

**Sri Lanka: Financial System Stability Assessment—Update,  
including Reports on the Observance of Standards and Codes on the following topics:  
Banking Supervision and Payment Systems**

This update to the Financial System Stability Assessment on Sri Lanka was prepared by a staff team of the International Monetary Fund and the World Bank as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on November 6, 2007. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Sri Lanka or the Executive Board of the IMF.

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SRI LANKA

**Financial System Stability Assessment Update**

Prepared by the Monetary and Capital Markets and Asia and Pacific Departments

Approved by Jaime Caruana and David Burton

November 6, 2007

This report presents the conclusions of the joint IMF-World Bank Financial Sector Assessment Program Update mission, which visited Sri Lanka in June–July 2007. The findings of the mission were discussed with the authorities during the Article IV consultation mission in July 2007.

The main findings of the FSAP Update are:

Despite a challenging macroeconomic environment characterized by a high fiscal deficit, inflationary pressures, and a widening current account, near-term risks to the financial system appear manageable. Financial soundness indicators have improved; nonetheless, stress tests suggest that banks remain relatively less resilient to interest rate and liquidity shocks.

Moreover, the system faces challenges over the medium term from continued rapid credit growth, rising interest rates, and rigidities in interbank markets. Against this background, improving bank risk-management systems, implementing risk-focused supervision, and strengthening the capital position of the weak state bank are key priorities.

As regards financial sector development, the state continues to play a key role in the financial system through its ownership of a significant proportion of the system. A key challenge will be to ensure that this public sector involvement does not undermine the efficiency of the system or its ability to support the economy's development.

The FSAP team comprised Messrs/Mmes. Kiatchai Sophastienphong (leader, World Bank), Aditya Narain (deputy leader, IMF); Turgut Kisinbay, Andre Santos and Mercy Mathibe (all IMF); Peter Hayward (banking supervision expert, ex-IMF), Jorg Genner (banking supervision expert, BAFIN), Tom Kokkola, (payment systems expert, ECB); Nagavalli Annamalai, Gregory Gordon Brunner, Sriyani Hulugalle, Lohita Karunasekera, Yibin Mu, Carlotta Saporito, and Niranjani Sathiakumaran (all World Bank), and K. R. Ramamoorthy (bank restructuring expert). The mission received excellent cooperation and support from the authorities.

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## GLOSSARY

ALM	Asset and Liability Management
AMC	Asset Management Companies
AML/CFT	Anti Money Laundering and Combating the Financing of Terrorism
APPF	Approved Private Provident Funds
BA	Banking Act
BCP	Basel Core Principles for Effective Banking Supervision
BOI	Board of Investment
BSD	Banking Supervision Department
CSE	Colombo Stock Exchange
CBSL	Central Bank of Sri Lanka
CRIB	Credit Information Bureau
DFI	Development Finance Institution
EPF	Employees' Provident Fund
ETF	Employees' Trust Fund
FCA	Finance Companies Act
FLA	Finance Leasing Act
FSAP	Financial Sector Assessment Program
FIU	Financial Intelligence Unit
GOSL	Government of Sri Lanka
IBSL	Insurance Board of Sri Lanka
IAS	International Accounting Standards
IFRS	International Financial Reporting Standards
LCB	Licensed Commercial Banks
LOLR	Lender of Last Resort
LSB	Licensed Specialized Banks
MB	Monetary Board
MFI	Microfinance Institutions
MLA	Monetary Law Act
MOF	Ministry of Finance
MOU	Memorandum of Understanding
MTPL	Mandatory Third Party Liability Insurance
NBFI	Nonbank Financial Institutions
NITF	National Insurance Trust Fund
NPL	Nonperforming Loans
NSB	National Savings Bank
OECD	Organization for Economic Co-operation and Development
OTC	Over the Counter
PD	Primary Dealer
Repo	Sales and Repurchase Agreement
RDB	Rural Development Banks

RFC	Registered Finance Companies
ROA	Return on Assets
ROE	Return on Equity
ROSC	Report on Observance of Standards and Codes
RTGS	Real Time Gross Settlement
SCB	State Commercial Banks
SEC	Securities and Exchange Commission
SEMA	Strategic Enterprise Management Agency
SLAASMB	Sri Lanka Accounting and Auditing Standards Monitoring Board
SLC	Specialized Leasing Companies
SME	Small and Medium Enterprise
SOE	State-Owned Enterprises
SRCC&T	Strike, Riot, Civil Commotion and Terrorism
SRCCTF	Strike, Riot, Civil Commotion and Terrorism Fund
SRO	Self-Regulatory Organization
SSSS	Scripless Securities Settlement System

## EXECUTIVE SUMMARY

**The authorities have embarked on a major reform program since the 2002 FSAP.**

Important legislative and regulatory reforms have taken place, banking and insurance supervision and central banking operations have been strengthened, and market infrastructure has improved. However, less progress has been achieved in the restructuring of the state commercial banks, and reforms of the pension and provident funds have not been addressed.

**The financial system has been remarkably resilient, despite a challenging**

**macroeconomic environment.** Even in the face of natural disasters, continued civil strife, high fiscal deficits, a widening current account deficit, and accelerating inflation, the banking system's financial performance has improved on the back of robust economic growth.

**Although near-term risks to banking system stability appear manageable, challenges**

**remain.** Stress tests suggest that banks are relatively well positioned to deal with asset quality concerns, but recent data indicates that credit quality could begin weakening in the face of rapid credit growth. Moreover, banks have increased their reliance on less stable interbank borrowings, as funding sources and the stress tests pointed to relatively greater vulnerabilities to interest rate and liquidity shocks. A lack of supervisory data precluded testing for contagion, FX rollover risk, and risks faced by nonbank credit institutions, such as finance companies and leasing companies.

**However, financial sector efficiency and development in the presence of large public sector involvement seem greater challenges.**

The authorities are deeply committed to maintaining a large role for public sector financial institutions, which, in the absence of reform, could weigh on the system's efficiency and its ability to support Sri Lanka's growth objectives. Steps are needed to create a level regulatory playing field, so as to allow private institutions to develop, to improve the efficiency of the state banks through strong governance and management structures, and to better use the development banks and microfinance institutions to address under-banked segments.

**In addition, key conclusions and recommendations of the assessment include the following:**

- **Bank supervision:** While progress has been made, a framework for risk-focused supervision is still evolving. This is an important condition for successful implementation of Basel II planned by Central Bank of Sri Lanka (CBSL). Bank boards also have to be encouraged to play a more effective role in the risk-management process. Implementing consolidated supervision, including through improved information sharing among regulators using more fully the Inter-regulatory Institutions Council, is another key item on the reform agenda.

- **The state-owned licensed commercial banks:** These two institutions continue to face structural weaknesses and liquidity management problems. While there has been some improvement following the government's restructuring efforts, high cost-income ratios, driven by staff and pension costs, continue to affect their performance. Addressing the capital deficiency in state banks should be a key policy priority.
- **Insurance:** While there have been a number of positive developments in the insurance sector, further efforts are needed to improve insurance supervision. The Insurance Board of Sri Lanka (IBSL) is establishing a sound basis for the effective supervision through risk-based supervision, improved reporting, and measures designed to improve transparency. However, its effectiveness is hampered by a lack of resources. The targeted utilization of funds specifically created for Strike, Riot, Civil Commotion and Terrorism (SRCC&T), and Policy Holders Protection and Reinsurance, is currently not ensured. The absence of a comprehensive supervisory framework for pension funds is a matter of concern.
- **Liquidity management:** The CBSL has the standard set of tools to manage liquidity, including reserve requirements, standing facilities, and open-market operations. However, volatility in the overnight-call money market has increased significantly in recent months, in part because of very limited access to the reverse repo window. This experience suggests that there is scope for the CBSL to use its existing instruments more effectively even while adhering to reserve money targets.
- **Financial market infrastructure:** The system has been considerably improved in recent years, with LankaSettle (the real-time gross settlement system) commencing operation in 2003 and LankaSecure (the securities settlement system) beginning work in 2004. Check imaging and truncation were introduced in 2006, and work now remains to be done on the development of safe and efficient payment instruments and a nationwide noncash retail payment system, for which a road map has been prepared by the National Payments Council.
- **Capital markets:** A number of positive developments have also taken place in the capital markets, but there is considerable untapped potential still. The fragmentation of T-bond issuance and the current cash-management practices hamper the development of a benchmark yield curve. The investor base remains narrow, with large captive sources of government funding impeding its enlargement. The private securities market suffers from both a limited issuer and investor base, due to the state-owned enterprises' dominant role in the market and the role of the state-owned institutional funds as captive sources of funds.

## MAIN FSAP UPDATE RECOMMENDATIONS

Recommendation	Time Frame
<p><b>1. Strengthen bank supervisory and regulatory framework</b></p> <ul style="list-style-type: none"> <li>• Provide supervisory guidance to banks on a comprehensive risk management framework and expedite move to risk-focused supervision;</li> <li>• Review and strengthen regulation on large exposure limits and related party lending;</li> <li>• Apply prudential requirements on a consolidated basis and improve communication with other supervisors;</li> <li>• Develop and announce approach to Pillar II well before Basel II implementation date; and</li> <li>• Review the draft Micro Finance Law to address concerns of capacity and moral hazard.</li> </ul>	<p>Short term</p> <p>Short term</p> <p>Short term</p> <p>Short term</p> <p>Short term</p>
<p><b>2. Expedite restructuring of state commercial banks</b></p> <ul style="list-style-type: none"> <li>• Shore up capital of weak state bank to meet required capital adequacy;</li> <li>• Implement SEMA recommendations on streamlining cost structures; and</li> <li>• Improve the legal framework to expedite bank debt recovery.</li> </ul>	<p>Short term</p> <p>Short term</p> <p>Medium term</p>
<p><b>3. Enhance supervision of insurance sector</b></p> <ul style="list-style-type: none"> <li>• Enhance supervisory capacity in IBSL commensurate with supervisory approach; and</li> <li>• Manage the proposed re-insurer as a separate entity operating on a commercial basis.</li> </ul>	<p>Short term</p> <p>Short term</p>
<p><b>4. Introduce supervisory framework for pension funds</b></p> <ul style="list-style-type: none"> <li>• Develop an overall pension strategy and introduce a robust supervisory framework for all pension funds.</li> </ul>	<p>Medium term</p>
<p><b>5. Address rigidities in inter-bank markets</b></p> <ul style="list-style-type: none"> <li>• Better-align policy rates with market rates and consider using price (and supervisory attention) instead of across-the-board quantitative restrictions to discourage frequent access to standing facility; and</li> <li>• Consider lengthening the reserve maintenance period from one week at present and relax the daily minimum requirement.</li> </ul>	<p>Short term</p> <p>Medium term</p>
<p><b>6. Enhance robustness of payment systems</b></p> <ul style="list-style-type: none"> <li>• Clarify legal jurisdiction risks in foreign bank participation; and</li> <li>• Define access criteria and make them publicly available.</li> </ul>	<p>Short term</p> <p>Short term</p>

## I. BACKGROUND

1. **This report presents the conclusions of the June/July 2007 FSAP Update mission.** This mission followed from a 2002 FSAP mission, which encouraged steps to restructure the banking system; modernize the legal framework; develop the securities, insurance, and provident fund sectors; and improve access to finance. The FSAP Update mission found important progress in implementing these earlier recommendations, especially in the areas of banking, insurance, central bank operations, and market infrastructure (Appendix III). However, there has been less progress in restructuring the weak state banks and no progress in pension reform, where initiatives to move the public service pension scheme to a funded basis have been reversed.

