorities.
- However, the fact that the same operations (i.e., in the case of SHF, the same type of mortgages) were being (or could have been) financed through two alternative channels, one fully regulated (private commercial banks) and the other one not (Sofoles) could have introduced potential competitive distortions in the fabric of financial intermediation. The fact that SHF lent to banks and Sofoles under the same conditions would only eliminate potential competitive distortions if accompanied by (and translated into) a fully consistent treatment of prudential requirements. In the absence of oversight, however, there was no guarantee that this would necessarily be the case. Thus, unless adequately regulated, Sofoles could have unfairly competed with banks, inducing the latter to either take excessive risk in order to remain competitive or to exclude themselves altogether from the market. In either case, the final outcome could have been an inefficient or brittle financial development.
- The fact that contagion risk may also not have been adequately internalized further strengthened the case for official oversight. While the contagion risk deriving from the failure of one Publicly Funded Sofoles (PFS) for other PFS in the same sector should clearly have affected the solvency of the public bank that funded that sector, it might not necessarily have affected its ex-ante behavior due to the conflicts of interest underlined above. Indeed, such contagion risks were likely to be higher in the case of financial sectors that had grown and prospered mainly as a result of public (rather than private) financing. In such cases, by obviating the need for close market monitoring, government guarantees exacerbated the scope for asymmetric information and moral hazard. Hence, without a clear understanding as to whether a problem was idiosyncratic or systemic, the failure of one PFS could have triggered a sharp reassessment of risks in the whole sector by under-informed market participants. Nor were there strong assurances that a massive failure of the Sofoles would not spread out to the rest of the financial system.

## Colombia

In the Colombian case, the potential for competitive distortions resulting from public financing and guarantees was more limited, albeit not absent. The fact that all commercial banks faced the same conditions for accessing public funds and guarantees clearly contributed to limiting such distortions. The limited participation (and



interest) of private commercial banks in financing small farmers further restricted the scope for competitive distortions. Even then, however, Banco Agrario did benefit from some implicit subsidies, such as on the opening of new branches in remote areas and the holding of public or judicial deposits, that were not shared with its competitors.

Instead, the main justification for strengthening the official oversight of second-tier public banks was in the way of providing a specialized service to Government. Due to its better knowledge of the sector and specialized supervisory techniques, the SBC was much better equipped to assess the risk assumed by second-tier public banks and the quality of their risk management than the treasury or the public auditors.<sup>12</sup>

However, because such oversight is not typically part of a prudential supervisor's primary mandate, a good case could in fact be made for providing it in the form of a "fee-for-service" arrangement. Moreover, unless the supervisor has sufficient powers and authority, an arrangement whereby the supervisor functions as a specialized consultant to the government could well be preferable to one in which it acquires responsibility for ensuring that the second-tier public banks it supervises remain solvent at all times.

### **How Should Public Funding to the Financial Sector Be Supervised?**

#### **Mexico**

In assessing the modalities of supervision, the main question was whether CNBV oversight of PFS should be direct or delegated to the development banks. While development banks were of course already

---

<sup>12</sup> While this service could in principle be fully outsourced to a private risk manager (such as an auditing firm), in practice the quality of such services would be questionable. The fact that government treasuries may not always have in house the specialized expertise to assess the quality and depth of an auditor's assessment is a further reason for caution. Instead, official oversight can help ensure uniformity of risk management and regulatory practices across the whole financial system.

subjected to CNBV oversight, the main novelty in the second approach with regard to existing practices was the need to focus the oversight of development banks more squarely in terms of their own oversight of the PFS. The CNBV (the principal) was to set the prudential requirements on the development bank (the agent) based on the latter's conditions and requirements on its lending to the PFS. The less tight the public bank's requirements on the PFS (i.e., the more risk it took upon itself and the less it charged for assuming that risk), the tighter the CNBV's requirement on the development bank. While the allocation of risk between the development bank and the PFS was a legitimate strategic decision of the bank, what mattered to avoid competitive distortions was that the risk be adequately priced and reflected somewhere on a balance sheet (i.e., that the CNBV's requirements for the development bank and the latter's requirements for the Sofol be fully consolidated). Moreover, any risk transfer from the PFS to the development banks funding them should have been provided through explicit subsidies or actuarially fair guarantees available to all financial intermediaries and consistent with the prudential norms on which the CNBV's regulatory framework for banks was based.<sup>13</sup>

The IMF team expressed a preference for delegating to development banks the task of contractually overseeing the PFS. This would allow all Sofoles, NPFS, and PFS to be treated uniformly as regards official oversight and their participation in (or exclusion from) the financial system. In addition, by channeling the oversight of the PFS through the development banks, exclusively, it would make the latter more accountable and commercially disciplined. By avoiding duplication, it would also limit the overall cost of oversight. The public bank's enhanced expertise in the sector in which it operated should help it design a sector-specific, better-adapted regulation. Instead, should the CNBV directly regulate the Sofoles, there was a risk that it might "over-regulate" them (by fully assimilating their oversight to that of banks). Introducing regulations at odds with

---

<sup>13</sup> For example, should SHF have failed to require from the mortgage PFS the same capital or provisioning requirements on the same type of loan as those required by the CNBV from banks, this would effectively have transferred risk from the PFS to SHF.

development banks' policies could also have interfered with their commercial relationships and introduced unnecessary costs and inefficiencies. The highly specialized and sophisticated nature of these financial transactions (this was certainly the case for SHF and the mortgage PFS) increased such risks. While this problem would not have disappeared in the case of delegated oversight, it was nonetheless less intense.

Delegating oversight could have undermined enforcement, however. The contractual nature of development banks' oversight of PFS could have similarly limited the scope for early corrections and timely resolutions. But direct oversight was not problem-free either. Overall, the IMF team expressed a preference for full delegation and recommended a number of measures to enhance its effectiveness.<sup>14</sup>

The key guiding principle in revising the CNBV's oversight of development banks was to shape it in a way that would have induced development banks to conduct an adequate contractual oversight of the Sofoles to which they lent. In particular, the CNBV needed to ensure that its prudential requirements for development banks fully reflected the quality, monitorability, and enforceability of the contractual relationship between development banks and the PFS. At the same time, to avoid duplication, the CNBV's requirements for development banks should have reflected the requirements imposed by development banks on Sofoles.

In choosing a style of oversight, the CNBV needed to strike a proper balance between a more intrusive, micro-managed approach and a broader, more risk-focused approach. While some bias toward the former could have been appropriate during initial stages, a gradual

---

<sup>14</sup> Another alternative, following the practice in India, was to "officially" delegate PFS oversight to the development banks. However, while this could have given the development banks' oversight more teeth, the quality of oversight by technically unprepared development banks could have been deficient. In addition, this could have promoted bureaucratic growth in development banks and created vested interests that could have hindered the gradual phasing out of their activities. Indeed, the viability of the Indian model was facilitated by the fact that the Indian state mortgage bank was a direct subsidiary of the Reserve Bank of India.

shift toward the latter seemed natural and advisable during later stages. At the same time, adjustments to the current contractual framework used by development banks were also recommended to enhance its effectiveness and enforceability. Finally, the team recommended that the CNBV upgrade its supervisory and risk assessment capabilities to match the growing sophistication of the financial instruments issued by the development banks in their quest toward more “complete” financial markets in Mexico.

## Colombia

In the Colombian case, the key priorities in improving the oversight of the public sector’s funding to the agricultural sector and limiting fiscal contingencies were: (i) to identify more sharply the extent of the fiscal exposure; (ii) to establish clearer boundaries between financial risk and fiscal subsidies; (iii) to limit the extent of risk shifting from first-tier to second-tier banks, thereby strengthening incentives for sound risk management; (iv) to foster the role of market oversight; and (v) to promote good governance in public banks.

Given the above priorities, the IMF team recommended that:

- FAG be fully incorporated into FINAGRO’s accounts. This would go a long way toward clarifying the extent of the State’s exposure:
  - By ensuring the consistency of FAG’s capital and provisions with the risk it was assuming, under the same prudential norms used for assessing and absorbing risk in the rest of the banking industry, it would have effectively capped the Government’s fiscal exposure and ensured that any additional exposure was fully “fiscalized” through transparent subsidies.
  - By consolidating the assessment and management of risk between FINAGRO and FAG, it would ensure their full consistency (the ultimate risks incurred on loans or guarantees were of course the same) and better coordination in the range of products offered.
  - By improving the quality of FAG’s risk management and the intensity of SBC’s supervision as the financial agent of the treasury, it would

ensure that regulations were adequately implemented and risk assessed.<sup>15</sup>

- Credit guarantees be capped and fees on the guarantees be adjusted to reflect their true risk, so as to limit the extent of risk-shifting from Banco Agrario to FAG.<sup>16</sup>
- Interest rate ceilings on loans funded by FINAGRO or guaranteed by FAG be removed. If the State wished to provide an explicit subsidy to encourage lending to the smaller farmers, this should be done through an explicit budgetary account. In addition to helping overcome credit-rationing for small farmers and encouraging lending in the agricultural sector, including by private banks, this would help internalize risk.
- Measures be taken with regard to governance to strengthen the role of the Board of Directors and help limit the operational risk deriving from the excessive centralization of powers in the hands of the CEO. Key recommendations included:
  - Establishing minimum terms for the members of the Board.
  - Allowing directors to appoint the chairman of the Board, the bank's CEO, and the internal auditor.
  - Including independent directors and ensuring that their remuneration is in line with established practices in the private sector.
  - Establishing modalities such that the candidates for the Board of Directors and the bank's CEO are appointed from a shortlist prepared by an independent selection committee.
  - Strengthening internal controls and external oversight. In particular, the work of the Board should be supported by specialized committees, such as the risk and audit committees, in which directors participated and which reported to the Board.
- Measures be taken to promote market discipline (Basel's third pillar) as a complement to the above measures. Short of full privatization, issuing

---

<sup>15</sup> As in the Mexican case, it was recommended that the SBC consolidate more fully the oversight of second-tier banks with that of first-tier commercial banks.

<sup>16</sup> As in the case of SHF in Mexico, a case could have been made for adopting a principal-agent framework in which FINAGRO-FAG were let free to determine the extent of their risk exposure with Banco Agrario, provided SBC's capital and provisioning requirements on FINAGRO-FAG were commensurate with this risk. In the Colombian case, however, technical constraints argued at the time against the viability of this approach.

shares in the local stock market could have strengthened the Board of Directors by ensuring the representation of value maximizing minority shareholders. It would also have reinforced the need for transparency and outside ratings, and provided a continuous and visible indicator of the quality of the banks' management.

- The role of market oversight be further fostered by gradually substituting the mandatory investment by banks in FINAGRO bonds with market issues bearing market interest rates.<sup>17</sup> These bonds could have initially benefited from a government guarantee. However, once sufficiently established in the market place and the management of risk in agricultural lending (particularly that associated with FAG) would have strengthened sufficiently, the guarantee could have been removed so as to promote market oversight.<sup>18</sup>
- Measures be taken to help develop the markets for insurance and hedging of agricultural products. In the shorter term, efforts should focus on contracts to cover weather-related casualties and price volatility.

Of course, measures to improve governance and market oversight go much beyond the realm of official oversight. However, the supervisor can play a key supporting role by emphasizing the operational risks associated with weak governance and promoting changes when and as needed. In the Colombian case, the SBC was advised to issue minimum rules and regulations that banks should meet as regards the quality and resilience of their management. In addition, it was encouraged to play a more active role in promoting the Basel Committee guidelines on corporate governance.