## II. FINANCIAL SYSTEM STRENGTHS AND VULNERABILITIES

### A. Structure of the Financial System

2. **There has been little change in the structural composition of the financial system since 2002, and banks continue to dominate.** Their assets still account for around two-thirds of financial sector assets, with provident funds holding around 20 percent and insurance companies, finance companies, and leasing companies each accounting for around 3 percent (Figure 1).

3. **The banking system includes 23 licensed commercial banks (LCBs) and 14 licensed specialized banks (LSBs).** Of the LCBs, the two largest are state-owned. There are nine privately owned commercial banks and 12 branches of foreign banks. LSBs are not permitted to take demand deposits or undertake foreign currency business, but are otherwise treated similarly to LCBs, and are mostly state owned, with a market share about one-fifth of the LCBs. There are also a large number of finance companies, which may take savings-and-time deposits, and leasing companies, which are funded by bank borrowings and debentures.

4. **The pensions sector is dominated by the Employee Provident Fund, which accounts for nearly 15 percent of financial sector assets and which is managed by the CBSL.** The next largest pension fund is the Employees Trust Fund, which manages 2 percent of financial system assets. Nearly all of these two institutions' assets are held in the form of government debt. In addition, there are around 185 approved provident funds (APPFs), whose assets represent only around 3 percent to 4 percent of the total financial system. These funds are privately administered by individual employers and employer groups, with no specific agency in charge of their supervision.

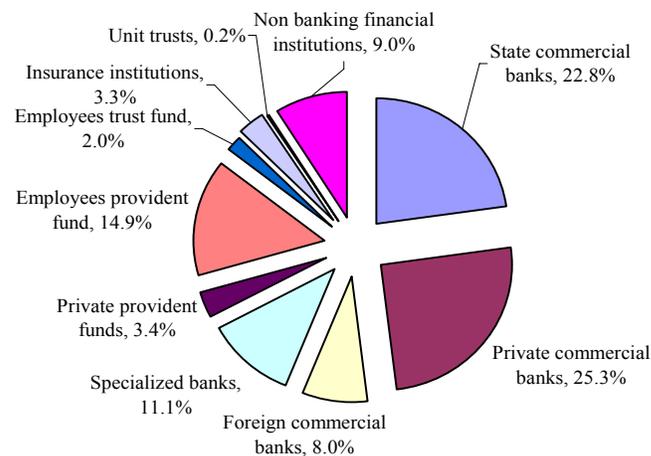
5. **The insurance sector is relatively underdeveloped compared to other countries, with total insurance premiums representing about 1½ percent of GDP.** Although the sector has grown strongly in recent years, less than 10 percent of the population are said to

have any form of insurance. There are currently 15 insurance companies, comprising 12 composite insurers, 2 general insurers, and one life company; although foreign companies are free to enter the market, they have had a modest impact. The market for insurance is highly competitive and the existing pricing of insurance products may be unsustainable.

6. **Equity markets have performed well and their market capitalization increased while corporate debt markets remain underdeveloped.** Between 2001 and 2006, the stock market performed quite well and the All Share Price Index (ASPI) rose at an average annual rate of 35 percent, causing market capitalization to rise from 8 percent of GDP to about 30 percent of GDP. The corporate debt market remains small with only two debenture issues listed for 2006 for a value of Rs.2.3 billion.

7. **State-owned institutions continue to dominate the financial system.** Despite a decline of 5 percentage points in their share of financial sector assets since 2002, state banks still account for nearly half of total banking system assets and nearly a quarter of total financial sector assets. With the government's management (either directly or indirectly) of the two main provident funds, it effectively controls nearly 40 percent of all financial sector assets. Moreover, government debt represents the largest single exposure of the financial system, accounting for nearly a quarter of banks' assets (loans and investments) and more than 90 percent of investments of the pension and insurance institutions.

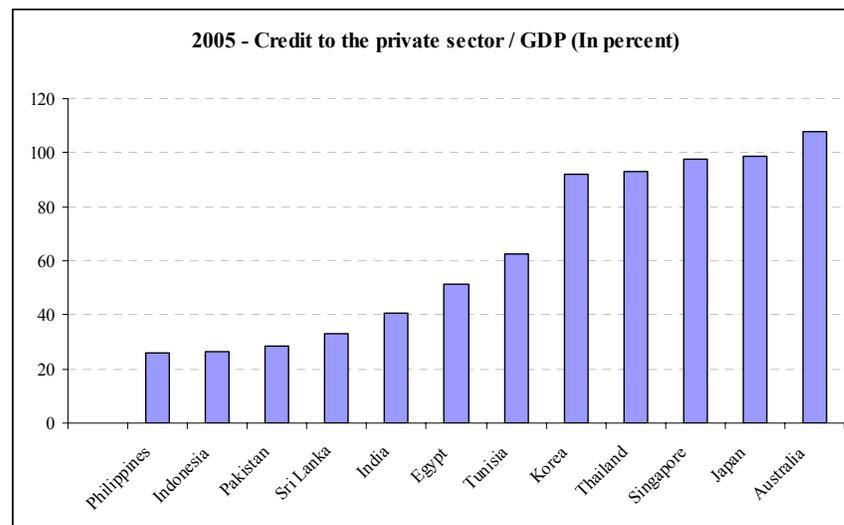
**Figure 1: Sri Lanka: Structure of the Financial System (2006)**



Source: Central Bank of Sri Lanka

8. **The government’s significant role in the financial sector has been a source of stability, but also risk.** State ownership has provided an implicit guarantee for public deposits and confidence that the authorities would be willing to support their institutions in difficulty. However, state involvement in the financial sector risks undermining its efficiency and development, and the heavy reliance of the government on local banks and the pension system to meet its domestic and external financing needs limits the extent to which these institutions can provide much-needed funding for private investment (Figure 2). Finally, the bank exposure to the government is more than four times the capital, leaving the system exposed to a shock to the fiscal position.

**Figure 2. Credit to the Private Sector—Select Countries**



Source: International Monetary Fund.

## B. Macroeconomic Environment

9. **Sri Lanka’s recent economic performance has been generally positive and proved resilient to recent shocks, including the end-2004 tsunami and an escalation of civil unrest.** Economic expansion has been robust four years in a row, reaching 7½ percent in 2006. Growth has been broad-based and supported by buoyant domestic demand. Looking forward, the economy’s vulnerabilities to shocks have increased and the medium-term outlook is challenging. The high public debt, accelerating inflation, and pressures on the current account and exchange rate pose challenges to macroeconomic management.

10. **Fiscal dominance is a drag on the economy and complicates financial sector policies.** At 90 percent of GDP, public debt risks crowding out private sector investment and development, constrains growth, and poses risks to macroeconomic and financial stability. However, while the fiscal deficit reached 8½ percent in 2006, this was lower than budgeted and the government has revised the 2007 budget deficit target down to 7¾ percent of GDP, reflecting the strength of revenue growth through May, and recourse to the banking sector is expected to be within target.

11. **Rising inflation has led the CBSL to tighten monetary policy, putting pressure on interest rates.** Monetary policy operates in the context of a flexible exchange rate, the principal instruments are the two rates at the standing lending-and-borrowing facilities, the operating target is reserve money, and the intermediate target is the consolidated broad money (M2b). Consumer price inflation accelerated in the second part of 2006, reaching nearly 18 percent at end-2006 declining to 16.6 percent (year-on-year) in June 2007, and then picking up again to 21.7 percent in August 2007. The latter increase was contributed significantly by the pass-through of administrative price adjustments.

12. **The current account deficit has widened.** The deficit rose to 5 percent of GDP in 2006, from 2¾ percent in 2005, despite strong remittance inflows, owing to a surge in oil and consumer imports. Although exports continued to grow strongly in the first six months of 2007 (14½ percent, year-on-year), reflecting a rebound in the garments sector and cyclical factors; and import growth decelerated (mainly due to oil), the current account deficit is expected to be sustained at around 5 percent of GDP in 2007, on account of higher world oil prices and increased imports for infrastructure projects. While aid flows and the debt relief moratorium have helped finance the deficit, the government resorted to foreign currency borrowing from banks, including by the issuance of domestic dollar-denominated bonds.

### C. Strength and Vulnerabilities of Financial Institutions

#### Banking

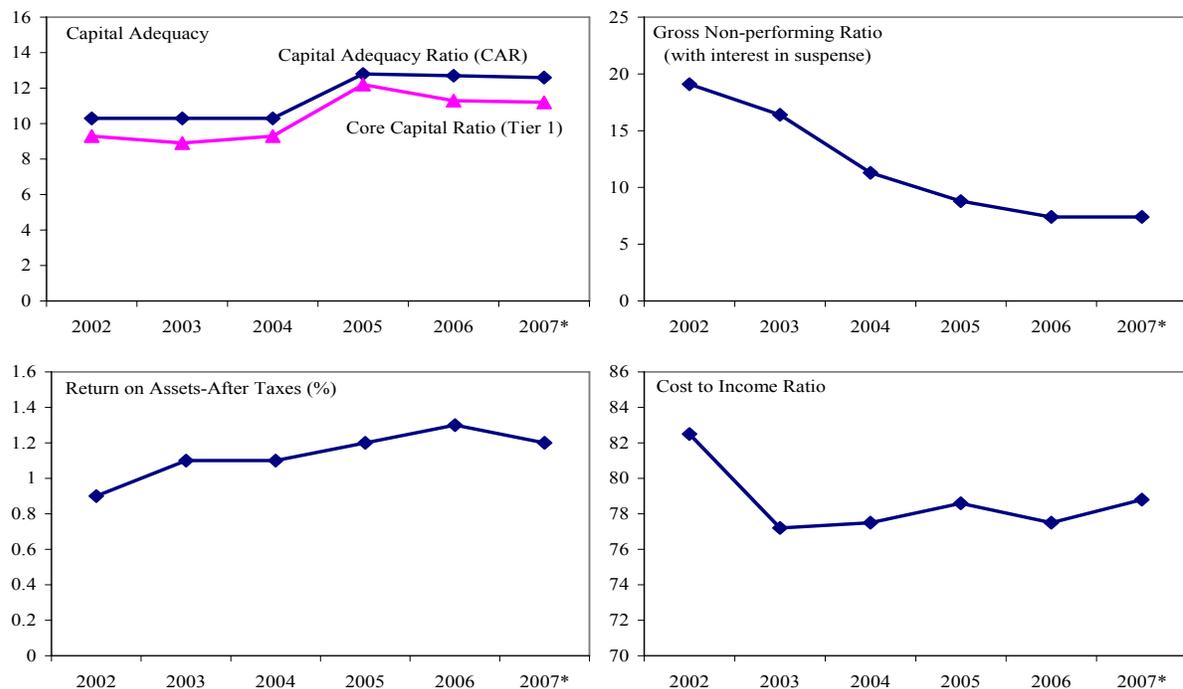
13. **Despite a challenging macroeconomic environment, the banking system financial performance has improved.** Key financial soundness indicators (capital, asset quality, and profitability) improved steadily in recent years (Figure 3). Most commercial banks continued to maintain capital in excess of minimum statutory capital adequacy requirement (CAR) of 10 percent in 2006 with the exception of one private bank and one major state-owned bank.<sup>1</sup> However, 11 LCBs and two LSBs have not yet met the new (higher) minimum capital

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<sup>1</sup> By not requiring provisioning against off-balance sheet items and loans overdue between three to six months, capital remains somewhat overstated.

requirements introduced in 2005, and have been given until 2009 to do so. The gross NPL ratio fell by more than half since 2002, due to improved credit risk management and supervision, though rapid credit expansion in recent years has also contributed. Recent data, however, suggests some reversal, with NPLs rising in the first half of 2007. Provisioning cover has also increased from 50 percent in 2002 to 67 percent in 2006, before falling to 63 percent in June 2007.