## Conclusions

As long as small uninformed investors are not at risk, supervisors could take the view that what the government does in the financial sector with taxpayers' money is the government's business only. Should it incur large losses, this is a problem for Congress and the

<sup>17</sup> In the shorter term, it was recommended that capital adequacy and provisioning requirements for FINAGRO bonds and loans partially guaranteed by FAG be reduced so as to avoid a "double accounting" of risk (at the level of the second and first tier banks).

<sup>18</sup> The experience of SHF, which successfully phased out mandatory financing in the Mexican housing sector, was worth examining in this respect.

public to be worried about, but not something that should concern the supervisor. Indeed, in view of potential conflicts of interest and authority, particularly when the supervisory authority has limited independence, making it accountable for overseeing the activities of second-tier public banks can lead to situations in which the supervisor ends up getting the blame for failures and losses it could do little to prevent. A good argument can thus be made in principle that by staying clear altogether (i.e., by not prudentially supervising second-tier public banks), the supervisor helps clarify the lines of responsibility, thereby promoting better governance and accountability.

This chapter tested this argument using IMF technical assistance to Mexico and Colombia as illustrations. The rationale for not supervising the use of public funds in financial sector activities was found to break down when: (i) the risk associated with credits (or guarantees) provided by public institutions was not adequately internalized, yet such funding competed with that channeled through alternative intermediaries where risk was correctly internalized; (ii) public funding gave rise to important contagion or systemic risks that were not adequately internalized; and (iii) official oversight could be provided as a specialized service to the government, preferably without strings attached and on a fee-for-service basis. The first item (internalizing risk in a way that is consistent with the regulatory framework that applies to commercial banks) and, to some extent, the second item (limiting adverse systemic externalities) were found to be the key justifications for strengthening the official oversight of the development banks funding the PFS in Mexico. In the case of the Colombian second-tier public banks, the third item (using specialized expertise) was found to be the most relevant.

As regards the modalities of official oversight of public banks, the chapter identified the following key issues: (i) the extent to which official oversight of first-tier finance institutions could be delegated (on a contractual basis) to the second-tier public institutions financing them; (ii) how to ensure the full consolidation of prudential requirements between first- and second-tier financial institutions; (iii) how to identify and effectively cap the public sector's exposure in financial sector activities while establishing clear boundaries between financial risk and fiscal subsidies; and (iv) how to promote, through

the official oversight of development banks, better governance practices and more effective market oversight. Items (i) and (ii) dominated the agenda in the case of the Mexican development banks. Items (iii) and (iv) were more relevant to the Colombian case.

Looking forward, the specialized service justification for the official oversight of public lending institutions may gradually lose its relevance. As financial systems mature, the private sector should become increasingly able to provide good risk management support to the public institutions and their owners. In contrast, because of the complex interface between risk and regulation, the argument for retaining official oversight in order to ensure across the board regulatory neutrality is unlikely to vanish any time soon.

## References

- Carmichael, Jeffrey, and Michael Pomerleano, 2002, "The Development and Regulation of Nonbank Financial Institutions," The World Bank.
- De la Torre, Augusto, 2002, "Reforming Development Banks: A Framework," Power Point Presentation given at the World Bank Staff Workshop on Reforming Public Banks, December.
- Hart, Oliver, Andrei Shleifer, and Robert W. Vishny, 1997, "The Proper Scope of Government: Theory and an Application to Prisons," *Quarterly Journal of Economics*, Vol. 112 (4), pp. 1127-61.
- Inter-American Development Bank, 2005, "Should the Government Be in the Banking Business?" Chapter 11 in *Unlocking Credit: The Quest for Deep and Stable Bank Lending*, Annual Report on Economic and Social Progress in Latin America.



**Indonesia: From Monetary Program  
to Inflation Targeting****KARL HABERMEIER**

The Asian financial crisis of 1997–98 was an important stimulus to the reform of Indonesia’s monetary and financial institutions. The crisis was not caused by unsound macroeconomic management, but by a loss of confidence in the financial system; and it manifested itself in large-scale outflows of private capital and in a collapse of the banking system and corporate sector. The crisis was worsened by cross-contagion from other regional crises (Thailand and Korea). Massive liquidity injections into the banks in 1998 exacerbated inflation and the uncontrolled depreciation of the rupiah. Crisis management involved reestablishing monetary stability, comprehensive bank restructuring, and the adoption of a new central bank law in 1999. These reforms were supported by an IMF program and large-scale technical assistance.

Monetary policy under Indonesia’s programs with the IMF was primarily aimed at restoring confidence and stability. The programs, supported by a series of financial arrangements, began in November 1997 and ended in December 2003. Monetary policy was guided by quantitative performance criteria and targets for key monetary aggregates, notably net domestic assets, base money, and net international reserves. The exchange rate was allowed to float, although initially there was substantial intervention. Operational implementation by and large was through open market operations. Bank Indonesia (BI) formally targeted base money, but in practice an increasing emphasis was placed on interest rate policy as the programs wore on, reflecting the fact that developments in base money did not provide a sufficiently clear signal of the monetary policy stance.

Although the IMF programs provided a nominal anchor, the conduct of monetary policy was not fully transparent. BI signaled the

monetary policy stance via the volumes and interest rates accepted in the weekly central bank certificates (Sertifikat Bank Indonesia, SBI) auctions, the results of which were periodically accompanied by general statements on the direction in which BI wished to see interest rates evolve. Later on, the weighted average of SBI interest rates was used by banks as a reference rate. It became increasingly apparent that once the IMF programs came to an end, a different monetary policy framework would be needed to anchor inflationary expectations. Thus, BI began to systematically rethink the way it conducted monetary policy.

The outcome of these deliberations was a decision to move step by step toward formal inflation targeting in the post-program period. An inflation targeting (IT) framework has been successful in a growing number of advanced and emerging market economies. By anchoring inflation expectations to a quantified target, an IT framework typically reduces both inflation and output volatility, and thus reduces the real costs of monetary policy actions. BI also decided to streamline and simplify its monetary operations in order to provide markets with a clearer signal of the monetary policy stance. A key step in this direction was taken in July 2005, with the introduction of the “BI Rate” as the main policy interest rate.

This paper provides an account of the adoption of inflation targeting in Indonesia. This process was supported by IMF technical assistance (TA), which helped to bring international experience to bear on the efforts of the Indonesian government to adopt an updated stability-oriented monetary policy framework. The sections that follow discuss the macroeconomic context, the legal basis of monetary policy, the rationale for the IT framework, the technical preparations, and the challenges that BI has had to face in the first year following its adoption. The paper concludes with some thoughts on the prospects for the sustained success of inflation targeting in Indonesia.

### **Indonesia’s Monetary Policy Framework in Perspective**

For many years before the Asian crisis of 1997-98, macroeconomic policies in Indonesia had been firmly oriented toward stability. Inflation in the decade preceding the crisis was contained between 6

and 10 percent annually; and economic growth averaged 7 percent per year. This favorable performance was underpinned by a supportive fiscal policy, a stable rupiah exchange rate, and large capital inflows. The latter reflected a significant positive differential between domestic and foreign interest rates, which induced domestic corporate and financial institutions to borrow from abroad. In due course, capital inflows contributed to inflation and pressure on the exchange rate. Moreover, serious governance problems, especially in the financial and corporate sectors, were not addressed.<sup>1</sup>

Monetary policy before the crisis was conducted in the context of a managed float (since 1978) and an open capital account (since 1970). BI set an intervention band for the rupiah based on a basket of foreign currencies and intervened in the foreign exchange market to buy or sell rupiah to maintain the market rate within the band. The intervention band was managed to broadly offset the inflation differential vis-à-vis trading partners.<sup>2</sup> In addition, BI announced targets for monetary growth. Monetary management was complicated by large private capital inflows, which exceeded 5 percent of GDP each year in 1995–97. In 1996, money growth exceeded the announced targets because the nominal exchange rate was allowed to depreciate in order to limit real exchange rate appreciation; and inflation remained higher than it would otherwise have been. Large capital inflows also contributed to rapid domestic credit growth, despite expanded sterilization operations by BI, higher reserve

---

<sup>1</sup> These problems were noted in IMF staff reports and research papers in the years preceding the crisis. For example, in a review of the Indonesian financial system before the crisis, Montgomery (1997) notes that “There are indications that a significant number of banks are undercapitalized and have not yet complied with some important prudential rules, although compliance appears to be improving. According to BI, 15 banks did not meet the required 8 percent capital adequacy ratio in April 1996, down from 21 banks in December 1995, while 41 banks did not comply with the legal lending limit; this was an improvement from the 70 banks in December 1995. Twelve out of the 77 licensed foreign exchange banks did not meet the rules on net open foreign exchange exposure.”

<sup>2</sup> The intervention band was widened to 3 percent in January 1996, 5 percent in June 1996, and 8 percent in September 1996. At end-May 1997, the band was Rp 192 wide (Rp 2,415 to Rp 2,607) and the market rate was Rp 2,436 per \$1.

requirements, quantitative lending targets for individual banks, and reduced BI credit to public enterprises.

IMF staff analysis in the pre-crisis period concluded that monetary policy needed a clearer nominal anchor.<sup>3</sup> The managed float, under which the rupiah was generally depreciated against the U.S. dollar to offset relative price changes, could not provide such an anchor. Moreover, broad money had relatively little predictive power for future inflation, especially at shorter horizons. Against this background, the staff's recommendation was to base monetary policy decisions on factors more closely related to future inflation, notably movements in the interest rate differential relative to the United States and in the nominal effective exchange rate. The staff did not endorse an explicit inflation targeting regime at that time, principally in light of the volatility of food prices and their high weight in the consumer price index, which would have made it difficult to maintain inflation within a credibly narrow band. However, in a number of countries, this problem was addressed by a greater focus on core inflation.

The loss of macroeconomic and monetary control during the crisis was severe but of short duration. When the confidence crisis hit, the exchange rate of the rupiah plummeted from about 3,650 per U.S. dollar at end-November 1997 to 10,380 per U.S. dollar by end-January 1998 (in mid-1997, the rate had still stood at about 2,500 per U.S. dollar).<sup>4</sup> This massive exchange rate depreciation, along with large private capital outflows, and an adverse reaction to the closure of unsound banks in the absence of deposit protection, triggered a crisis in the banking system, all the more so as corporate borrowers were unable to meet their foreign exchange obligations. In order to prevent a complete banking collapse, BI provided massive liquidity injections beginning in early 1998; and the 12-month rate of increase in reserve money peaked at 135 percent in October. Real interest rates turned sharply negative, and inflation accelerated quickly. Year on average

---

<sup>3</sup> International Monetary Fund (1997).

<sup>4</sup> Foreign exchange intervention resulted in a loss of about one-quarter of BI's foreign exchange reserves (some US\$ 5 billion) between end-September 1997 and end-February 1998, but was essentially ineffective in halting the collapse of the rupiah.

consumer prices rose by some 60 percent in 1998, while real GDP contracted by 13 percent.

The initial monetary policy response to the crisis was thus inconsistent with the IMF program, which envisaged an increase in base money of about 10 percent; and the program was seriously off track in the first quarter of 1998. It was subsequently reformulated in April 1998 to provide for firm control of net domestic assets of Bank Indonesia.<sup>5</sup> The formal monetary performance criteria under the program were supplemented by informal understandings on interest rate policy. By late 1998, the program had begun to bite: the growth of monetary aggregates and inflation subsided, and real interest rates moved back into positive territory.