**Figure 3. Sri Lanka Selected Financial Soundness Indicators for LCBs**

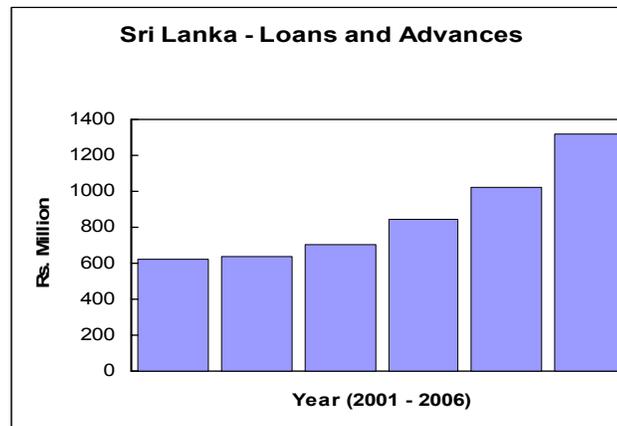


Source: Central Bank of Sri Lanka  
NB: Data for 2007 is as of end-June, provisional.

14. **The rapid increase in credit growth in recent years suggests growing credit risk (Figure 4).** Credit has grown by around 25 percent over 2005 (compared to a trend growth of 15 percent), led by a 40 percent increase in consumer credit (including housing and credit cards). The experience in other countries illustrates the danger that banks may relax underwriting standards to meet rising demand for consumer credit, and the recent uptick in

NPLs suggests this may be an issue in Sri Lanka.<sup>2</sup> In a welcome step, the CBSL has responded by introducing a general provisioning requirement of 1 percent and by increasing risk weights for consumer lending. Moreover, systemic concerns are mitigated by the fact that credit to the private sector is still a relatively modest 35 percent of GDP and provisioning coverage has increased. The authorities could consider further strengthening of provisioning by introducing specific provisioning for the “watch” category of three to six months overdue loans.

**Figure 4. Sri Lanka: Credit Growth (2001–2006)**



Source: Central Bank of Sri Lanka.

15. **The recent tightening of monetary policy to combat inflation could also weigh on the financial sector.** A higher interest rate environment is likely to adversely affect the profitability of finance companies and banks with largely fixed-rate assets. Banks have so far managed to mitigate this by demanding increased spreads between deposit and lending rates. Liquidity management is also likely to be a growing challenge, given the rapid credit growth in recent years—the loan-to-deposit ratio for the banking system has increased from 80 percent at end-2003 to 94 percent at end-2006, but the increase has been especially rapid among smaller private banks that have increased their reliance on less stable interbank borrowings to fund asset growth.

<sup>2</sup> For LCBs, gross NPLs leveled off at 7.4 percent, net NPLs increased from 1.8 percent to 2.0 percent, and provisioning coverage fell from 67 percent to 63 percent between December 2006 and June 2007 (data for 2007 is provisional).

**16. Notwithstanding the widening current account deficit and the depreciation of the exchange rate, the exposure of the banking system to foreign-currency risks is limited.**

Stringent open-position limits preclude any direct currency risk, but the increase in the short-term foreign currency liabilities of the government that have been financed largely through the banking system may expose banks to default risk, given the bunching in their maturities. In addition, given the rigidities in the domestic interbank market and the recent volatility in international markets, banks could face funding liquidity risks arising from their short-term foreign currency maturity mismatches between the sources and uses of funds. However, this risk is mitigated in part by the large component of nonresident Sri Lankan deposits, which have tended to be stable through earlier stress periods. While no data was available to examine currency-induced credit risk, recipients of foreign currency bank loans are typically exchange-earning corporates or state-owned enterprises.

**17. Stress tests suggest that banks are less vulnerable to asset quality shocks than they were in 2002, but are more vulnerable to liquidity and interest rate shocks (Appendix IV).**

The increased resilience to asset-quality shocks reflects the decreased level of NPLs, the increased loan-loss provisioning and recovery efforts, as well as enhanced supervisory focus. However, limits on large exposures are relatively lax, which leaves the banks more vulnerable to credit concentration risk and to defaults by their largest borrowers. The sensitivity tests confirmed that banks are relatively resilient to direct effects of exchange rate shocks, but banks representing more than half of banking system assets were more vulnerable to changes in interest rates. Banks' liquidity positions were also not able to withstand standard shocks to deposits when assumptions regarding market discounts on liquid assets are introduced. These results underscore the BCP assessment (Appendix I), which calls for a stronger risk-management framework for banks and expediting the move to risk-focused supervision.

**18. Weaknesses among the state-owned commercial banks impact on the performance and soundness of the overall banking system.**

The government has dropped earlier plans to privatize the banks and, instead, has opted for operational and financial restructuring, which has yielded some improvements over the past three years. The negative net worth of one large bank has turned around and it now reflects a positive, albeit low, CAR. Provisioning cover has also improved markedly to 85 percent. However, much more needs to be done. The overhead expenses of the state-owned LCBs (Figure 4) driven by high personnel costs—both for salaries and pensions—continue to weigh heavily, reflecting difficult relations with the labor unions. Management and governance of these enterprises also suffers from frequent changes in board membership and gaps in expertise in finance and risk management. The lack of operational autonomy has also meant that, **at times, banks' exposure** to SOEs is in excess of prudent limits and government business is conducted on a noncompetitive basis.

19. **Both CBSL and the government of Sri Lanka (GOSL) are aware of these issues and governance codes are under formulation.** Against this background, while there would seem to be considerable merit in the proposals by the Strategic Enterprises Management Agency (SEMA) in the areas of cost sharing, streamlining of branch and ATM networks, and other strategic alliances aimed at cost reduction, measures to address overstaffing and personnel costs need to go beyond the current strategy of waiting for attrition in numbers over time.

Table 1. Sri Lanka: Licensed Commercial Banks—Key Indicators by Banking Group (2006)

	State	Private	Foreign	All
Market share among LCBs	40.6	45	14.3	100
Capital adequacy ratio	7.3	11	20	12.7
Gross NPL ratio	8.7	7.3	2	7.4
Provisioning cover ratio	85	64.3	71.9	74
ROA (post -tax)	0.9	1.4	2.1	1.3
Cost Income ratio	83.7	77.5	61	77.5
Liquid assets ratio	23.2	18.4	37.2	23.4
Credit deposit ratio	85.6	98.4	102.9	92.8

Source: Central Bank of Sri Lanka.

20. **Addressing the capital deficiency of the large state bank and improving the legal framework for debt recovery emerge as key policy priorities.** Capital adequacy is the pre-eminent anchor of banking regulation, and the continued inability of a key bank representing a quarter of LCB assets to maintain this undermines both the credibility of banking supervision and the soundness of the banking system. It suggests regulatory forbearance and clouds the existence of a level playing field among banks. As the owner, the government should recapitalize the bank at the earliest, and restrict growth in risk-weighted assets till this is done. If the government's contribution is not forthcoming, and privatization has been ruled out, then consideration could be given to divesting part of the government's holdings to the public following the strategy of successful restructuring of state-owned banks in other developing countries. Employee schemes can be designed to provide incentives to employees and overcome entrenched resistance. This would provide much-needed capital support and, at the same time, bring some degree of market discipline to the SCBs, improve governance standards—including Board oversight—and provide a welcome impetus to the capital markets. In addition, improving the legal framework to hasten bank debt recovery

should be a policy priority. A legislation aimed at setting up an Asset Management Company to acquire and manage the legacy of nonperforming assets has been drafted but has not been passed.

## **Insurance**

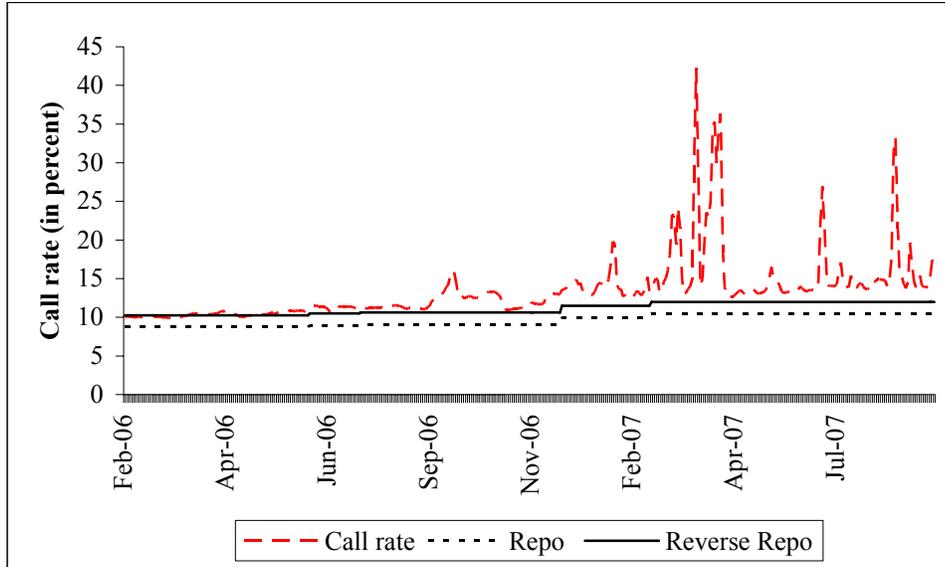
21. **There have been a number of positive developments since 2002, with the pursuit of a market-oriented reform agenda, though some recent developments signal a reversal.** The state-owned insurance companies have been privatized and the Insurance Board of Sri Lanka (IBSL) created as an independent supervisor. Tariff controls in several lines of business, such as fire and motor insurance, have been removed, allowing companies to price the business based on market forces. However, less supportive of market development has been recent legislation requiring insurance companies to place up to 50 percent of their reinsurance business with the National Insurance Trust Fund (NITF). This fund has been created for the purpose of providing health and accident benefits for public servants and operating schemes for the benefit of “needy persons.” Already, the Strike, Riot, Civil Commotion and Terrorism Fund (SRCCTF), which was set up to underwrite these other special risks has been transferred to the NITF, and transfers made from it to the government. However, this new legislative framework does not provide certainty that the resources previously held in the SRCCTF would be available, and it would be preferable for this reinsurance business to be operated separately from the NITF on a commercial basis and subject to proper actuarial assessment and external scrutiny.

### **III. RISK MITIGATION IN THE FINANCIAL SYSTEM**

#### **A. Systemic Liquidity Management Framework**

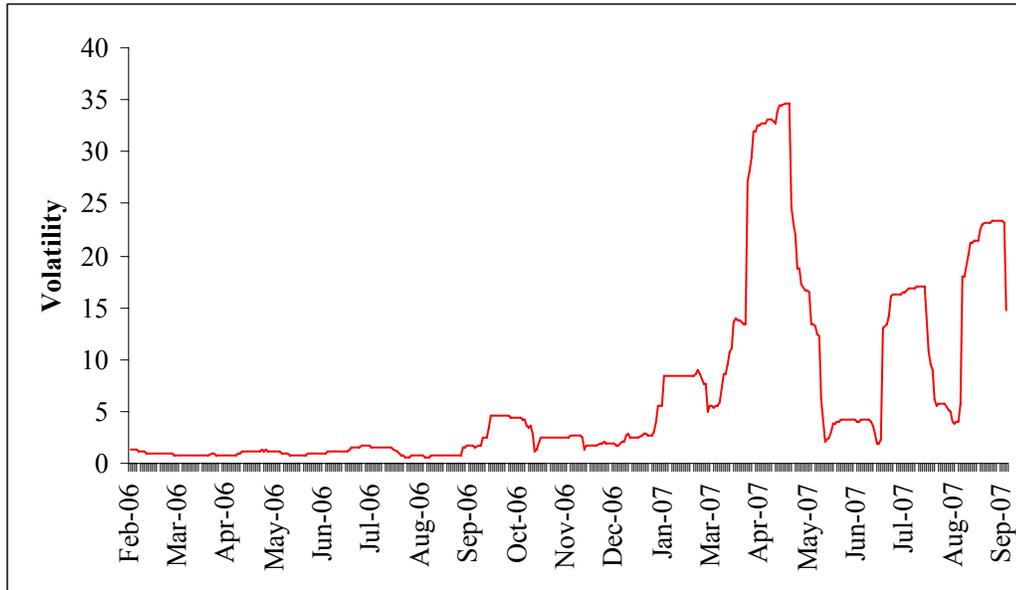
22. **CBSL has the standard set of tools to manage liquidity, including reserve requirements, standing facilities, and open-market operations.** However, recent episodes of volatility may require fine-tuning of these instruments. Overnight interest rate volatility increased significantly since restrictions on the reverse repo facility were introduced in early 2007 (Figure 5). This measure was introduced to contain borrowings by banks to fund asset growth, but the limited room for averaging reserves and limited access to central bank overnight lending has caused banks to keep a large safety margin of liquidity and placed limits on money market activity. Call-money-market rates have been consistently, and sometimes considerably, above reverse repo rates of the CBSL in recent months (Figure 6), undermining the signal value of the policy rate and illustrating the need to better align this rate with market rates. Higher rates and supervisory measures, instead of quantitative restrictions, should be used to deal with repeated access by banks. Over the medium term, to help reduce volatility in the overnight rate, consideration could be given to increasing the length of the averaging period, which is currently one week, and gradually relaxing the daily minimum limit on reserve balances.

**Figure 5. Sri Lanka: Interest Rates**



Source: Central Bank of Sri Lanka.

**Figure 6. Call Market Rate Volatility**



Source: Central Bank of Sri Lanka.

## B. Regulatory and Supervisory Framework

### Banking

23. **Good progress has been made with regard to the framework and capacity for effective banking supervision, though risk management and its supervision needs further strengthening.** Since 2002, the legal framework and prudential regulations have been strengthened and the practice of supervision improved. However, the move from a compliance-based approach to a risk-focused approach is still in its early stages. A framework for overall risk assessment is still evolving and the current practice does not pay enough attention to management and the quality of internal systems and controls. Risk-management systems and processes are unevenly implemented across banks, and supervisory guidance in this regard has yet to be issued. Bank boards are not seen as effective and do not yet play a central role in guiding the risk-management process.

#### Box 1. Basel II Implementation in Sri Lanka

**Banks in Sri Lanka will be required to move to Basel II by January 2008.** For the time being, the approaches allowed will be the standardized approaches to credit risk and market risk, and the basic indicator approach to operational risk. Draft guidelines were issued in March 2006, and draft consultative policy document issued in June 2007. Parallel computations of capital were made in 2006, the results of which suggest that capital ratios remain largely unchanged, as the addition of an operational risk charge is largely balanced by the lower risk weights permitted on certain risk exposures.

**CBSL is following a cautious approach in its implementation of Basel II, and should be prepared to adjust the schedule in keeping with the state of preparedness of banks and the supervisors.** CBSL has taken a prudent approach by not lowering the risk weight on mortgages, given their perception of risks in the local context; it should make a similar determination in the case of exposures to retail sector before finalizing the new framework. With very limited ratings penetration, enhancements in risk sensitivity will be limited under the standardized approach in Pillar I, and, hence, implementing the supervisory review process of Pillar II assumes even greater importance. CBSL is therefore encouraged to develop its thinking on implementing Pillar II in the context of its supervisory practice and legal framework, and share this with the banks well in advance of implementation.

24. **A more forward-looking approach to the supervision of credit risk is warranted in the Sri Lankan context.** Asset quality is subject to risk with banks relying heavily on collateral, at times because of the absence of reliable financial statements for some borrower segments. In addition, the existing loan-loss classification and provisioning regime is based on formulae-based delinquency criteria. The existing large exposure and related-party regime also serves to enhance credit concentration risk in the system. In some cases, the single-borrower limits are unusually large in relation to capital and are not always driven by

safety and soundness considerations. In addition, these limits are not always applied to several major SOEs. As credit concentration is a major source of bank failure, establishing robust and reliable tests of a single exposure are particularly important and the supervisor should be able to determine this on a case-by-case basis, an ability which is presently lacking.

25. **The framework for consolidated supervision also needs to be strengthened to suit the changing landscape of the financial industry.** Banks are permitted to invest in any activity “not inconsistent with the business of banking and the provision of finance,” and banks may own not just financial institutions but also nonfinancial businesses, such as property development companies. A framework for consolidated supervision is still developing, and prudential regulations are not consistently applied on a consolidated basis. Although the CBSL has begun to establish links with other domestic regulators, these are still undeveloped and there remain significant barriers to the exchange of information, which also apply to relations with overseas authorities.

26. **The operational independence of the CBSL as the supervisory agency could be further strengthened to enhance its credibility and assist it in imposing true remedial action.** The participation of the controller of the state banks in supervisory decisions on the banking system through membership of the Monetary Board could limit the ability of the supervisors to enforce compliance, particularly with respect to the state owned banks. This lack of independence and potential conflict of interest could, in turn, affect the supervisors’ relationship with the rest of the market.

#### **AML/CFT**

27. **Progress has been made in the area of Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT), including the enactment of three key laws.** The passage of the legislation and the setting up of the Financial Intelligence Unit (FIU) last year are significant steps in the development of Sri Lanka’s AML/CFT regime. Moving forward, it is important to prioritize the Asia Pacific Group (APG) recommendations and formulate a road map for implementing the recommendations. The importance of allocating sufficient resources to enhance the capacity of FIU and assuring its independence is essential. Also, the knowledge and skills of FIU staff have to be deepened, and training and raising the awareness of licensed institutions and the public must be continued. Enhancing the cooperation of the police and judicial officers would greatly enhance the enforcement of the

AML/CFT regime. The ROSC, prepared by the APG, will be circulated to the Board for information.<sup>3</sup>

### **Microfinance regulation**

28. **A new Microfinance Law on the anvil seeks to bring together the regulation of the diverse micro finance institutions (MFIs).** Some 14,000 providers of microfinance, both formal and informal, are estimated to be operating in Sri Lanka. Participation of private commercial banks in the micro finance sector is minimal, although some banks have begun downscaling. Currently, several ministries are involved in supervising microfinance and a proposed Micro Finance Institutions (MFI) Act seeks to consolidate responsibility for microfinance under CBSL. All MFIs with a capital base greater than an amount to be notified by the Monetary Board (MB) will be required to apply for a license from CBSL, which will also be responsible for supervision. This raises concerns relating to the capacity and reputation risk of CBSL, consequential moral hazard, and regulatory cost on the industry. While an oversight framework for MFIs would provide legal recognition and build capacity of micro credit providers, it is advisable for smaller MFIs to be outside the purview of the CBSL; instead, certification authorities or a self-regulatory organization could be used to certify or register smaller micro credit providers.

### **Insurance**

29. **Considerable strengthening of insurance supervision has taken place, but the efforts to operationalize risk-based methods have been constrained by limited resources.** The Insurance Board of Sri Lanka (IBSL) began operation as a division of the SEC in 2001, and moved out as an independent agency in May 2005. It has taken steps to introduce a modern risk-based supervisory framework with the assistance of a full-time IMF consultant. However, IBSL needs to strengthen its resources to complete the risk assessment of all insurance companies, update the assessments regularly, and use the results to direct supervisory activities. There are currently only two supervision professionals responsible for 15 insurance companies, which undermine the ability of the IBSL to perform effectively.

30. **Solvency rules and reporting arrangements have improved, but a lack of enforcement powers remains.** Solvency rules for life insurance companies have been in place for some time. New solvency rules for nonlife insurance companies became effective in May 2007; the first formal reporting will occur for June Quarter 2007. These rules combined with proposals to increase the minimum capital of insurers for each line of business in 2010

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<sup>3</sup> The APG mutual evaluation on-site visit was conducted during March 2006. The Mutual Evaluation Report was adopted by the APG Plenary on July 5, 2006.

may lead to industry consolidation or the exit by some firms. Amendments to the Act are proposed, which will provide the IBSL with a sufficient range of corrective and remedial powers to deal with industry problems and should be implemented expeditiously. The law does not yet provide for the supervision of offshore activities of insurance companies, although several of the larger insurance companies have overseas operations.

### **Pension and provident funds**

31. **There has been little progress in implementing the 2002 FSAP recommendations, and initiatives to move the public service pension scheme to a funded basis have been reversed.** One key shortfall is the need for the Employees Provident Fund (EPF) to develop a sound, robust, and independent governance structure with the clear objective of seeking the best investment returns for members, while taking into account reasonable levels of risk tolerance and the individual preferences and circumstances of workers. The second is the need to create a strong regulatory framework for the licensing and supervision of approved private provident funds (APPFs).

32. **However, there also remains an overarching need to develop a comprehensive retirement income objective for the pensions sector.** Demographic trends are worrisome, and the current framework assigns too many objectives to the various pension plans. For example, although the EPF, which covers all private sector employees (except those belonging to APPFs) is aimed at encouraging retirement savings, balances can be used as security for housing loans, and it is not uncommon for members to default on these loans. The Employees Trust Fund (ETF), too, is often considered as an employee benefit program rather than a retirement income program. Similarly, the APPFs have multiple objectives and many offer low interest loans to members. There are various other pension arrangements offered, particularly by banks and government bodies (for example, the universities offer a defined benefit scheme). This continues to argue for the 2002 FSAP recommendation to bring the entire gamut of pension arrangements within an independent supervisory framework and establish, as a key objective of government and supervisory policy, the need for pension arrangements to facilitate adequate savings for retirement.

### **Securities**

33. **The SEC is well-resourced, but its capacity needs to be further strengthened.** The effectiveness of the SEC still appears to be hampered by a lack of staff to undertake its duties fully and effectively, and this situation will be exacerbated by the new amendments to the Securities Law. These give the SEC two additional broad areas of responsibility: (i) regulating the five new types of intermediaries (underwriters, clearing houses, portfolio managers, credit rating agencies, and margin providers); and (ii) implementing its enhanced investigative powers.