Monetary stability was largely restored by the second half of 1999. An aggressive program of systemic bank restructuring, combined with a revamped supervisory system, also contributed to restoring confidence.<sup>6</sup> Even though the crisis had passed, investor confidence remained precarious, with large net private capital outflows continuing for several years (averaging 3.5 percent of GDP annually in 1999–2003). Moreover, while Indonesia experienced a sustained recovery in real GDP during the post-crisis period, growth was slower than before the crisis (about 5 percent on average), while inflation was generally higher and more volatile.

Against this background, and given the still low level of foreign exchange reserves, the Indonesian government decided to continue with an IMF program until the end of 2003. As in the earlier phases of the program, monetary policy was generally guided by formal quantitative performance criteria, notably on BI's net domestic assets and net international reserves, with an indicative target for base money. These criteria and targets were all met, either in full or very nearly.

In addition, from 2000 on, BI announced a target range for inflation

---

<sup>5</sup> Lane, et al. (1999).

<sup>6</sup> Enoch, et al. (2001).

each year as mandated by the new central bank act of 1999. Although these announcements did not constitute inflation targeting as it is normally understood by monetary economists, they fostered a learning process allowing BI to move toward more formal inflation targeting. Moreover, it proved difficult to credibly communicate to the public the relationship between these two apparently separate “nominal anchors” and the implementation of monetary policy through interest rates on central bank facilities. The public’s interpretation of interest rate policy may also have been somewhat obscured by frequent changes in central bank facilities and their operation. However, some changes in facilities were essential to bring about the gradual improvement of the operational framework.

### **Legal Underpinnings**

The legal foundation for inflation targeting was laid in 1999, with the adoption of a revised central bank law. This law provided a single objective for BI, namely to achieve and maintain the stable value of the rupiah. This objective has been interpreted to mean stability against goods and services (as measured by the inflation rate) and stability against foreign currencies (as measured by exchange rates).<sup>7</sup> BI was defined as an independent state institution, free from interference from the government or other parties; and given the sole responsibility to prescribe and implement monetary policy.<sup>8</sup> BI is not permitted to give credit to the government; and it may purchase government securities only on the secondary market. The law also provided BI with a standard range of instruments (open market operations in domestic currency and foreign exchange, discount facility, minimum reserve requirements, and credit controls); and gave it responsibility for managing foreign exchange reserves.

---

<sup>7</sup> This two-fold definition of stability, along with a provision that requires BI to implement exchange rate policy in accordance with the prescribed exchange rate system, introduces a tension that is also found in a number of other central bank statutes (for example, that of the European Central Bank), as exchange rate stability may not always be consistent with price stability.

<sup>8</sup> Other BI functions under the 1999 law are to regulate the payment system and ensure its smooth functioning; and to regulate and supervise banks (for a specified period until the creation of a separate supervisory agency).

The central bank law was amended in 2004. These amendments increased BI's accountability but maintained its mandate and preserved its ability to independently implement an inflation targeting framework. Under the amended law, BI is now charged not solely with maintaining the stable value of the rupiah, but also to "conduct monetary policy on a sustained, consistent, and transparent basis, taking into account the general economic policies of the government."

Furthermore, the amendment clarifies that the government sets the inflation target, in coordination with BI (Article 10). Both of these new provisions are similar to those in other central bank laws. The amended law gives Parliament more influence over the selection of BI's Board of Governors; and Parliament approves BI's budget. The law also establishes an external board to supervise BI's internal procedures. It is not yet clear how well this board will perform.

### **Adoption of Inflation Targeting**

Although base money targeting helped to restore confidence during the crisis, it has several important shortcomings as a framework for monetary policy. During a crisis, clear quantitative limits on the money supply and its components can have a powerful effect on expectations. However, experience in Indonesia and elsewhere has shown that base money targeting is much less suitable for more normal periods, owing to the lack of a sufficiently stable relationship between base money, the price level, and output, especially in the short run.<sup>9</sup> As a result, targeting base money can lead to considerable volatility in inflation in both the short run and the medium-term. If, in addition to the base money target, the central bank announces a target for inflation, this may create confusion as to which of the two targets (base money or inflation) will be given precedence, and thus undermine the credibility of monetary policy.

By 2003, opinion in official circles began to favor a move toward formal inflation targeting. However, given that the technical preparations for inflation targeting were not yet complete, BI decided

---

<sup>9</sup> Much the same holds true of broader monetary aggregates, which in addition are more difficult for the central bank to control.

that monetary policy should be guided by a target path for base money at least through the end of 2004, to avoid unsettling markets through an abrupt shift in the monetary regime at the end of the IMF arrangement.<sup>10</sup> These intentions were communicated to the public, including through speeches and press releases by the Governor and other members of the BI Board.

The inflation targeting framework was formally adopted on July 1, 2005.<sup>11</sup> BI provided detailed documentation of the new framework in late June.<sup>12</sup> The inflation target was set by the government (in consultation with BI) at  $6\pm 1$  percent in 2005,  $5.5\pm 1$  percent in 2006, and  $5\pm 1$  percent in 2007; and the medium and long term inflation target was set around 3 percent. The target was subsequently revised to  $8\pm 1$  percent in 2006,  $6\pm 1$  percent in 2007, and  $5\pm 1$  percent in 2008. However, the revised target has not been documented yet in a decree by the Minister of Finance. In BI's words, the key elements of the new framework were as follows: (i) a change from base money to an interest rate (BI Rate) as the operational target for monetary control; (ii) stronger monetary policy formulation through a consistent forward looking approach to achieve the inflation target; (iii) more transparent communication to strengthen the monetary policy signal to the market and to guide inflation expectations; and (iv) reinforced policy coordination with the government to minimize inflation pressures from administered price increases, volatile food prices, and macroeconomic management generally.

### **Technical Preparations for Inflation Targeting**

The adoption of the new inflation targeting framework was preceded by detailed technical preparations. All elements of the new framework for monetary policy were discussed at length within BI; and the preparations were supported by IMF technical assistance.

---

<sup>10</sup> International Monetary Fund (2004), page 7.

<sup>11</sup> As noted, the implementation of monetary policy in Indonesia was intended to achieve target inflation since at least 2000. However, the official adoption of inflation targeting occurred in 2005.

<sup>12</sup> Bank Indonesia (2005). See also Alamsyah et al. (2001).



## **Specification of the Target**

One of the most basic questions concerned the selection of the target itself. In choosing an inflation target, central banks have focused either on the headline consumer price index (CPI) or a measure of core inflation. The headline CPI measures the cost of representative consumer, whereas core inflation excludes certain volatile components such as food and energy prices. The total or headline CPI, which is produced and published by the statistical service, has the advantages of being easily understood by the public and being most directly related to the cost of living. However, basic food, which tends to be volatile, accounts for 25 percent of the consumer basket in Indonesia. Since transitory shocks to food prices could revert quickly and need not prompt a monetary policy reaction, policy makers could focus on a measure of inflation that excludes such elements.

On the other hand, the Indonesian public might not understand the concept of core inflation, and would probably find irrelevant a target that excludes major components of expenditure. On balance, the IMF staff, in its technical assistance, recommended targeting the headline CPI. BI now uses headline CPI as a target while using core inflation as an indicator for monetary policy formulation. The core inflation rate is calculated and published by Central Bureau of Statistics to increase the credibility of the estimates.

At the time of these discussions, it was well recognized that adjustments in administered prices are a major challenge to the implementation of inflation targeting in Indonesia. In early 2005, price controls (often supported by subsidies) were in place on products such as electricity, gasoline, and telephone service, which have a weight of nearly 8 percent in the CPI. Adjustments in these prices could cause large, discrete increases in the headline CPI. Indeed, as discussed in the following section, BI faced a major challenge to the new monetary policy framework within months of its adoption, when fuel prices were significantly increased in a single step in October 2005.

With the headline CPI as the target, there are essentially two scenarios for handling adjustments in administered prices in the inflation targeting framework. First, if administered prices are increased in large steps, either the inflation target needs to be adjusted upwards, or the upward deviation from the target needs to be carefully explained and accompanied by all necessary policy actions to contain any second-round effects and stabilize inflation expectations around the target value. Second, if administered prices are adjusted gradually and predictably, for example, based on a formula, this would allow them to feed in a smooth fashion into inflation expectations, in which case deviations from the inflation target may be less likely. In either case, coordination with the government is needed, both on setting the inflation target and on communicating to the public the size and timing of adjustments in administered prices.

In the event, BI opted to state publicly only that it would target the CPI, without elaborating in advance on the issues discussed above. BI noted that monetary policy would stay flexible to accommodate temporary inflation shocks without disturbing the achievement of the medium-term inflation target. This was probably the best available approach in the circumstances, given that it would have been difficult and possibly counterproductive to reopen a discussion on the inflation targets already agreed with the government, and also given the likelihood of large adjustments in administered prices going forward.

The width of the target range can have an important effect on the credibility of an inflation targeting regime. In choosing the width of the target range, central banks face two competing considerations. A narrow range demonstrates that the central bank intends to be rigorous in its conduct of policy, which could improve credibility. A wider range reflects the realization that inflation, in particular headline CPI, has a high variance and is subject to a range of potential shocks. Many IT central banks have put more weight on the credibility benefits of a narrow range, thus choosing a range of  $\pm 1$  percentage point around a midpoint, which was also the approach taken by Indonesia.

BI's document describing the inflation targeting framework makes no further mention of a role for base money or the exchange rate in monetary policy formulation. Thus, the new monetary policy framework avoids setting multiple and possibly conflicting targets, and maintains a clear focus on inflation. However, BI continues to carefully monitor base money, the exchange rate, and a wide variety of other indicators for any information they provide on the future direction of the economy and inflation. By stating clearly that the exchange rate is market-determined under the new inflation targeting framework, with intervention only to avoid excessive exchange rate volatility, BI effectively counteracted the previously existing market perception that it had a goal for the level of the exchange rate, which had contributed to higher volatility in the foreign exchange market and opened the door to speculation against the currency.

## **Operational Implementation**

In connection with the move toward IT, BI recognized the need for an overhaul of its monetary operations. In October 2003, BI completed a draft technical paper on "Operational Procedures for Monetary Control Based on Interest in the Inflation Targeting Regime," in which it recognized that the current mode of monetary policy implementation lacked transparency, did not make use of a well-defined operational target, and could best be described as eclectic. The paper set out proposals for the improved operation of monetary policy. Nonetheless, BI was in principle well placed to implement a market-based monetary policy. The key was to better specify its instruments, conduct monetary policy within a disciplined decision-making framework, and ensure that statements and actions are well-considered, well-communicated, and transparent to the financial markets and the public at large.

A key question was how to implement the "corridor" arrangement used by many central banks in the Indonesian context. In such an arrangement, central bank rates on standing facilities bracket the policy rate on the main facility. In Indonesia, substantial excess liquidity, and money and financial markets that are still considerably less deep and liquid than in the advanced economies, require some adjustments to this framework. Experts from overseas central banks participating in IMF work on this question emphasized two elements

in their discussions with BI:<sup>13</sup> (i) the establishment of a single clearly specified *main operational target* (the BI rate), which would preferably be an overnight rate, if possible. Changes in this rate would be used to signal changes in the stance of monetary policy; (ii) *standing facilities* that create a corridor of perhaps 100-300 basis points around the BI rate. BI would accept deposits, at the initiative of the banks, at a margin below the BI target rate (essentially the existing deposit facility FASBI), and would lend to banks, again at the initiative of the banks, at a margin above the BI rate. The corridor structure would provide strong incentives for banks to first seek to borrow and lend amongst themselves before approaching BI, and would thus tend to act as a ceiling and a floor on interbank transactions. The width of the corridor would be reduced in due course.