34. **The governance structure of the SEC could also be strengthened to mitigate concerns about its effectiveness, independence, and neutrality.** The SEC board is composed of ten people, four of whom sit *ex officio* on the Commission, and the other six of whom are appointed by the ministry of finance. The Commission has a quorum of five, is non-executive, and meets once a month. Members of the Board are essentially unpaid. Reducing the number of people sitting on the Commission, and requiring them to operate as full-time paid Commissioners, who give up all their other affiliations on appointment, following the U.S. model, is one approach. Another would be to maintain the current structure but require all decisions of the SEC to be made public (possibly including the votes of individual commissioners).

### C. Safety Nets and Crisis Management

35. **CBSL has prepared itself and the banking system well to deal with operational disruptions caused by disasters.** Plans for disaster recovery and business continuity have been documented, and coordination with local law enforcement and emergency officials has been discussed. Succession arrangements have been drawn up and a back-up site has been created where transactions are backed up in real time and periodic tests are carried out. Guidance has also been issued to banks on business continuity planning and these are commented upon in the course of supervisory discussions. There is, however, no separate exercise or framework for responding to a financial crisis. CBSL would be well served by drawing up procedural and operational guidelines, and the role of the CBSL as the lender of last resort, which is spelled out in the Monetary Act, could be better supported by operational guidelines to facilitate speedy action in the event of such a crisis.

36. **The authorities are encouraged to continue the discussions on introducing a compulsory, funded deposit insurance scheme.** The existing voluntary scheme is not used, and the fact that the one bank to have failed in the past few decades had been bailed out at the behest of the government has created an expectation of a blanket guarantee. There are a high number of small depositors in the system, and introduction of a credible deposit insurance scheme could lessen the moral hazard. Prerequisites, however, will be addressing the issue of initial funding, as well as the legal impediment to paying insured depositors ahead of liquidation. While the authorities are encouraged to continue working on resolving these issues, the introduction of the scheme should be timed when all banks are able to meet regulatory capital requirements, risk-focused supervision has been effectively implemented, and supervisory independence is assured.

## IV. MARKET INFRASTRUCTURE

### A. Payment and Settlement Systems

37. **The Sri Lankan financial market infrastructure has undergone major reforms since 2002.** LankaSettle, the real-time gross settlement system (RTGS), commenced operation in 2003 and LankaSecure, the securities handling system, in 2004. Check imaging and truncation was introduced in 2006 and the National Payments Council is now working on developing a nationwide noncash retail payment system. Discussions are also underway to move the settlement of the cash leg of securities transactions completed at the Colombo Stock Exchange to the central bank's RTGS.

38. **In its initial years, LankaSettle RTGS has proved to be a technically well-functioning and reliable system.** It works well with the logically separate, but technically closely interfaced LankaSecure securities system, allowing securities transactions to be settled in central bank money on a delivery versus payment (DvP) basis. Some issues remain to be addressed to improve the soundness and efficiency of the system. These relate to clarifying legal jurisdiction risks in foreign bank participation; elaborating the rules and procedures for handling abnormal events; documenting RTGS security objectives, policies, and procedures; reviewing the need to further formalize change-management procedures; and conducting regular IT audit of the RTGS system. The CBSL should separately define objectives and fair access criteria for each of the two systems, LankaSettle RTGS and LankaSecure, and make such criteria publicly available.

## V. CAPITAL MARKET DEVELOPMENT<sup>4</sup>

39. **GOSL has taken a number of positive steps in promoting the development of the markets for government securities.** These include the introduction of the RTGS, the Scripless Security Settlement System (SSSS), and the Central Depository System for government securities, as well as the decision to allow foreign investors to invest in a maximum of 5 percent of the total value of T-bonds outstanding. This has resulted in a marked increase in the proportion of marketable government securities to total domestic government debt from about one-half to two-thirds.

40. **The narrow investor base and captive sources of large funds pose significant challenges to debt market development.** The investor base is very limited with the EPF and National Savings Bank (NSB) alone holding 43 percent of government securities. The excessive fragmentations of the T-bonds (there are 52 series) also impede the development of

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<sup>4</sup> These issues are dealt with in more detail in the World Bank's Financial Sector Assessment (FSA) Report.

the benchmark yield curve. Medium-term measures to promote market development should focus on diversifying the investor base by promoting collective investment schemes, gradually further relaxing the restrictions on foreign investors' participation, and developing a medium-term, benchmark-oriented issuance strategy.

41. **The limited investor and issuer base is also an impediment to development of the private securities markets.** Though state-owned institutions play a dominant role in the economy, they do not participate in the capital markets. The investor base of private securities market is also limited for several reasons. The EPF, the ETF, and NSB capture a significant amount of the nation's funds, but these are invested mainly in government securities. The free float of stocks is also limited. The role of these captive sources of government funding, together with the lack of corporate debt supply, implies a very limited space for the development of collective investment schemes, which remain conspicuously absent from the market. Measures to promote development of the private securities markets could focus on exploring new sources of private issuances, for example, securitization of the expanding housing loan portfolios of banks; gradually divesting equity in state-owned enterprises and listing them on the exchange; promoting collective investment schemes to attract retail investors; and permitting the large pension funds to expand their private securities portfolio.

## APPENDIX I. ASSESSMENT OF COMPLIANCE WITH THE BASEL CORE PRINCIPLES FOR EFFECTIVE BANKING SUPERVISION

### Introduction

42. This Basel Core Principles Assessment was carried out from June 18 to July 3, 2007 by Peter Hayward, ex-Bank of England and IMF, and Dr. Jörg Genner of BaFin, the German supervisory authority, on the banking supervision function of the CBSL as part of an FSAP Update undertaken by the IMF and the World Bank. With the agreement of the CBSL, the assessors used the new 2006 methodology issued by the Basel Committee, and it was also agreed that the assessment would be based on the essential criteria, but that comments would be made on the additional criteria where appropriate.

### Information and methodology used for assessment

43. The assessment was carried out on the basis of the legal framework governing the supervision of banks, principally, the Monetary Law (MLA), the Banking Act (BA), as well as Regulations and circulars issued by the CBSL under the Acts, responses to a questionnaire sent to the CBSL before the mission, and a self-assessment prepared in advance of the mission. Where the CBSL plans changes to the requirements these may be reflected in the text but are not taken account of in the assessment which is based on the situation prevailing at the time of the assessment. The assessors met the governor of the CBSL, the deputy governor responsible for supervision, and the Director and staff of the Banking Supervision Department. The assessors also met managements of several commercial banks and external auditors of banks. The assessors are grateful for the generous assistance of all those whom they met without which their work would not have been possible.

### Institutional and macroeconomic setting and market structure—overview

44. **The macroeconomic environment** in which banks operate can be characterized by a large fiscal deficit with consequent financing needs imposed on banks, relatively high inflation, and strong demand for credit, involving higher asset prices, met recently by tighter monetary policy leading to rising interest rates. Further details appear in other FSAP papers.

45. **The banking system** includes 23 Licensed Commercial Banks (LCBs) and 14 Licensed Specialized Banks (LSBs). Of the LCBs, the two largest are state-owned. There are 9 privately owned commercial banks, two of which are much larger than the rest and 12 branches of foreign banks. The LSBs, which are not permitted to take demand deposits or undertake foreign currency business but are otherwise treated similarly to LCBs, and are mostly state owned, have a market share about one fifth of the LCBs. There are also a large number of finance companies which may take savings and time deposits, and leasing companies which must be funded by bank borrowings and debentures.

46. The CBSL is responsible for the, licensing and supervision of all deposit taking institutions except for some very small cooperatives. The CBSL will also be responsible for supervision of microfinance institutions under a new law; several of these have the right to take deposits. LCBs are entitled to operate foreign currency banking units (FCBUs) which have certain exchange control exemptions and some tax advantages. They are now treated as an integral part of the banks for supervisory purposes.

### **Preconditions for effective banking supervision**

47. The Basel Committee has made clear that it is difficult to establish and maintain an effective system of banking supervision unless certain pre-conditions, often beyond the control of a supervisory agency, are met. The main requirements are as follows:

- **Soundness and sustainability of macroeconomic policy.** The Sri Lankan economy has been growing above 6% in the recent past, amidst challenging external and domestic developments. In view of rising inflationary pressures and high fiscal deficits, monetary policy continued to remain tight necessitating interest rates in double digits. Government borrowing from the banking system is high. Taxation of banks is also high with corporate income taxes supplemented by a so-called VAT on financial services; together the effective tax rate is over 50 percent of operating profits.
- **The legal infrastructure is developing but has some significant deficiencies.** The registration of collateral is at a basic level although banks have the power to seize and dispose of real estate collateral without the need for litigation in many cases. The court system tends to favor the rights of individuals so banks' actions are frequently challenged. Accounting and auditing standards for banks are high and will shortly meet international standards in all significant respects. However, the quality of financial statements by borrowers is mixed and banks have a tendency to rely more on collateral than on an assessment of the borrower's future cash flows as a source of repayment. The payments system has been recently modernized and functions well. (See separate assessments on payments and settlements systems.)
- **Effective market discipline.** Banks are subject to substantial disclosure requirements (published quarterly statements in prescribed format, for example) and most private banks are quoted on the Colombo Stock Exchange which imposes further disclosure requirements. Additional disclosure requirements will be imposed with the implementation of Basel II from January 2008.
- **Mechanisms for providing an appropriate level of systemic protection (or public safety net).** There is no compulsory deposit insurance scheme although one is under consideration. There has been little need for any extension of emergency liquidity assistance to date and bank resolution procedures are untested.

## Main findings

48. The main findings of the assessment can be briefly summarized under the following headings:

- **Objectives, independence, powers, transparency, and cooperation (CP1).** The objectives of the CBSL are well laid out but the Monetary Board's independence could be potentially constrained by the presence of the Secretary of the Treasury who acts as shareholder of the two largest banks and is therefore responsible both for appointing members of their boards and approving them as 'fit and proper', not consistent with standards of corporate governance expected by the CBSL of supervised entities. Exchange of information with other supervisory authorities, both domestically and abroad, is inhibited by legal barriers.
- **Licensing and structure (CPs 2–5).** The distinction between licensed banks and certain other categories of institution which can undertake almost all banking functions is beginning to look outdated. Licensing criteria need to be spelt out in more detail for the benefit both of new applicants and also as a guide to licensed banks so they are aware of their continuing obligations if they are to retain the license. The cap on shareholdings in banks provides an incentive to disguise controlling interests and is no substitute for a well designed suitability test.
- **Prudential regulations and requirements, (CPs 6–18).** Credit and market risk-related computations, capital charges, and reporting requirements are in force in Sri Lanka. Risk-weighted capital adequacy requirements are applied on a "solo" basis only, but reported on a "consolidated" basis as well. Capital adequacy ratios and risk weights for certain exposures were increased recently. The CBSL has issued regulations (directions) that set more detailed prudential standards for capital adequacy, large exposures, liquidity, share-ownership, classification of assets and require general provisions. Neither law, nor regulations or directions issued by the CBSL explicitly stipulate general requirements for risk-management processes and procedures dealing with the management of specific risks in greater detail. Determining the efficacy and efficiency of risk management, as well as management oversight, and assessing the risks taken by an institution are an integral part of CBSL's ongoing off-site and on-site supervision. Due to the nature and maturity of the banking market in Sri Lanka, credit risk is the predominant risk. However, interest rate risk is significant and increasing due to rising interest rates and the funding structure. While the CBSL requires that senior management must address all significant internal operations in order to create an effective comprehensive internal control system, and the CBSL has inspection procedures to assess adequacy of banks' internal control systems, the CBSL has not yet issued guidance. A nonmandatory

Corporate Governance Code Sri Lanka has been issued and a mandatory code will be imposed in 2008.