The operational framework that came into effect at the beginning of July 2005 was largely consistent with these considerations. BI announced that under the IT framework, the BI Rate would be used both as the signal for monetary policy and as the main operational target. The BI Rate was linked with the one month SBI rate because the SBI rate has been widely used as reference rate by banks and is well understood by them. However, this linkage is intended to be transitional. In time, monetary operations will target a shorter tenor, preferably an overnight instrument.

Initially, monetary operations using the BI Rate were conducted through weekly auctions, with a variable rate tender and a multiple price allotment mechanism. Every Tuesday, BI announced its targets for the SBI auction, against the background of the prevailing BI rate. In addition to the SBI auction, BI also decided to use daily fine tuning operations (FTO) with SBI and government securities (SUN) as the underlying instruments. This framework was a significant step toward greater transparency and efficiency, and it continued to be refined and streamlined during the first year following the adoption of formal

---

<sup>13</sup> IMF technical assistance is typically delivered by a combination of outside experts and IMF staff. In the assistance on IT, the outside experts were drawn (at various times) from the Bank of Canada, the European Central Bank, and the Reserve Bank of New Zealand.

inflation targeting, as discussed in the section titled “Initial Operation of the Inflation Targeting Framework and Future Challenges,” below.

A special consideration in Indonesia’s implementation of inflation targeting is the existence of structural excess liquidity in the banking sector. This excess is a legacy of the large-scale liquidity injections during the Asian crisis, and has obligated BI to issue central bank certificates to absorb it.<sup>14</sup>

Absorption of excess liquidity will enhance the link between short-term interest rates, which are strongly influenced by BI, and long-term interest rates across the yield curve impacting markets and households as desired. In due course, for example when excess liquidity in the banking system has been durably absorbed and central bank bills are replaced by government securities in open market operations, BI could transition to targeting an overnight rate. The absorption of excess liquidity would also set the stage for the further development of the interbank money market and would facilitate an eventual transition to monetary operations based on the overnight rate.

### **Policy Formulation**

Successful inflation targeting requires a systematic and regular process for monetary policy decision-making. Rather than surprising markets with unexpected monetary policy actions, a key objective of inflation targeting is to stabilize inflation expectations by making monetary policy decisions more transparent, consistent, and predictable. To the extent possible, monetary policy decisions should be taken on the basis of an understanding of the monetary transmission mechanism that is also shared by market participants. Thorough economic analysis thus moves to center stage in the formulation of monetary policy; and policy decisions are taken on a

---

<sup>14</sup> BI increased unremunerated minimum reserve requirements in September 2005, following the introduction of inflation targeting. This step helped to mitigate losses from higher official interest rates and to reinforce the required monetary tightening.

regular cycle tied to the accumulation of significant new data and other information on developments in the economy.<sup>15</sup>

IMF staff and experts advising BI stressed the importance of an orderly and structured decision-making process. It was recommended that members of the Board with primary responsibility for monetary policy form a Monetary Policy Committee (MPC), which would have a close involvement in, and ownership of, the inflation forecast and the core modeling and analytical techniques used to produce it. Monthly Board meetings should be timed around the release of key data, while policy meetings would be aligned with the quarterly forecasting cycle. As part of the quarterly policy and forecasting cycle, an inflation report would be prepared, for approval by the Board. The monthly meetings of the quarterly cycle would track the new information that had accumulated and analyze whether current economic developments are consistent with the inflation forecast.

The procedures announced by BI at the end of June 2005 were closely in line with these agreed recommendations. Changes in the BI rate are based on the inflation forecast relative to the target. The BI Rate was to be determined by the Board every January, April, July, and October. However, a monthly cycle was adopted soon after the introduction of inflation targeting given the need for more frequent market guidance, notably in light of the large increase in oil prices and the associated increase in market uncertainty.

BI has also established a MPC comprising the Governor, three Deputy Governors, and some Directors in BI's monetary stability wing. The MPC meets regularly before the monthly Board Meeting and invites relevant BI staff to a Pre-Board Meeting the day before the Board Meeting. In the Pre-Board Meeting, BI staff present information on monetary and economic conditions (including surveys

---

<sup>15</sup> Mervyn King (2005, page 12) comments how inflation targeting changed monetary policy-making: "This systematic process should be contrasted with what went before in the United Kingdom. No notice of when policy decisions would be made was given. The financial markets had no notice of when interest rates would be decided, so it could be any day. That certainly kept them glued to their screens."

of real activity), banking and financial markets, and international issues. This process allows the Board Meeting to more effectively focus on the monetary policy stance and the decision on BI rate.

IMF technical assistance also noted the desirability of “smoothing” adjustments in policy interest rates, by changing the rates in a series of small or moderate steps. Among the main arguments for such interest rate smoothing are the policymakers’ uncertainty about the economy and reducing the risks to financial stability.

When possible, it is generally preferable to move consistently in one direction until the need for the policy response is eliminated, and to avoid frequent changes in the direction of policy, which may be confusing to the public and induce undesirable oscillations in inflationary expectations. Even so, a central bank may need to change interest rates rapidly and in big steps if the economy is hit by a major shock, or if the economy is significantly above or below its full employment level for some other reason. During normal periods, central banks generally move in increments of 25 or 50 basis points, depending on the level of nominal interest rates and inflation and output gaps. Moves smaller than 25 basis points are considered unlikely to be necessary or effective. BI has consistently implemented this approach to monetary policy signaling since the inflation targeting framework was adopted.

BI continues to make intensive efforts to develop its capacity for economic research and analysis, which is essential to the successful implementation of IT. BI researchers have developed a wide variety of models, leading indicators, and surveys that help the central bank arrive at an outlook on economic activity and inflation. In particular, BI collects and analyzes a wide range of standard leading indicators, including a composite index based on OECD methodology. Monetary and financial indicators are followed closely, and provide a comprehensive picture of developments in the economy. That said, more work needs to be done on the models used to forecast inflation, which do not yet incorporate true forward-looking behavior. This could lead to significant errors in policy analysis, given that under inflation targeting, expectations become one of the most important

mechanisms through which monetary policy is transmitted.<sup>16</sup> Some areas in which this work could be taken forward are considered in the section “Initial Operation of the Inflation Targeting Framework and Future Challenges.”

## **Communications with the Public**

Transparency and the communications strategy are key ingredients in building the credibility of the new IT framework. The principal tools adopted by BI are regular press releases and press conferences on monetary policy decisions, the quarterly publication of BI’s complete assessment of macroeconomic developments (which covers inflation and monetary conditions, predicted inflation, and the monetary policy responses needed to bring inflation and inflationary expectations to the targeted level). The monthly Monetary Policy Review, speeches and publications by the governor and other members of the Board, dissemination of policy information through BI regional offices, and the posting of detailed information on the website are additional means of communicating BI’s thinking to the public.

BI’s quarterly Monetary Policy Report continues to be improved. It serves as BI’s inflation report, and contains a summary statement by the governor on BI’s assessment of economic activity and inflation, and the key policy decisions taken by the Board. Considerable details are provided on macroeconomic performance, monetary indicators and policy, the economic outlook and inflation forecast, and the implications for policy. BI is seeking to strike an appropriate balance in its transparency policies in an environment still high in its macroeconomic uncertainty.

---

<sup>16</sup> The IMF staff and BI agreed that in a new policy regime the old and well-known econometric relationships may no longer be valid. A weak correlation between the policy variable and future inflation is not necessarily a cause for concern, as a new policy variable by definition has not been used in the past to contain inflationary pressures. In Indonesia, there is also the difficulty arising from the uncertainty surrounding estimates based on historical data, as the Indonesian economy has gone through turbulent periods in the recent past. Thus, a forward-looking approach, while always important in evaluating the effects of monetary policy, is all the more crucial at the earlier stages of the new policy regime.



## **Coordination with the Government**

BI has clearly recognized the need for regular coordination with the government. Consistent with IMF technical recommendations and with the existing central bank law, this coordination does not impinge in any way on BI's operational independence. The focus of coordination has been on minimizing inflation pressures from adjustments in administered prices and the volatile foods component of the CPI. More generally, discussions with the government have emphasized the coordination of monetary policy, fiscal policy, and general economic policy.

Coordination has been institutionalized in regular meetings with government officials. Government ministers and the BI Board have discussed the inflation target, macroeconomic assumptions underlying the government budget, the strategy for managing the government debt (which also affects the structure and supply of securities available to BI for use in its open market operations), and issues related to financial system stability (which has important implications for both budgetary soundness and the sustainability of monetary policy). In addition, the government and BI formed a team of officials in early 2005 focusing on inflation control, both with respect to specific government actions such as increases in administered prices, and to draw up a roadmap for coordination on inflation control going forward.

## **Initial Operation of the Inflation Targeting Framework and Future Challenges**

The new IT framework faced significant challenges almost immediately following its inception. Reflecting the increase in international oil prices, the tightening of monetary policy in the United States, increased foreign debt servicing, and a loss of confidence in Indonesia's mutual fund industry, the rupiah depreciated against the US dollar by some 5 percent in the third quarter of 2005. At the same time, headline inflation rose markedly, from 7.5 percent in the second quarter of 2005 to about 18 percent in October 2005. The major part of the surge in the price level was attributable to the

cut in the government fuel subsidy, but volatile food prices and increases in other administered prices also played an important role. Core inflation remained fully under control at about 6.75 percent year-on-year in the third quarter of 2005, but rose sharply to almost 9.5 percent year-on-year in the fourth quarter, as second-round effects and higher inflationary expectations began to take hold.

BI reacted in an appropriate fashion, consistent with the new monetary policy regime. The BI rate was increased in stages from 8.5 percent at the end of June 2005 to 12.75 percent during the fourth quarter. These actions resulted in some slowdown of the economy and of credit growth. During the first quarter of 2006, headline inflation was running at 15.75 percent, below the earlier forecast, while core inflation remained stable, at about 9.5 percent. These trends continued into the second quarter of 2006, against the background of declining demand pressures, subsiding external shocks to the price level, and closer coordination with the government on the timing and pace of administered price increases, which together resulted in a lower inflation forecast and set the stage for a gradual reduction in the BI rate.

BI continued to make frequent adjustments in its monetary operations in the course of 2005 and early 2006. These changes preserved the role of regular SBI auctions tied to the BI rate as the main instrument of monetary policy, while moving closer to establishing a corridor for money market rates. In particular, in November 2005 BI reinstated the standing overnight deposit facility (FASBI), which had been closed in January 2005 (the seven day deposit facility also continued to be available). In addition, the SBI repo facility (which provides overnight central bank funds at a penalty rate) was closed in August 2005, during a period of foreign exchange market turbulence, and reopened in February 2006. Overnight fine tuning contracts (FTK), which had been used actively in the proceeding period, were discontinued; and BI indicated that 2-6 day FTK would be used less frequently. In addition, the seven day deposit facility had been deactivated since May 2006 in line with the implementation of the fixed rate tender auction. Despite these

considerable enhancements to the operational framework, BI's monetary operations continued to include efforts to influence or control interest rates at various maturities between overnight and three months; this may have hampered the development of the interbank money market, as well as reducing the information content both of the monetary policy signal provided by the BI rate and of the yield curve at shorter maturities.

These monetary policy actions were carefully explained to the public in a series of press releases, in the quarterly Monetary Policy Report, and in other publications. In particular, the Monetary Policy Report took care to draw analytical distinctions between headline inflation, core inflation, inflationary expectations, and BI's inflation forecast, and provided information on targets versus outcomes. In addition, BI has consistently reiterated its commitment to taking the necessary actions to bring inflation back to its target range.

Even so, further improvements in communications with the public will be needed in connection with BI's efforts strengthen the credibility of the IT regime. In general terms, these improvements will lead to greater transparency regarding BI's inflation target, the manner in which it is set, and how BI is planning to achieve it. For example, there was some ambiguity about the inflation target for 2006, and in the medium term. Documents published by BI suggested that the inflation target for 2006 was increased to  $8 \pm 1$  percent, from  $5.5 \pm 1$  previously.<sup>17</sup> However, no background is provided on the reasons for this decision, or how it was taken. Similarly, while press releases on the policy decisions taken by the BI board often refer to the medium-term inflation target, the numerical value is not given.<sup>18</sup>

---

<sup>17</sup> BI's Monetary Policy Report for the first quarter of 2006 notes (on page 33) only that "the inflation forecast for 2006 remains within the government-set inflation target of 8 percent with  $\pm 1$  percent deviation."

<sup>18</sup> Consistent with practices in other inflation-targeting central banks, BI could also include its inflation and output growth (or output gap) forecast for the policy horizon, with the respective confidence bands and balance of risks. The monetary policy report could give greater prominence to statistical data on the BI rate and BI's monetary operations, to help markets form a clearer picture of the underlying stance of monetary policy. Once BI's internal models are sufficiently

*(continued)*

BI has made significant efforts to strengthen its analytical capacity. The ability to conduct sound and professional economic analysis, the publication of this analysis, and a demonstrated willingness to act on it, are important underpinnings of the credibility and reputation of inflation-targeting central banks. The IMF, in its TA with BI, has emphasized the importance of developing an analytical and research system consisting of four components: a strengthened core staff of highly competent economists able to make sound judgments on macroeconomic conditions in general and the outlook for inflation in particular; compiling a standard set of macroeconomic time series, in well-organized electronic databases; developing fully forward-looking models of the economy (with an emphasis on the monetary transmission mechanism) to support forecasts and analysis; and developing an organizational structure and work processes that allow this knowledge and information to be effectively used by BI's policy-making board.

Overall, Indonesia has made significant strides toward restoring monetary stability since the Asian crisis and the end of the IMF programs. IMF staff and experts have supported these efforts by fostering a regular technical dialogue with BI and other public agencies as Indonesia developed its inflation targeting framework.

### **References**

- Alamsyah, Halim, Charles Joseph, Juda Agung, and Doddy Zulverdy, 2001, "Towards Implementation of Inflation Targeting in Indonesia," *Bulletin of Indonesian Economic Studies*, Vol 37, No. 3, pp. 309-24.
- Bank Indonesia, 2005, "Steps Toward Strengthening Monetary Policy with Price Stability as the Final Target (Inflation Targeting Framework)," Jakarta.

---

developed, the detailed specifications could be published to further the dialogue on the structure of the Indonesian economy and the monetary transmission mechanism.

Enoch, Charles, et al., 2001, "Indonesia: Anatomy of A Banking Crisis—Two Years of Living Dangerously," IMF Working Paper 01/52.

International Monetary Fund, 2004, "Indonesia—Eleventh Review under the Extended Arrangement," Staff Country Report 04/18 (International Monetary Fund: Washington, DC).

\_\_\_\_\_, 1997, "Indonesia—Selected Issues," Staff Country Report 97/76 (International Monetary Fund: Washington, DC).

King, Mervyn, 2005, "What Has Inflation Targeting Achieved?" in: Ben S. Bernanke and Michael Woodford, eds., *The Inflation-Targeting Debate* (University of Chicago Press: Chicago and London).

Lane, Timothy, et al., 1999, *IMF-Supported Programs in Indonesia, Korea, and Thailand: A Preliminary Assessment*, IMF Occasional Paper No. 178 (International Monetary Fund: Washington, DC).

Montgomery, John, 1997, "The Indonesian Financial System: Its Contribution to Economic Performance, and Key Policy Issues," IMF Working Paper 97/45.

MARTA CASTELLO-BRANCO

**Background**

**T**urkey opted for a gradual introduction of an inflation targeting (IT) framework. Following the switch to a floating exchange rate regime in 2001, the Central Bank of Turkey (CBT) adopted “implicit” inflation targeting, using the interest rate as a policy instrument while continuing to target monetary aggregates in the context of an IMF program.<sup>1</sup>

This strategy reflected concern about the lack of some crucial preconditions for full-fledged IT. Fiscal dominance and a weak financial sector in a significantly dollarized and high-inflation economy were the most serious obstacles to formal IT. Moreover, forecasting inflation at a time of significant structural change was a real challenge, in particular considering the uncertain monetary policy transmission mechanism under the flexible exchange rate regime, the strong exchange-rate pass-through, and the high and volatile risk premium.

On the positive side, the amendments to the central bank law in April 2001 ensured that a critical pre-condition for IT—central bank independence—was fulfilled. The revised law granted operational independence to the CBT; defined price stability as the primary objective of monetary policy; and prohibited the CBT from extending credit to the government.

---

<sup>1</sup> The stabilization and structural reform program adopted in the aftermath of the 2001 crisis was supported by substantial financial assistance from the IMF under a stand-by arrangement, covering the period 2002–05.

The law also featured initial elements of central bank accountability: it established a seven-member Monetary Policy Committee (MPC), and required the CBT to regularly brief Parliament and publish periodic monetary policy reports.

In the following years, considerable progress was made to create an appropriate environment for formal IT. The reform program launched after the 2001 crisis, including the adoption of implicit IT in early 2002, led to strong economic recovery and successful disinflation. Tight fiscal policies reduced the risk premia, real interest rates, and the debt burden, thus easing the fiscal dominance problem. The financial sector strengthened considerably after bank restructuring/recapitalization reduced balance sheet vulnerabilities to interest rate and exchange rate movements. At the same time, the CBT took several steps to improve the organization and management of the forecast process, and to develop a communication strategy. All this led to lower inflation expectations, less dollarization, and enhanced credibility—as reflected in a declining exchange-rate pass-through, paving the way for the introduction of full-fledged IT at the beginning of 2006.

The CBT's efforts to put in place the new policy framework have been supported by IMF technical assistance since 2000. Technical support covered issues related to design, decision-making, forecasting, organization, and communications, stressing the interrelation between the various elements of IT for successful implementation.

This chapter reviews Turkey's "gradualist" experience in implementing inflation targeting. The focus is on the role of technical preparations, in particular on the development of a forecasting and policy analysis system (FPAS) to support the IT framework. The second section summarizes the evolution of the monetary policy framework during the period of implicit inflation targeting. The third section (titled "Moving to Full-Fledged IT") relates the move to full-fledged IT. The last section, "Fine-Tuning the IT Framework," concludes with a discussion of the challenges ahead.

### **Implicit Inflation Targeting (2002–05)**

The new approach to monetary policy incorporated some of the key elements of full-fledged IT. However, initially it lacked the required levels of transparency and accountability, and did not focus much on medium-term inflation projections. Multi-year inflation targets were determined jointly by the CBT and the government, while the central bank had been granted instrument independence as well as a clear mandate on price stability. However, in the highly uncertain environment, monetary policy information was not provided to the public on a systematic basis, and the decision-making process, without the full benefit of medium-term inflation projections, was not yet formalized.

Other elements aimed at increasing the transparency and accountability of monetary policy were introduced at end-2004. At that time, the CBT announced that formal IT would be adopted at the beginning of 2006. During the transition period, the governor would continue to be in charge of the interest rate decision, with the MPC playing an advisory role. A regular schedule for MPC meetings was established, with the interest decision announced the day after each meeting, and a CBT statement published within two days.<sup>2</sup>

The results were impressive, with inflation targets met with room to spare for four years in a row (Figure 20.1). Continued fiscal discipline, good coordination between the CBT and the government, and an effective communications policy were instrumental in engineering a sharp decline in inflationary expectations and boosting central bank credibility. In view of the possible “Blanchard effect” of interest rate hikes, the CBT strategy was to push for fiscal reforms and use its external communications to act on market expectations, stressing the role of fiscal discipline as a stabilizing force.<sup>3</sup> In order to increase the

---

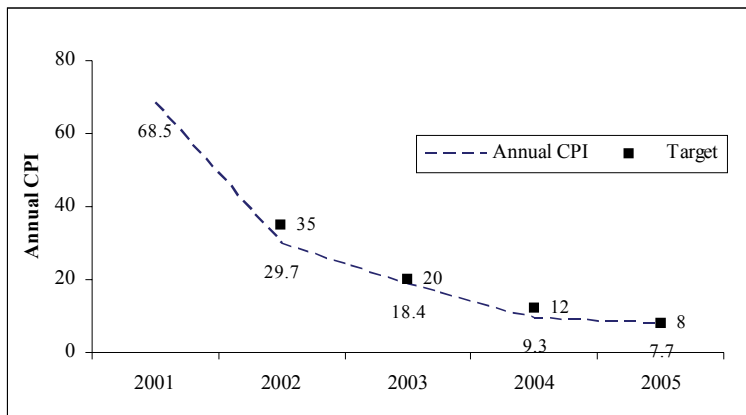
<sup>2</sup> For details, see Central Bank of Turkey (2004).

<sup>3</sup> As pointed out by Blanchard (2004), under conditions of fiscal dominance, an interest rate increase is more likely to lead to an exchange rate depreciation than to an appreciation because of its effect on the risk premium. Given the strong pass-through of exchange rate to domestic prices in Turkey, higher interest rates could then translate into higher inflation.



transparency of its exchange rate policy, the CBT announced that it would not interfere with the level or trend of the exchange rate, but could use interventions in case of excess volatility. In the event, the exchange rate pass-through fell markedly during the 2002-05 period, contributing to improve the credibility of the IT regime.

Figure 20.1. Turkey: Inflation Targets and Outcomes (in percent)



Source: CBT.

IMF technical assistance during this period supported the CBT's efforts to gradually develop the necessary technical expertise and upgrade the institutional framework to allow implementation of formal IT. The main objectives of the technical support were to: (i) strengthen the CBT's forecasting capacity; (ii) incorporate the forecasting and policy analysis into monetary policy decision-making; and (iii) enhance the communications, transparency, and accountability elements of monetary policy.

### Moving to Full-Fledged IT

By mid-2005, most pre-conditions for full-fledged IT had been met, but the operational details still needed to be fleshed out. In addition, much work remained to be done to effectively change the process and organization of forecasting and policy analysis to meet the needs of the new regime. The preparation process accelerated in the second half of 2005, and a general framework for inflation targeting was

detailed in a CBT press release in December 2005.<sup>4</sup> These guidelines stressed the crucial role of fiscal discipline for the successful implementation of IT.<sup>5</sup> The key features of the IT framework, adopted at the beginning of 2006, are summarized in Box 20.1.

The new framework has given a boost to the transparency and accountability of monetary policy. The main changes relative to the implicit inflation targeting period are as follows: (i) monetary policy decisions are taken within a medium-term perspective; (ii) the MPC acts as a decision-maker, rather than just as an advisor; (iii) the CBT is required to explain deviations from the targeted inflation path and to propose measures to bring inflation back on track; and (iv) an inflation report has replaced the Quarterly Monetary Policy Report. Consistent with the focus on medium-term targets, a three-year target inflation path was specified jointly by the CBT and the government for 2006–08, with targets of 5 percent, 4 percent, and 4 percent, respectively.

### **Design of the IT Framework**

CBT staff reviewed carefully the various options for the parameters of the new regime. The experience of several industrial and emerging countries was discussed at length, both in-house and in various seminars and workshops held in Turkey or attended abroad.<sup>6</sup> The Brazilian experience was considered particularly relevant for Turkey, given the common problem of fiscal dominance. At the same time, the CBT ensured that the specific conditions of the Turkish economy were taken into account in the design of the IT framework.