- **Methods of ongoing supervision, (CPs 19–21).** The CBSL performs off-site analysis and on-site inspections. Full-scope on-site inspections are mandatory and their scope is planned as a result of the off-site analysis of regulatory reporting, and carried out using standardized procedures. Inspections cover compliance with prudential regulations and the accuracy of regulatory reporting, as well as the quality of risk management and internal control processes and procedures. Formal and informal contacts with (senior) managements are increasing, although there are no regular meetings with internal audit or risk managers. Measures to enhance the quality of supervision have led to a better understanding of the risks in the supervised banks and the quality of the emerging separate risk-management functions. The CBSL has started shifting its focus from a compliance-based to a more risk-focused supervisory approach.
- **Accounting and disclosure (CP 22).** International accounting standards will shortly be introduced posing problems of consistency with existing prudential rules that are seemingly more objective but do not well reflect actual risks.
- **Remedial measures (CP 23).** A wide range of tools is available although their use can be subject to legal challenge. Implementation in the major state-owned institutions is difficult and problems there have persisted for many years.
- **Consolidated and cross-border banking supervision (CPs 24–25).** The CBSL has legal powers to exercise supervision on a solo basis only. Consolidated capital adequacy ratios are reported by the banks, but prudential requirements are not applied on a consolidated basis although supervisors do have access to information on banks' subsidiaries. Confidentiality provisions inhibit the exchange of information with other relevant supervisors, both domestically and abroad, and hamper the assessment of the risk resulting from limited nonbanking activities of Sri Lankan banking groups. Nevertheless, CBSL is able to perform its supervisory task with regard to the foreign activities of domestic banks and the domestic activities of foreign banks by applying the same regime that is in place for domestic banks.

Table 2. Summary of Compliance with the Basel Core Principles—ROSCs

Core Principle	Comments
1. Objectives, independence, powers, transparency, and cooperation	Deficiencies on independence and exchange of information
1.1 Responsibilities and objectives	Rationale for supervisory distinctions between banks and NBFIs is unclear
1.2 Independence, accountability and transparency	Minister's role as MB member and shareholder could present a conflict of interest
1.3 Legal framework	Supervision covered by two overlapping laws
1.4 Legal powers	Adequate legal authority for supervisors
1.5 Legal protection	CBSL and staff are legally protected
1.6 Cooperation	Confidentiality requirements inhibit exchange of information
2. Permissible activities	No clear distinction between banks and NBFIs
3. Licensing criteria	Guidance needed on detailed criteria
4. Transfer of significant ownership	Cap on shareholdings but no suitability test
5. Major acquisitions	Adequate authority though some gaps exist
6. Capital adequacy	Not all banks comply with requirement
7. Risk-management process	Risk-management processes just developing. Reliance on mechanical formulae. Ineffective identification of significant risk
8. Credit risk	No specific framework, sufficient oversight
9. Problem assets, provisions, and reserves	Provisioning is not forward looking
10. Large exposure limits	Rules are lax and coverage partial
11. Exposure to related parties	Related parties not properly identified. No arms length requirement.
12. Country and transfer risks	Minimal country risk
13. Market risks	No specific framework, sufficient oversight
14. Liquidity risk	No specific framework, sufficient oversight
15. Operational risk	No specific framework, sufficient oversight
16. Interest rate risk in the banking book	No specific framework, sufficient oversight
17. Internal control and audit	No formal guidance
18. Abuse of financial services	New laws in place, practices only partly implemented
19. Supervisory approach	Supervisors understand risk profiles, but risk focus yet to be further developed
20. Supervisory techniques	Mix of supervisory tools used needs to be more risk focused
21. Supervisory reporting	Need to cover subsidiaries and affiliates
22. Accounting and disclosure	IAS to be fully implemented soon
23. Corrective and remedial powers of supervisors	Rehabilitation of state banks still to be completed
24. Consolidated supervision	No powers but limited oversight
25. Home-host relationships	No powers to share information. Some oversight of activities abroad

## Recommended action plan and authorities' response

### *Recommended action plan*

Table 3. Recommended Action Plan to Improve Compliance with the Basel Core Principles

Reference Principle	Recommended Action
Principle 1	Limit conflict of interest in Monetary Board posed by MOF representative's role as shareholder of SCBs. Remove legal barriers for exchange of information.
Principle 3	Publish licensing criteria and guidance on definition of 'fit and proper'.
Principle 4	Broaden the definition of significant ownership to encompass exertion of control, introducing a suitability test.
Principle 6	Ensure that all banks, including state-owned banks are adequately capitalized
Principle 7	Move further from a compliance based to a more risk focused approach. Introduce an explicit legally-binding requirement that banks have proper risk-management processes and procedures and publish supervisory guidance. Incorporate analysis of banks' risk and internal audit reports in off-site analysis.
Principle 10	Broaden the definition of large exposures. Introduce definition of connected group of counterparties that is based upon correlated risks rather than shareholdings. Revise the definition of and reduce the existing limits for large exposure to levels common internationally.
Principle 11	Broaden the definition of related parties to encompass owners and others who exert control. Introduce a requirement for prior unanimous approval for such exposures by the Board. Introduce requirement that exposures to related parties may not be granted under more favorable terms than corresponding exposures to non-related parties.
Principle 14	Introduce reporting of asset and liability maturities by currency.
Principle 20	Reduce heavy reliance on seemingly objective criteria and mechanical formulae. Recognize the necessity for expert judgment and encourage it both in the supervisory framework and culture as well as in the banks' risk management.
Principle 21	Use risk profiles to manage the supervisory process, especially frequency and scope of on-site inspections. Leverage off the internal auditor's and risk management's work.
Principle 22	Assess implications for provisioning of move to IAS 39

Reference Principle	Recommended Action
Principle 23	Keep the MB's legal powers of enforcement under continuous review to ensure especially that the more rarely used powers will continue to be effective and resistant to challenge in the courts.
Principle 24 and 25	Amend the BA to impose prudential standards on a consolidated basis. Empower the supervisor to exchange financial and prudential information with other relevant supervisors. Establish a banking group approach with regard to continuous supervision and on-site inspection.

### *Authorities' response to the assessment*

49. The Central Bank of Sri Lanka broadly agrees with the assessment. It has been in the process of working on implementing several of the issues brought out in the assessment. For example, the integrated risk-management guidelines which are under preparation, draft mandatory code of corporate governance for banks that has already been issued, implementation of Basel II and IAS 32 and 39, and IFRS 7 would address many of the concerns raised in the assessment and improve the overall risk management of banks.

50. With regard to government representation on the Monetary Board of the Central Bank, this arrangement facilitates greater co-operation and co-ordination between government and the Central Bank and does not hinder the Monetary Board's independence, but provides synergic benefits. Further, the secrecy provisions in the law have not hindered information sharing, since the legal provisions allow sharing of information in the performance of duties and such information sharing has taken place whenever the need arose. Moreover, two committees set up by the Central Bank, i.e. the Inter Regulatory Institutional Council (IRIC) at the policy level, and a working group representing all regulators, will provide a forum to discuss issues among the regulators and help facilitate information sharing. The Central Bank is in the process of strengthening the FIU and has taken measures to procure an IT system for on-line data reporting and maintaining a database, provide training for staff and expand the coverage of institutions reporting to FIU. While large exposure limits will be addressed when the Banking Act is amended, it should also be noted that in an economy where bank based funding dominates and capital markets are at a nascent stage, a higher exposure limit is justifiable from an economic point of view provided that concentration risks are managed prudently.

## APPENDIX II. ASSESSMENT OF COMPLIANCE WITH THE CORE PRINCIPLES FOR SYSTEMICALLY IMPORTANT PAYMENT SYSTEMS

### Summary, Key Findings and Recommendations

#### Introduction

51. The Sri Lankan financial market infrastructure has undergone major reforms in recent years. LankaSettle RTGS the real-time gross settlement system commenced operation in 2003 and LankaSecure, the securities handling system, in 2004. During its first years of operation, the LankaSettle RTGS has proved to be a technically well functioning and reliable system. It works well with the logically separate, but technically closely interfaced LankaSecure securities system, allowing securities transactions to be settled in central bank money on a Delivery versus Payment (DvP) basis. There are, however, still a number of issues to be addressed to improve the soundness and efficiency of the system. These relate to clarifying legal jurisdiction risks in foreign bank participation, elaborating the rules and procedures for handling abnormal events, documenting RTGS security objectives, policies and procedures, reviewing the need to further formalize change management procedures, and conducting regular IT audit of the RTGS system.

52. This report summarizes the degree of observance of the LankaSettle RTGS system, which provides real-time gross settlement facilities for transactions in Sri Lanka rupees, with the *Core Principles for Systemically Important Payment Systems (CPSIPS)* and includes recommendations for a range of further improvements.

#### Information and methodology used for assessment

53. The assessment was conducted by Tom Kokkola of the European Central Bank in the context of the joint IMF/World Bank FSAP Update mission which visited Sri Lanka between June 20 and July 3, 2007. The assessment is based on information provided by the CBSL including an assessment of LankaSettle RTGS against the CPSIPS prepared by a Sveriges Riksbank team in February 2005, and other documents and statistics relevant for the assessment. Extensive meetings were held with officials from the CBSL (during which oral information was received on a large range of issues), supplemented by discussions with representatives of three participant banks and LankaClear (Pvt) Ltd. CBSL also provided answers to a questionnaire and a number of documents relevant for the assessment. The G-10 Committee on Payment and Settlement Systems' (CPSS) Report on Core Principles for Systemically Important Payment Systems Part I and II and a World Bank and IMF guidance note were used when assessing the LankaSettle RTGS system. The cooperation of authorities and others is gratefully acknowledged.

#### Institutional and market structure

54. LankaSettle RTGS, owned and operated by the CBSL, represents the backbone of the market infrastructure for payment and securities transactions in Sri Lankan rupees. In

general, a large majority of the overall number of payments in Sri Lanka are paid in cash or with cheque. Noncash payment transactions are processed through one of the following systems:

- The LankaSettle RTGS system, providing facilities for the real-time gross settlement in central bank money of (credit) transfers. The system is primarily designed for high-value payments, although there is no lower (or upper) limit on the value of individual payments. LankaSettle RTGS currently has 34 participants: 23 licensed commercial banks (including 12 foreign banks), 8 non-bank primary dealers, the Central Depository System of the Colombo Stock Exchange, the Employees' Provident Fund and the CBSL.
- LankaClear (Pvt) Ltd. is a Clearing House that operate four different clearing systems for the processing of large volumes of relatively low-value (retail) payments: the Cheque Imaging and Truncation System (CIT) for the electronic processing of truncated cheques; the Sri Lanka Interbank Payment System (SLIPS) for bulk direct debit ("many to one") and direct credit ("one to many") transactions; a Rupee Draft Clearing System, and; a US Dollar Cheque Clearing System. The three former systems settle their net clearing balances in the RTGS system, while balances arising in the U.S. Dollar Cheque Clearing System are settled at a commercial bank.
- Finally, two commercial banks provide settlement services for domestic VISA and MasterCard transactions.