---

<sup>4</sup> Two events in 2005 (the change in the methodology and the content of the CPI basket, and the currency reform that knocked six zeros from the Turkish lira) contributed to the decision to adopt IT only in 2006.

<sup>5</sup> For a comprehensive description, see Central Bank of Turkey (2005).

<sup>6</sup> For example, two events in Istanbul provided opportunity to exchange views on inflation targeting: a joint IMF/CBT international workshop on IT in September 2005, and a conference organized by the CBT in January 2006 (“Inflation Targeting: Performance and Challenges”), marking the introduction of IT.

## Box 20.1. Turkey: The IT Framework at a Glance

- **Design Issues:** The target variable is the annual change in the (end-period) CPI; several “special CPI aggregates” are used as supporting indicators instead of a single core inflation index. The inflation target is set as a point target, with two percent “uncertainty bands” around the target, and upward/downward deviations from the target treated symmetrically. If inflation falls outside the bands, the CBT must submit a written explanation to the government and share it with the public. This statement must include the proposed measures to bring inflation back to target. The multi-year targets are not expected to change, except in extraordinary circumstances. In particular, temporary shocks should not lead to revised inflation targets (only to revised forecasts).
- **The Decision-Making Process:** Policy decisions are taken on a consensus basis by the “collegial” MPC, within a forward-looking perspective. The schedule for the MPC’s monthly meetings is announced to the public well in advance. Meetings involve two steps: (i) CBT staff and Treasury representatives present their analyses to the MPC; and (ii) MPC members meet to vote and prepare a press statement announcing the policy decision.
- **The Forecasting Framework:** To facilitate management of the forecast process, the Research Department was expanded and reorganized as the Research and Monetary Policy Department, in charge of both short-term and medium-term forecasting and analysis. Following the reorganization, model-based, medium-term projections started to play an important role in MPC deliberations and decision-making, and the coordination between short-term and medium-term forecasting improved markedly.
- **Communications Strategy:** The quarterly inflation report (IR) is the main communication vehicle for monetary policy. The CBT also holds regular press conferences after IR releases. A press statement announcing the interest rate decision is posted on the CBT website immediately after the MPC meeting. A summary document describing the MPC’s deliberations and the inflation outlook is published within five days of the decision, instead of formal minutes. Technical reports, research papers, seminars, workshops, conferences, speeches, press conferences, and interviews are also part of the CBT’s external communications arsenal.

During this process, IMF staff and experts discussed the pros and cons of each option with CBT staff, drawing on international experience. Technical advice covered design issues such as the definition of the *target variable* (CPI, core CPI, or a broader measure); the use of *escape clauses*; the choice of a *point target* or a *range target*; the choice of the *target path* (how quickly inflation would be brought to levels consistent with the price stability objective); and the various *time horizons* relevant in an IT framework (control horizon, target horizon, policy horizon). The main message was that, while respecting international best practice, the various parameters should be chosen according to the specific conditions and background of the country, keeping in mind the interlinkages between the various elements in an IT framework. In the event, the key parameters of the new regime were basically in line with international practice.

### **The Decision-Making Process**

The move to full-fledged IT required significant changes in the decision-making process. During the implicit IT period, monetary policy decisions had been guided by analysis of current trends and short-term forecasts of single variables, drawing on the CBT's reliable data monitoring system. In essence, the CBT key policy rate was gradually cut, in line with the declining trend of inflation and inflation expectations. Since in an IT regime medium-term outlooks are used to guide monetary policy decisions, including in cases when inflation does not exhibit a clear trend, the main task for the CBT during that period was to develop a forecasting and policy analysis system to support the new framework. In particular, internal communication of medium-term policy issues needed to be made more effective, calling for more intensive interaction between staff and the MPC. Reaching a better understanding of the monetary transmission mechanism was a crucial step to improve the decision-making process, allowing for more productive internal and external communications.

IMF staff and experts worked closely with the CBT to develop a FPAS to support monetary policy decisions in the IT framework. The system combines data monitoring, short and medium-term forecasting, and policy analysis to provide all available information for forward-looking monetary policy decisions, including elements of uncertainty and risk. In practice it involves (i) building adequate forecasting, managerial, and technical expertise; (ii) learning how to produce the forecast in this new environment; and (iii) learning how to use the forecast in decision-making. The CBT made significant progress on all these fronts during the implicit IT period—especially during 2005, ahead of the planned introduction of formal IT. However, the development of a FPAS is a continuous process, requiring constant adjustments along the way. Therefore, work in this area is expected to continue.

### **The Forecast Process**

The forecast process encompasses current development analysis, the production of short-term forecasts, and medium-term projections, all used as inputs for the development of medium-term outlooks with policy implications. With enough experience in short-term forecasting and conjunctural analysis, the main challenge for the CBT during the final stages of the implicit IT period was to develop and use structural macroeconomic models as tools for medium-term forecasting, and to combine effectively the model simulations with short-term forecasts into a single medium-term projection.

#### *Short-term forecasting and current analysis*

By mid-2005, expertise on short-term forecasting and current analysis was fairly developed. The CBT's data monitoring system provided timely information for policymaking, and a comprehensive system of data analysis allowed the preparation of analytical reports using econometric techniques, leading indicator models, and judgment. The reorganization of the Research Department in the summer of 2005 further strengthened staff capacity to analyze current economic developments, as the units in charge of data monitoring and conjunctural analysis were then located in the same department. While its system of data monitoring and analysis is in line with international best practice, the CBT is working on enhancing the effectiveness of its

use in MPC decisions. In practice, this implies its use as an input into medium-term projections and as a complement to them in the periods when a new medium-term projection is not available.

### *Medium-term forecasting*

IT central banks typically use a “core” structural model for medium-term forecasting. The model, which formalizes the workings of the monetary policy transmission mechanism, adds medium-term consistency to the forecast and contributes to focus the policy debate around a main message. The CBT strategy was to start with a relatively simple core structural model, and complement it with various satellite models, sectoral analysis, and judgment to produce baseline and alternative medium-term scenarios.

### *Organization issues*

Given the crucial role that organization and management of the forecast process plays in the FPAS, several adjustments have been made to improve the efficiency and effectiveness of existing resources. The Research Department reorganization strengthened coordination between short-term and medium-term forecasting and analysis. In addition, the CBT established forecast schedules for the quarterly projection exercises, and appointed a special forecasting team in charge of their organization. The CBT also continues to make efforts to maintain and recruit high-caliber staff. Further tasks ahead include enhancing interactions between modeling and forecasting teams, and between the MPC and the forecasting team in order to obtain more regular feedback during the forecast process; conducting post-mortem analysis of each forecast cycle; and improving the organization of forecast documentation.

## **External Communications**

Communications play a crucial role in an IT framework. During the past decade there has been a dramatic change in the way most central banks conduct monetary policy, with increasing emphasis on transparency and openness. Typically, modern central banks are investing significantly to put in place an effective communications

strategy—a systematic approach to providing their views on the economic outlook as well as information on the decision-making framework. Such strategic approach to communications is all the more relevant to IT central banks, as monetary policy effectiveness depends crucially on market perceptions.<sup>7</sup> Since better understanding of central banks' policies can improve pricing in financial markets, managing market expectations can help central banks move asset prices in the right direction. To achieve this goal, central bank behavior needs to be reasonably predictable and well understood by the markets.

Against that background, CBT management placed heavy emphasis on developing an effective communication strategy. External communications started to be used systematically to support monetary policy when implicit inflation targeting was adopted. The existing secretariat was reorganized and renamed as the Communications Department, and guidelines establishing its objectives, principles, targeted audience, and key communication channels were prepared.

A key change following the adoption of formal IT was the introduction of an Inflation Report as the main vehicle of CBT communication. The first Inflation Report was issued in January 2006; one important innovation compared to its predecessor is the inclusion of CBT forecasts for inflation and the output gap, and its analytical, forward-looking content, both of which were appreciated by the specialized public. The other key documents underpinning the IT framework are the press release issued in December 2005 (CBT, 2005), the press statement announcing the interest rate decision, and the summary of MPC discussions (the publication of minutes was considered premature at this stage). Using probabilistic language, the press statement provides critical information about the future path of interest rates—another important new feature of the IT framework.

---

<sup>7</sup> There is an extensive literature discussing the importance of communications in modern central banking. See, for example: Blinder (1998), *Central Banking in Theory and Practice*, MIT Press; Blinder, Goodhart, Hildebrand, Lipton and Wyplosz (2001), *How do Central Banks Talk?*, Geneva Report on the World Economy No. 3, CEPR; Blinder (2004), *The Quiet Revolution, Central Banking Goes Modern*, Okun Memorial Lectures, Yale University Press; and Woodford (2005), *Central Bank Communication and Policy Effectiveness*, NBER Working Paper 11898.

The CBT's current communication strategy has been shaped by the structure of decision-making at the CBT, based on a collegial MPC, which "speaks with one voice." While the CBT has made great strides toward establishing a credible and effective communication strategy, keeping policy messages clear will remain a challenge going forward.

A particular important (and potentially damaging) area is the communication of exchange policy. Despite repeated statements that the exchange rate was not a target for monetary policy, in the early stages of full-fledged IT implementation there remained some public concern about the objective of sporadic CBT interventions and the perceived separation between exchange rate and interest rate decisions. Other areas requiring further communication efforts include providing more information on the CBT's reaction function and on the role of the forecasting and analytical framework in decision-making, as well as the CBT's views on the monetary policy transmission mechanism. Establishing formal, two-way, communication channels with market participants, analysts, and academics could also help to explain CBT policies and obtain useful feedback.

### **Fine-Tuning the IT Framework**

Although the basic building blocks for IT are in place, implementation is still at the early stages, and some fine-tuning will be needed over time to ensure monetary policy effectiveness. The key challenge ahead are (i) to ensure that the medium-term nature of the IT framework is well understood in an environment where most market participants have short policy horizons, given their past experience with high and chronic inflation; and (ii) to use the forecasts effectively in guiding monetary policy decisions once inflation has reached stable levels.

As it accumulates experience with IT implementation, the CBT will need to refine some elements of its policy framework and its external communication strategy:

- Regarding the *policy framework*, the main challenges are to further institutionalize the forecast process; streamline and enhance the effectiveness of data monitoring and reporting; and place more emphasis



on understanding the monetary transmission mechanism, and using it regularly for policy decisions.

- On the *communications* front, the key challenges are to improve the public's understanding of CBT policies (including exchange rate policy, the CBT's reaction function, and the transmission mechanism); and CBT expertise (by keeping open channels of communications with market participants, providing more information on MPC views and deliberations, and placing more emphasis on key technical topics in MPC speeches).

## References

Akyurek, Cem, and Ali Kutan, 2006, "The Effectiveness of Turkey's Inflation Targeting Regime," Working Paper, Southern Illinois University, Edwardsville.

Blanchard, Olivier, 2004, "Fiscal Dominance and Inflation Targeting: Lessons from Brazil," NBER Working Paper No. 10389.

Central Bank of Turkey, 2004, Press Release No. 2004-43 on "Monetary and Exchange Rate Policy for 2005".

\_\_\_\_\_, 2005, "General Framework for Inflation Targeting Regime and Monetary and Exchange Rate Policy for 2006."

Kara, Hakan, 2006, "Turkish Experience with Implicit Inflation Targeting," Research and Monetary Policy Department, Working Paper No. 06/3, Central Bank of Turkey.

Özatay, Fatih, 2005, "Monetary Policy Challenges for Turkey in European Union Accession Process," Research Department, Working Paper No. 05/11, Central Bank of Turkey.