55. Once a valid payment request is submitted to LankaSettle RTGS through the SWIFT FIN Copy service, the system will check whether sufficient funds are available in the correspondent (settlement) account of the ordering bank. If yes, funds are debited in the account of the ordering bank and credited to the account of the receiving bank (as from the moment of debiting, the payment is final). The payment message is then automatically released to the receiving participant. If a payment cannot be settled due to a lack of funds, it will be put in a waiting queue. Once funds become available, queued payments are processed first by priority, then by time of input to the queue.

56. Payment requests can be prioritized by the originating bank. A real-time information management system allows participants, *inter alia*, to continuously monitor their account balance, payments queued and to change the priority of or cancel queued payments.

57. On average 760 daily payments are currently being settled, with some 40 percent representing customer payments. The LankaSettle RTGS day is characterized by two peaks: a morning peak at the time of the opening of the system at 08.00 and an afternoon peak between 1.00 and 3.00 pm. A trough is generally observed between 09.00 and 11.00, reflecting a time-lag between banks opening their systems for receiving customer payments and forwarding them for input to the RTGS system.

58. There is no observable concentration of payment flows to or from particular LankaSettle RTGS participants. In terms of volume of payments initiated, the five most active participants generate 36.07 percent (35.06 percent in terms of value) of total traffic. These figures are very low in an international comparison, implying that the payment flows are more evenly distributed in LankaSettle RTGS than in many other RTGS systems worldwide.

59. A National Payment Council (NPC) was established in 2006, involving a large stakeholder representation. The NPC meets at least six times a year and has received a broad mandate from the CBSL Monetary Board. With a view to improving the payment and settlement system infrastructure and institutional and regulatory framework the CBSL, with the assistance of the NPC, has prepared a Road Map for the four years period 2007-2010.

60. A local SWIFT Service Bureau, the Lanka Financial Service Bureau Ltd. (LFSB), is being established to provide, by end 2007, a common connectivity point for LankaSettle participants' secondary sites to communicate with the CBSL using the SWIFT network. This is an important point in business continuity arrangements. The LFSB will be operated as an independent legal entity and owners will be the SWIFT users in Sri Lanka. Its objective is to establish a more economical and safer SWIFT connectivity infrastructure, manageable by its users in Sri Lanka.

### **Main findings**

61. While the LankaSettle RTGS has proved to be generally a technically well functioning system, the mission's assessment points to opportunities for further improvements in a range of areas to ensure full adherence to the Core Principles.

62. **Legal foundation (CP I).** While there is a sound legal basis for the system, since about one third of all RTGS participants are branches of foreign banks, even though some protective regulatory measures have been taken, it is not fully excluded that the system and its participants are exposed to conflict of law risk. To address this issue, foreign participants should be requested to provide independent legal country opinions for the jurisdictions concerned. The CBSL should also consider maintaining regular contacts with the supervisory authorities of the different foreign participants' home countries.

63. **Understanding and management of risks (CPs II-III).** As the LankaSettle RTGS is a real-time gross settlement system with central bank money as settlement asset, credit risk does not arise for participants in the system. The CBSL is subject to credit risk to the extent it provides credit to participants, however this risk is mitigated by the CBSL requiring collateral (to which haircuts are applied) for any credit provided. As a result, the main risks to which participants are exposed are legal risk, operational risk and liquidity risk.

64. The RTGS system has worked well so far. To ensure an orderly handling of any unexpected events in future, the system rules and procedures should be further elaborated as

regards the handling of abnormal situations, including the exercise of the wide discretionary powers available to the CBSL (which should preferably be omitted).

65. Enabling an efficient and flexible liquidity management by the participants is important in view of reaping the full benefit for the financial system of RTGS processing. There are currently issues pointing to rigidities in liquidity and, as a consequence, the system appears to not be used to its full potential. There is hesitation among participants to transact with same day value after the closing of the call money market at around 9.00 am. Thus, it will be important for the CBSL to address liquidity and possible other barriers to a smooth functioning of the RTGS and increased financial markets activities, and also improved services for customers across the national economy. In this context, a key point for consideration is the allowance for more flexibility in the maintenance of required reserves.

66. **Settlement (CPs IV-VI).** Individual payments are settled on a real-time gross basis, in central bank money, in the LankaSettle RTGS. Any payment that cannot be settled due to a lack of funds is put in a waiting queue. Once funds become available, queued payments are processed first by priority, then by time of input to the queue.

67. **Security and operational reliability and contingency arrangements (CP VII).** The LankaSettle RTGS is a stable and reliable system with a good track record as regards availability. In relation to security, operational reliability and contingency arrangements, there are several improvements at the margin that could be made by further refining and formalizing the system rules and procedures.

68. Good practices foresee that a system like the RTGS is subject to regular audit and the CBSL should require regular security audits of the system to be made, end-to-end, by well-qualified external experts. Furthermore, RTGS operational staff resources are very limited and do not really allow for unexpected unavailability of individuals.

69. **Efficiency and practicality of the system (CP VIII).** As regards practicality for users and efficiency for the economy of the system, it appears that the system does not yet serve to its full potential the financial markets and the economy at large. The liquidity issues mentioned above are of key importance in this context. The CBSL should investigate whether and to what extent cumbersome procedures impact the use of intraday credit facility (ILF).

70. **Criteria for participation (CP IX).** Access rules to payment and securities settlement systems represent an important element in the overall safety and efficiency management of such systems. They provide potential participants advance information, besides on technical matters, on type and regulatory arrangements for the institutions they would face as a participant in the system. LankaSettle access rules are not publicly available and they currently leave the CBSL a large degree of discretion to decide on eligibility for participation. In addition, while being distinct systems, access is now bundled for LankaSettle RTGS and LankaSecure. The mission invites the CBSL to clearly define

separate full access criteria for each of the two systems and to make such criteria publicly available.

71. **Governance of the payment system (CP X).** While external governance is good, there appear to be room for improvement as regards internal governance arrangements. Due to existing distribution of responsibilities, internal governance arrangements for LankaSettle as a whole are unclear. While functions and procedures might exist, they have often not been formalized. Clarity and transparency in governance arrangements could be enhanced by de-linking LankaSettle RTGS and LankaSecure in view of having two distinct systems, with their respective independent system rules and governance arrangements.

72. **Central Bank responsibilities in applying the CPSIPS.** The CBSL itself has so far not made any own assessment of the compliance of the RTGS with the Core Principles. Many of the shortcomings identified in this assessment had already been identified in the assessment delivered about two and a half years ago by the Sveriges Riksbank team. However, while action has been taken on a few points, there has been no systematic follow-up to address outstanding issues. Moreover, in not requiring independent legal country opinions, the CBSL also does not maintain regular contacts with the home country supervisors of the 12 foreign banks that participate in LankaSettle RTGS. This must be addressed, since it is likely to make more difficult the management of any liquidity or solvency problem with one of those banks.

73. Furthermore, while the mission's assessment points to observance of a Core Principle or central bank responsibility, attention should be paid to the following issues:

- To clarify the CBSL independent authority on payment and settlement issues, if and when the Payment and Settlement System Act No.28 of 2005 is amended, it should be proposed to amend the law so that all references to the Ministry of Finance are changed to refer to the CBSL.
- The Monetary Board of the CBSL should usefully formally adopt the CPSS Core Principles and the CPSS/IOSCO Recommendations as the applicable oversight standards. At the same time it should be clarified which and in which way Core Principles and Recommendations apply to the low-value (retail) payment systems of system-wide importance. Such information should subsequently be made public.
- The CBSL is encouraged to continue its efforts in oversight capacity building in view of also subjecting external systems to assessments against the relevant oversight standards applied by the CBSL to the respective system.

Table 4. Summary of Observance of the CPSIPS and Central Bank Responsibilities in Applying the CPs

Core Principle/Responsibility	Comments
<b>Legal foundation</b>	
CP I – The system should have a well-founded legal basis under all relevant jurisdictions	12 RTGS participants are branches of foreign banks, and even though some protective regulatory measures have been taken, expose the system and its participants to conflict of law risk.
<b>Understand and management of risks</b>	
CP II – The system’s rules and procedures should enable participants to have a clear understanding of the system’s impact on each of the financial risks they incur through participation in it.	System rules and procedures do not fully cover the handling of abnormal situations and leave excessive discretionary powers to the CBSL.
CP III – The system should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks.	Consolidated up-to-date system rules to be released. Substantial rigidities in liquidity markets inhibit the system from being used to its full potential.
<b>Settlement</b>	
CP IV – The system should provide prompt final settlement on the day of value, preferably during the day and at a minimum at the end of the day.	The system provides for real-time gross settlement.
CP V – A system in which multilateral netting takes place should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single settlement obligation	Not applicable.
CP VI – Assets used for settlement should preferably be a claim on the central bank; where other assets are used, they should carry little or no credit risk and little or no liquidity risk.	Transactions are settled in central bank money.
<b>Operational reliability and efficiency</b>	
CP VII – The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing	The RTGS is a stable and reliable system with a good track record as regards availability. IT audit not conducted for some time.
CP VIII – The system should provide a means of making payments, which is practical for its users and efficient for the economy.	Current users satisfied. The system will serve to its full potential when liquidity issues are addressed and secondary market trading in public debt securities develops.

Core Principle/Responsibility	Comments
<b>Access and governance</b>	
CP IX – The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.	Access rules are bundled for LankaSettle RTGS and LankaSecure and are not publicly available.
CP X – The system’s governance arrangements should be effective, accountable and transparent.	Bundling of the two distinct systems contributes to lack of clarity in internal governance arrangements.
<b>Central bank responsibilities</b>	
Responsibility A – The central bank should define clearly its payment system objectives and should disclose publicly its role and major policies with respect to systemically important payment systems.	The CBSL has clearly spelled out its payment systems objectives and made them public.
Responsibility B – The central bank should ensure that the systems it operates comply with the core principles	CBSL has attempted to implement a system compliant with Core Principles and had undergone assessment from external sources earlier.
Responsibility C – The central bank should oversee observance with the core principles by systems it does not operate and it should have the ability to carry out this oversight.	External systems are clearly subject to oversight by CBSL.
Responsibility D – The central bank, in promoting payment system safety and efficiency through the core principles, should cooperate with other central banks and with any other relevant domestic or foreign authorities.	CBSL does not maintain regular contacts with the home country supervisors of the 12 foreign banks.