# CHAPTER 21 | Communications Strategies in Central Banking: The 2005 Mumbai Regional Seminar

CHARLES ENOCH

## Background

Over the past decade central banks in liberalized market economies have moved from intrusive interventions and regulatory controls to operating with a limited set of instruments. In part this has reflected the growing ineffectiveness of a control approach to monetary policy in an environment where market resources are deep and have diverse channels through which to operate; in part it reflects recognition of the benefits of allowing markets the maximum role in allocating resources subject to the overall policy constraint.

Communications with the markets and, more broadly, with the public, are increasingly recognized as a critical element of modern central banking. Once a central bank is working with markets, it becomes important that the markets understand its policy intentions. When a central bank is credible, markets will benefit from operating in line with the central bank's objectives. In that regard, they have incentives to extract the "signal" of the central bank's policy message from the incessant "noise" that serves to obscure it. It is also in the interest of the central bank that the signal is understood. Applying this new approach of communicating with markets is far from straightforward, and central banks are still riding up the learning curve.

Communication is more than just transparency. At a time when central banks are releasing more economic information than ever before, markets focus more closely on how policy makers are going to react to the information rather than just to the information itself. For example, the succession of Mr. Bernanke to Mr. Greenspan as head of the U.S. Federal Reserve Board in early 2006 led to a change in communications style, and much effort was put into interpreting the

new style. Analysis of the new monetary regime was initially not so much on substance but on how the new leadership was communicating. While opacity had been the deliberate norm under the previous regime, it took some time for markets to adjust to the new, apparently more open, style, and arguments were made that the new chairman was still learning how to communicate in his new role, rather than that the markets were still learning how to understand him.

The increased focus on central bank communications may be seen partly as a reflection of the trend toward expectations of transparency in the behavior of public institutions. The general trend is given more force in the case of central banks, largely because many of them have in recent years been given operational independence. With independence comes a need for accountability: central banks need to explain what they do, which often requires not only providing data to the public, but also explaining how the data are interpreted.

The IMF has been providing assistance on communications strategies in a number of countries, either as stand-alone exercises, or within the framework of refining the operation of monetary policy, particularly for those countries transitioning to inflation targeting. The widespread interest of central banks in refining their modes of communication, and the evolving state of perceived best practices, also make the subject a good topic for regional collaboration. Accordingly, together with the Reserve Bank of India (RBI), the IMF organized a regional seminar on central bank communications in Mumbai, on January 16–17, 2006.

The importance of an effective communications strategy for the operation of monetary policy was stressed by many of the speakers. Attendance at the seminar was at governor or deputy governor level from nine economies in the Asian region,<sup>1</sup> with Governor Reddy of the RBI making the keynote presentation.<sup>2</sup> It also included central

---

<sup>1</sup> China, Hong Kong SAR, India, Indonesia, Japan, Korea, Philippines, Singapore, and Thailand.

<sup>2</sup> See Y. V. Reddy (2006).

bank participation from outside the region, as well as communicators from the financial media and markets, largely from the region. IMF representation was from several departments, reflecting the interdisciplinary nature of the subject.

This chapter summarizes the main themes covered at the seminar, which are increasingly topics of IMF TA. The second section focuses on the general principles of how to communicate monetary policy in a modern environment. The third section (titled “Communications in Support of Financial Stability”) discusses communications strategies to safeguard financial stability—a remit given to many central banks.

While most of the presentations related to “normal” times, there was also a discussion of official communications during periods of crisis, a particularly relevant topic in light of the region’s experience. These discussions are covered in the fourth section (“Communications During Monetary or Financial Crisis”), with an example (Indonesia) provided in the following section. Some concluding remarks are presented in the last section.

### **Central Bank Communications in a Modern Environment**

The nature of central bank communications has changed significantly, together with the shift in the way central banks interact with the markets. Earlier, in line with the rational expectations literature, monetary policy was expected to be effective only if it surprised the markets; an anticipated policy change would have no impact. Nowadays communications should ensure that there is no “surprise”: central bankers typically give signals to induce markets to anticipate a policy change, so that when the change comes it will have been incorporated smoothly and will not be disruptive. This is more complicated to engineer than if central bankers just avoid giving any information and a policy change is suddenly implemented out of the blue.

The adoption of inflation targeting in many countries has also increased the importance of central bank communications. Unlike a money or exchange rate target, the inflation target is not immediately observable. The central bank needs credibility to achieve it, including

with the general public, as well as with the markets, which may mean providing more information to the public and explaining fully how a particular monetary policy reaction to it is consistent with achieving the inflation target. Indeed, it can be argued that, since central banks often have only one policy instrument at their disposal, communications around the operation of this instrument have become central.

A growing trend is for monetary policy decisions to be taken at some form of monetary policy committee (MPC). The MPC typically meets every four to six weeks and has a clearly understood process of communicating its decisions. There are, however, divergences as to how decisions should be communicated, whether through a collegiate approach (i.e. reporting just a monetary policy decision), or through revealing the diversity of opinions in a central bank's monetary decision-making process (e.g., publishing the minutes of the MPC and/or the votes of the members of the MPC). It was suggested that a central bank might evolve from collegiality toward full disclosure of individuals' positions as the public became better informed about what the additional information would bring. This may be in prospect, for instance, in India.

MPC meetings are typically accompanied by publication of a monetary policy report (or an inflation report for those countries with an inflation target). This report provides data on monetary conditions, analysis of those data, and research underlying the analysis. The report is accompanied by a range of channels through which the monetary authorities communicate their views. In many countries there are regular appearances by the central bank governor before a parliamentary committee or similar outside body.

Even amongst central banks that assert that they follow best practices in transparency there are significant differences in communication. The Federal Reserve, for instance, does not hold a press conference to discuss its decisions, while the European Central Bank (ECB) does not publish the minutes of its meetings, and instead

communicates through a press conference by the ECB President.<sup>3</sup> Governor Reddy pointed out, as regards communications, that “there is no universally valid international benchmark on the subject, but the framework, which is still evolving, is useful as a reference point for exchange of information amongst different countries.”

Participants at the seminar paid particular attention to the role of technology in transforming communications. The use of websites to disseminate data and information on policy reactions is now common in various central banks, making the transmittal of policy signals instantaneous through the internet.<sup>4</sup> The People’s Bank of China (PBC) complements this channel of communication with regular press conferences, TV presentations, and functions to facilitate market contacts.

While most presenters considered that greater transparency was helpful for the operation of monetary policy, several wondered if too much information was being given. One concern was that, with so much information and guidance being given to markets, it might be hard to get feedback. There was a suggestion to use gradualism in the establishment of transparency, so that communication would not be overstretched: the first stage should be data dissemination, then the central bank should open up the decision process, then it should release its forecasts, and finally give the details of the operational process. Others expressed particular uncertainty as to the benefits of transparency as regards the exchange rate regime.

---

<sup>3</sup> Governor Reddy suggested that there was a “Greenspan model” and an “Issing model”, and that the RBI was somewhere in between.

<sup>4</sup> The adoption of an internationally-recognized data standard, the Special Data Dissemination Standard (SDDS), observed by many countries in the region, including India, Malaysia, Philippines, Singapore, and Thailand, and data system, the General Data Dissemination System (GDDS), adopted by China, also enhance central bank communication. The IMF’s Statistics Department provides bilateral and regional TA in order to help countries achieve observance of the SDDS or participation in the GDDS. More details can be found on the IMF website at [www.imf.org](http://www.imf.org).

## **Communications in Support of Financial Stability**

Many central banks in recent years have acquired a mandate for financial stability, parallel to their mandate for monetary stability. The move to greater focus on communications for monetary stability is mirrored by recognition of the importance of appropriate communications for financial stability. Failures in communication can precipitate a financial crisis, or make one much harder to manage.

Transparency and communication issues are perhaps more contentious regarding financial than monetary stability. In this connection there remains a residual debate on the extent of disclosure. At one extreme is a position that used to be taken by the Bundesbank and the ECB—that even admitting that one was working on financial stability issues could cause moral hazard across the system. More generally accepted is the idea that admitting to focusing on one particular institution could lead to problems for that institution. Nowadays, there is recognition that, while the authorities may need time to resolve a situation before it becomes public (for instance to sell a bank), nevertheless they are “buying time” and that if it is not used productively the purchase of time could prove expensive. Experience shows that avoidance of disclosure may lead to postponement of action, which can significantly add to the ultimate cost of resolution.

Communications in support of financial stability frequently include the publication by the central bank of a financial stability report (FSR). Numerous central banks have introduced such reports in recent years; these generally provide summary data on the state of the financial system, as well as analysis of the overall soundness of the system, and details of research work underpinning the analysis. There has been a considerable degree of standardization across FSRs, in part because of the cross-fertilization of ideas on the production of FSRs by those involved, and the importance attributed to ensuring familiarity amongst the readership when a central bank joins its peers in producing its own FSR. Other important elements are the development of new statistical measures (the financial soundness indicators), heightened disclosure requirements on banks and harmonization of accounting practices, and a focus on assessment of a country’s observance of international standards and codes.

While internal evaluations can provide a measure of credibility, external evaluations can assist in this process, especially where the credibility of the local institutions is not fully established. Thus, in the case of the Financial Sector Assessment Program (FSAP), there has been considerable emphasis on publication: 70 percent of all completed assessments have been published. The dissemination of the standards has itself prompted widespread discussion, and education of the public about financial stability, in many countries, even where countries had reservations. India, for instance, established a series of working parties with high level representation to consider the applicability of the international standards to the local environment. Overall, while some question the full applicability, there is general consensus that one does not want a “two tier set of standards” with developing countries assessed at a weaker level. The importance of communicating a country’s adherence to international standards has been demonstrated by studies showing that those countries adhering to standards have been able to achieve lower borrowing costs in international markets.<sup>5</sup>

Most seminar participants endorsed the benefits for financial stability of greater transparency and broader communication. At the same time, it was noted that this might have led to over-confidence in financial stability amongst the public, and hence an underpricing of the risks involved; this in turn might be one reason for the recent global increases in housing and equity prices.

### **Communications During Monetary or Financial Crisis**

A monetary crisis may emerge due to inappropriate policies or exogenous factors, or to a combination of these. An exchange rate crisis is the classic case where this occurs, whether the crisis manifests itself first in the exchange market or whether it emerges elsewhere, for instance in the banking system. Such a crisis is likely to be worse if it is accompanied by a loss of official credibility—for instance, if there is a “surprise” exhaustion of reserves, or a sudden unexplained

---

<sup>5</sup> This has been shown most clearly with regard to countries that are in observance of the Special Data Dissemination Standard. See J. Cady (2004).



reversal of policy. Again, the classic case is in the exchange market, where repeated protestations of exchange rate stability may make a subsequent devaluation all the more shocking. The resultant loss of credibility may exacerbate the crisis, and may take considerable efforts to reverse.

In such a crisis, effective communications can help restore credibility. The first of a required series of public measures may well be the dismissal of the governor or the minister, at least in part, as a signal that the loss of credibility should be attributed just to those particular individuals, and that different policies are henceforth to be followed. The next step may be the enunciation of a complete program to address the crisis, visibly supported by all the surviving policymakers. Communication needs to include a complete assessment of the situation, as well as specific policies with regard to all those who are potential losers (e.g., bank depositors). Announcements need to be informative, honest, and timely—but not premature. There are serious dangers if the authorities are perceived to be contradicting themselves; if credibility is lost in this regard, it will be very hard to retrieve.

It is often helpful to enhance credibility through the endorsement from an outside agency, such as the IMF. In some countries the mere announcement of the authorities' intention to seek outside endorsement through an IMF program can have an immediate positive effect; the experience of the United Kingdom in 1976 is a case in point. But while it is clearly desirable to announce a comprehensive program, or the intention to go for outside endorsement, as soon as possible after the crisis emerges, there are dangers in pre-commitment. In the event the design of a program takes longer than expected, or the outside endorsement fails to materialize, there will likely be further loss of credibility. An effective communication strategy must, therefore, avoid over-promising. Where credibility is already lost or under threat, communications alone may not have much credibility; signs of implementation may be required. Thus communication may have to focus on identifying "quick successes," to accelerate the restoration of credibility.

### **Example of Communication in Financial Crisis: The Case of Indonesia**

Indonesia provides a good example of communicating during a financial crisis. At the end of October 1997, as part of its response to the unfolding financial crisis, Bank Indonesia (BI) closed 16 banks, and announced remedial measures for some other banks. Initially, the moves had a positive impact, but soon there was a complete loss of confidence, in part because of some reversals of the closures and the absence of a blanket guarantee for bank depositors. Gaps in communication, however, were also important. Announcements regarding the policy actions were not complete, in part because BI felt bound by pre-existing confidentiality agreements in the handling of some of the banks. The lack of full disclosure led to presumptions of discriminatory treatment and lack of credibility in the overall strategy.

In January 1998, there were widespread bank runs and the exchange rate collapsed. In response, the authorities introduced a blanket guarantee on deposits, established the Indonesian Bank Restructuring Agency (IBRA), and launched a framework for corporate debt restructuring. For the announcement, considerable efforts were made to demonstrate that the authorities were fully coordinated, and that a comprehensive strategy was in place. The policies were announced with full television coverage, with a joint appearance of the finance minister, central bank governor, and other key officials, including the new head of IBRA, as well as outside advisors from the IMF, World Bank, Asian Development Bank, and elsewhere. The impact was immediate and positive, with a 30 percent appreciation of the exchange rate on the day.

Unfortunately, with policy reversals, exchange rate depreciation and bank runs soon resumed. In mid-February, IBRA took over 50 banks, placing its officials into the banks to oversee their operations. The criteria for the interventions were uniform, and reflected a comprehensive approach to the banking system.

But, while the President had accepted in full the substance of his government's proposals for the interventions, he had insisted on no publicity, reportedly because of concerns that news of the interventions might undermine confidence yet further. As a result, the interventions had no public impact, IBRA appeared to continue to be inactive, and officials had limited leverage within the banks. Shortly thereafter the President dismissed the first head of IBRA, undertook further policy reversals, and bank runs intensified.

By late March, there was general recognition that credibility had to be established through a comprehensive approach to handling the crisis. IBRA developed objective criteria for banks to be taken over or to be closed. A public relations firm from Hong Kong was hired to advise on the presentation of the strategy. With preparations complete, interventions were announced and undertaken over the first weekend in April. Careful sequencing of presentations, fully transmitted on television, showed the collaboration of the finance ministry, the central bank, and IBRA, explaining in detail their actions and their impact on depositors in closed or taken-over banks. Importantly, next morning, reassurance was given to depositors. Double page advertisements appeared in major newspapers, with the left-hand side of the paper advertising IBRA's closure of the particular banks, and the right-hand side advertising the designated recipient bank welcoming the transfer of deposits from the closed banks to itself, and informing its new customers of the location of its branches and the extended opening hours that it would be offering.

The presentation, and the meticulous implementation of the commitments in the presentation, served to establish credibility in the bank restructuring strategy. Within three weeks the runs had tailed off and deposits started flowing back into the banking system; although there were several subsequent periods when policy reversals led to exchange rate pressures and runs on specific targeted banks, there were no longer systemic runs across the banking system.

## Conclusion

Although the importance of good communications with markets and with the public is generally recognized, there are key differences in how central banks implement their communications strategies. As with any emerging best practice, the experience of others may well be the most useful guide as to how a particular institution should move forward. The exchange of information and experience amongst the participants of the Mumbai seminar was thought to have been very helpful. Follow-on seminars were proposed to focus on technical specifics of aspects of communication, perhaps on how the press offices of central banks were doing their jobs. IMF TA continues to provide guidance in this critical area.

## References

- Cady, J., 2004, “Does SDDS Subscription Reduce Borrowing Costs for Emerging Market Economies?” IMF Working Paper No. 04/58 (Washington: International Monetary Fund).
- Reddy, Y. V., 2006, “Central Bank Communications: Some Random Thoughts,” presented at the Regional Seminar on Central Bank Communications, Mumbai, January. Available via the Internet at [http://www.rbi.org.in/scripts/BS\\_SpeechesView.aspx?Id=224](http://www.rbi.org.in/scripts/BS_SpeechesView.aspx?Id=224).

*This page intentionally left blank*

## Glossary

AFRITAC EAST	East Africa Regional Technical Assistance Center
AML/CFT	Anti-Money Laundering/Combating Financing of Terrorism
AsDB	Asian Development Bank
BACAR	Banque Continentale Africaine du Rwanda
BANCAFE	Banco Agrario and Granbanco
BANCOR	Gold Trust Bank of Rwanda Limited
Banguat	Bank of Guatemala
BB	Bangladesh Bank
BBO	Bangladesh Bank Order
BC	Banco Comercial
BCC	Central Bank of Congo
BCDI	Banque pour le Commerce, le Développement et l'Industrie
BCP	Basel Core Principles for Effective Banking Supervision
BCPs	business continuity plans
BCR	Banque Commerciale du Rwanda
BCU	Central Bank of Uruguay
BDR	Rwanda Development Bank
BEAC	Bank of Central African States
BGU	Banco Galicia Uruguay
BHU	Banco Hipotecario del Uruguay
BI	Bank Indonesia
BIS	Bank for International Settlements
BK	Banque de Kigali
BNR	National Bank of Rwanda
BoA	Bank of Albania
BOM	Bank of Mongolia
BOP	Balance of payments
BPA	Banking and Payments Authority of Timor Leste
BPK	Banking and Payments Authority of Kosovo
BPR	Bank Performance Report
BROU	Banco de la República Oriental de Uruguay
BSP	Bangko Sentral ng Pilipinas

BVMAC-SA	Central Africa Regional Stock Exchange
CAR	Capital adequacy ratio
CAR	Central African Republic
CBAK	Central Banking Authority of Kosovo
CBI	Central Bank of Iraq
CBL	Central Bank of Liberia
CBT	Central Bank of Turkey
CEE	Central and Eastern Europe
CEMAC	Economic and Monetary Community of Central Africa
CFA	Chartered Financial Analyst
CGF	Congolese franc
CICA-RE	Regional re-insurance company
CIMA	Conference Interafricaine du Marché des Assurances
CISA	Certified Information Systems Auditor
CNBV	Comisión Nacional Bancaria y de Valores
CNCA	Comisión Nacional de Crédito Agropecuario
CND	National Development Corporation
COREBAC	Congolese Banking Restructuring Committee
COSUMAP	Financial Market Oversight Commission for Central Africa
CPA	Coalition Provisional Authority
CPC	Central Point of Contact
CPI	Consumer price index
CRCA	Commission Régionale de Contrôle des Assurances
DAI	Internal audit directorate
DEBRA	Debt Enterprise Bank Resolution Agency
DIM	Department of Investment Management
DRC	Democratic Republic of Congo
DSIF	Directorate of Supervision of Financial Institutions
DVP	Delivery versus payment
ECB	European Central Bank
ECOWAS	Economic Community of West African States
FAG	Fondo Agropecuario de Garantías
FASBI	Fasilitas Bank Indonesia
FCDs	Foreign currency deposits

FED	Foreign Exchange Department
FFSB	Fortifying the System of Banks
FINAGRO	Financiamiento del Sector Agropecuario
FIRST	Financial Sector Reform and Strengthening Initiative
FIU	Financial Intelligence Unit
FNG	Fondo Nacional de Garantías
FNPF	Fiji National Provident Fund
FOGAFIN	State-owned Fondo de Garantías de Instituciones Financieras
FPAS	Forecasting and policy analysis system
FRBNY	Federal Reserve Bank of New York
FRC	Financial Regulatory Commission
FRS	U.S. Federal Reserve System
FSAP	Financial Sector Assessment Program
FSBS	Fund for the Stability of the Banking System
FSDP	Financial Sector Development Program
FSF	Financial Sector Forum
FSIs	Financial Soundness Indicators
FSRs	Financial Stability Reports
FSU	Former Soviet Union
FTC	Fine tuning contracts
FTO	Fine tuning operations
FY	Fiscal year
GDP	Gross Domestic Product
HIPC	Heavily Indebted Poor Country Initiative
IAB	Investment Advisory Board
IAIS	International Association of Insurance Supervisors
IAS	International Accounting Standards
IBRA	Indonesian Bank Restructuring Agency
IC	Insurance Commission
ICR	Incentivo a la Capitalización Rural
IFRS	International Financial Reporting Standards
IR	Inflation report
IRB	Internal ratings based
IT	Inflation targeting
JICA	Japan International Cooperation Agency
JVI	Joint Vienna Institute



LICs	Low-income countries
LOLR	Lender of last resort
MB	Monetary Board
MCM	Monetary and Capital Markets Department
MDRI	Multilateral Debt Relief Initiative
MICs	Middle-income countries
MFA	Multifiber Arrangement
MFI	Micro-Finance Institutions
MoPF	Ministry of Planning and Finance
MPC	Monetary Policy Committee
NBC	Nuevo Banco Comercia
NBFI	Nonbank Financial Institution
NBKR	National Bank of the Kyrgyz Republic
NBY	National Bank of Yugoslavia
NCBs	Nationalized commercial banks
NGO	Nongovernmental Organization
NOP	Net Open Position
NPL	Nonperforming Loans
NPFS	Non Publicly Funded Sofoles
NSCs	National Savings Certificates
NTGL	National Transitional Government of Liberia
OHADA	Organisation pour l'Harmonisation du Droit des Affaires en Afrique
PBC	People's Bank of China
PCA	Prompt corrective action framework
PF	Petroleum Fund
PFS	Publicly Funded SOFOLES
PISG	Provisional Institutions of Self-Government
PRGF	Poverty Reduction and Growth Facility
RBF	Reserve Bank of Fiji
RBI	Reserve Bank of India
REER	Real effective exchange rate
SADC	Southern African Development Community
SB	Superintendency of banks
SBC	Colombian Superintendency of Banks
SBI	Sertifikat Bank Indonesia
SBI	Superintendency of Banks and Insurance
SC	Steering committee
SDDS	Special Data Dissemination Standard
SEC	Securities and Exchange Commission

---

SES	Supervision and Examination Sector
SHCP	Secretaría de Hacienda y Crédito Público
SHF	Sociedad Hipotecaria Federal
SIMTEL	Societe Interbancaire de Monétique et de Télécompensation
SLR	Statutory Liquidity Ratio
SOEs	State-owned enterprises
SOFOLES	Sociedades Financieras de Objeto Limitado
SPV	Special Purpose Vehicle
SRSG	Special Representative of the UN Secretary General
SSA	Sub-Saharan Africa
STI	Singapore Training Institute
SYSCOHADA	Système Comptable Ouest Africain
TA	Technical Assistance
T-Bills	Treasury bills
TPL	Third party liability insurance
UEAC	Economic Union of Central Africa
UMAC	Ministerial Committee of the Monetary Union of Central Africa
UN	United Nations
UNMIK	UN Interim Administration Mission in Kosovo
UNMIL	United Nations Mission in Liberia
UNSC	United Nations Security Council
VAR	Value-at-risk
WTO	World Trade Organization