## Recommended actions and authorities' response

### *Recommended action plan*

Table 5. Recommended Actions to Improve Observance of CPSS Core Principles and Central Bank Responsibilities in Applying the CPs—LankaSettle RTGS

<i>Reference principle</i>	<i>Recommended action</i>
<b>Legal foundation</b>	Foreign participants, both new and existing ones, should be requested to provide independent legal country opinions for the jurisdictions concerned so as to identify any risk for conflict of law.
<b>Understanding and management of risks</b>	<p>To ensure an orderly handling and advance awareness by all parties concerned, the system rules and procedures should be further elaborated as regards both the handling of abnormal situations and the exercise of the wide discretionary powers available to the CBSL – the latter should preferably be removed.</p> <p>The CBSL should from time to time release new sets of complete and updated system rules (and possibly make them available on-line for participants).</p> <p>Address liquidity and possible other barriers to a smooth functioning of the RTGS and increased financial markets activities. In this context, consider allowing for more flexibility in the maintenance of required reserves.</p>
<b>Settlement</b>	--
<b>Security and operational reliability, and contingency arrangements</b>	<p>RTGS security objectives, policies and procedures, change management procedures, and a comprehensive documentation on internal operational rules and procedures should be further elaborated or created, documented and formalized.</p> <p>Conduct regular audit of the RTGS system and engage external IT-audit expertise.</p>
<b>Efficiency and practicality of the system</b>	<p>Investigate whether and to what extent cumbersome procedures affects the usage of the ILF facility.</p> <p>See also recommendation on liquidity above.</p>
<b>Criteria for participation</b>	Define separate sets of objective and fair access criteria for each of the two systems, LankaSettle RTGS and LankaSecure, and make such criteria publicly available.

<i>Reference principle</i>	<i>Recommended action</i>
<b>Governance of the payment system</b>	Consider de-linking LankaSettle RTGS and LankaSecure with a view to having two distinct systems, with their respective independent system rules and governance arrangements. Further clarify and formalize system ownership, responsibility allocation and procedures (including the relevant documentation).
<b>Central Bank Responsibilities in applying the CPs</b>	Responsibility A: Responsibility B: Set up a plan, with key milestones, for addressing the recommendations made in this assessment. Responsibility C: Responsibility D: Maintain regular contacts with the home country supervisors of each of the foreign banks in the system.

### **Authorities response to the assessment**

74. **CBSL broadly agrees with the assessment and notes to implement the recommendations that are practical and relevant to the Sri Lankan financial market conditions.** Some specific observations on the assessment are as follows:

75. CP I. Foreign participants are the local branches of the foreign commercial banks incorporated outside Sri Lanka. Under Sri Lankan law, the licensing requirement for these participants is recognized in the Banking Act No. 30 of 1988. Under Section 3 (1) (c) (i) of the Banking act, a written undertaking supported by a resolution of the board of Directors of a foreign bank (a company or a body corporate incorporated outside Sri Lanka) is submitted to the Monetary Board, stating that they shall on demand by the central bank provide such funds as may be necessary to meet all obligations incurred in or in connection with, its business in Sri Lanka. (Vide annexed Section 3(1) (c) (i) of the Banking Act No. 30 of 1988, as amended.) Accordingly, maximum legal protection against any legal risk is provided. In further support of the above and to fulfill all payment and settlement transactions, agreements (Mandate, Accession, RTGS, Repo and reverse Repo agreements etc.) and contracts are in place between the Regulator and the participant commercial Bank, be it local or foreign.

76. CP II. CBSL would release new sets of complete and updated system rules at the beginning of each year and the hard copies will be circulated among each participant institution. The soft copies would be available for public scrutiny on the CBSL website. With regard to handling of abnormal situations, the CBSL would strive to be more precise in describing the handling abnormal situations such as participant exclusions, sanctions or suspension, business continuity and handling of situations such as a failure of a Dealer Direct

Participant (DDP) and transferring of liabilities of a DDP at the forthcoming update of the System Rules which is envisaged for January 2008.

77. CP III. CBSL has taken number of measures to address issues relating to liquidity management of LankaSettle participants. Participants can obtain (free of charge) or repay at any time during the day the Intraday Liquidity Facility (ILF) (without any restriction on the number of instances or the amount). Participants can obtain ILF at the beginning of the day and repay ILF at the end of the day without even communicating with the CBSL, since the process is fully automated. The process involved in obtaining/repaying ILF is similar to that of a DvP transaction.

78. Though the call market is more active during the first two hours, there is no restriction preventing banks dealing in call money transactions during the day until the RTGS system is open for payment and settlements. Standing facility is open until 1500 hours of each day leaving sufficient time and facilitating for banks to meet customers' requirements through banking system. Therefore, the current operational framework would not affect participants much in meeting customer requirements.

79. CP VII. Each department engaged in operational tasks—Payment and Settlement, Public Debt and Information Technology has internal operational manuals. CBSL would incorporate these and prepare a comprehensive single document common for the RTGS and SSS system. Currently the Public Debt Department is in the process of further elaborating the operational manual for the SSS. The change management procedure is documented for both systems RTGS/SSS as a common procedure and this will be reviewed to accommodate any changes if required.

80. CP VIII. When considering the current level of development, the LankaSettle System serves well its users, financial markets and the economy. It also has the potential to serve future needs of the stakeholders and the economy. There is no clear relevance between the liquidity issues mentioned under CP III and the observance of CP VIII.

81. CP IX. Considering the level of development and the nature of financial systems in Sri Lanka, CBSL wishes to have discretion to decide on the eligibility of participation. The rationale is to minimizing risks to the payment system in particular and financial system in general, as the RTGS system has been in operation only for a short period from 2004. Primary Dealers require an RTGS account to enable DvP settlements of security transactions. For RTGS participants a SSS account is given to facilitate ILF, which is required for the smooth clearing and settlement of transactions and to avoid gridlock due to possible liquidity shortages.

82. CP X. RTGS and LankaSecure are operating as two independent systems. RTGS is operated by Payments and Settlements Department (PSD). LankaSecure is operated by

Public Debt Department (PDD). Each department's work is supervised by the different Assistant Governors and Deputy Governors. Therefore, governance arrangements are clearly separated. But in terms of technical infrastructure both systems are closely linked to minimize risks and increase efficiency. As the two systems are operated in an integrated manner, operators of both systems work in a coordinated manner.

83. However, the IT Department, with the assistance of the Payments and Settlements Department, will prepare an escalation procedure with clearly defined responsibilities. This will be in addition to the RSOG, operations group responsibilities that are already documented and shared with WB/IMF FSAP mission.

84. It is possible to maintain independent system rules and governance arrangements for the two systems. However, in terms of operations, it is not possible or beneficial to de-link the two systems. Transactions relating to the new issues of government securities and to the secondary market of the government securities are settled through SSSS. Whenever a transaction takes place securities will be transferred from one account to another in the form of an electronic data entry as instructed by the participants involved. The corresponding fund transfers will take place through the Real Time Gross Settlement (RTGS) System. The settlements of securities through SSS and funds through RTGS will be confirmed electronically to the participants involved. These transactions take place in real time and on the concept of Delivery vs. Payment (DvP). The Central Bank's Intra day Liquidity Facility is also given on the concept of DvP basis. Since these two systems are linked, it facilitates DvP transactions on real time basis.

### **Central Bank Responsibilities in applying the CPSIPS**

85. Responsibility B – CBSL has implemented the Sveriges Riksbank team's recommendations, which are practical to the Sri Lankan financial market conditions.

<b>APPENDIX III. IMPLEMENTATION STATUS OF FSAP 2002 RECOMMENDATIONS</b>	
<b>Banking System Restructuring</b>	
Restructure State Banks	The original proposal to privatize People's Bank (PB) and Bank of Ceylon (BC) has been abandoned, and implementation of restructuring plans has been slow. Main remaining issues include the large stock of bad debts, inadequate IT, and overstaffing.
Improve the capital position and management of private domestic banks	CBSL has enforced the regulatory CAR, introduced market risk capital charge and increased minimum capital requirements for all banks. CBSL is also planning to introduce mandatory corporate governance standards for banks.
Promote the consolidation of the banking system	The pace of consolidation has been slow. Acquisitions are inhibited by the limit on bank shareholdings, while mergers have faced resistance by unions.
<b>Regulatory and Supervisory Framework</b>	
Upgrade and modernize financial regulation and supervision	Several prudential requirements based on international standards have been issued. The process of introducing a risk-based approach for supervision has just begun, integrated risk-management guidance is being prepared and the development of a consolidated supervision framework is in its embryonic stages. A web-based reporting system has been developed to improve continuous surveillance.
Improve coordination among financial supervisory bodies	An Inter-Regulatory Institutions Council was established earlier this year to promote cooperation and information sharing among domestic agencies. A working group for financial sector regulators was also established to monitor the systemic risk of financial conglomerates. CBSL has signed MOUs with the SEC and IBSL as well as appointed a Deputy Governor to the Boards of these institutions. However, the need to remove legal barriers preventing the exchange of information has not been addressed, thus significantly hampering coordination efforts.
Devise framework for problem bank management, including taking prompt corrective action to deal with weak banks.	Amendments to the Monetary Law Act were introduced in 2002 which included liquidation procedures for specialized banks. A first draft of new banking and central banking laws were prepared with Fund/ Bank assistance in 2003 which among other things covered a regulatory response policy on banking problems.

<p>Do not introduce deposit insurance until preconditions for effective banking supervision are in place.</p>	<p>A Deposit Insurance Scheme was introduced in 1987, but the scheme remains voluntary and seldom used. In 2004, the central bank approved a more extensive scheme, but it is yet to be implemented due to a reluctance to commit the initial funds needed before the scheme can be financed exclusively by the premium. The larger banks are also reluctant to participate until risk-based contribution is introduced.</p>
<p>Define price and financial stability as primary objectives of the Central Bank of Sri Lanka.</p>	<p>Implemented by amending the Monetary Law Act No. 58 of 1949 in December 2002.</p>
<p>Advance the modernization of the legal and accounting framework.</p>	<p>The Payments and Settlement Systems Act, Electronic Transactions Act, Payment Devices Frauds Act, the New Companies Act, and legislation pertaining to Anti-Money Laundering, Terrorist Financing and Financial Transactions Reporting have been enacted. The Monetary Law Act and Banking Act have been amended in 2005/06, though the need to have more streamlined, modern, and comprehensive laws remain. In accounting, CBSL is planning to introduce key internationally accepted accounting and reporting standards. CBSL's own accounts are audited by an international auditing firm in line with IAS and IFRS, and there have been no qualified audits in the past two years.</p>
<p style="text-align: center;"><b>Development of Nonbank Financial Sector</b></p>	
<p>Enhance primary securities market efficiency and secondary market liquidity.</p>	<p>The inter-bank call market, the secondary market for treasury bills and bonds, and the central bank's Repo and Reverse Repo windows have been introduced and developed. However, direct administrative controls - such as the restriction of Reverse Repo facility and the government's exclusive use of state-owned banks to manage its liquidity needs - are not transparent, restricting private commercial banks' ability to effectively manage their liquidity. Policy signaling is also weak.</p>
<p>Restructure and modernize insurance and provident sectors.</p>	<p>The insurance sector has been privatized. In line with the policy focus of promoting strong financial institutions, the capital requirements for insurance companies were revised in 2005. However, the pension reform process has stalled.</p>
<p>Promote access to financial services by Small and Medium Enterprises (SMEs) and low-income groups.</p>	<p>Commercial banks have established links with Sri Lanka Post to increase their outreach to rural areas for remittances, credit delivery, and credit payment. The rural development banks have improved their financial viability for long term sustainability. A legal framework has been proposed under the MFI Act for supervision of micro finance institutions.</p>
<p>Finalize AML law after revising draft law.</p>	<p>Several steps have been taken to adopt the Financial Action Task Force recommendations, including the promulgation of the Convention on the Suppression of Terrorist Financing Act, the Prevention of Money Laundering Act, and the Financial Transaction Reporting Act. In addition, the FIU has been established within the CBSL.</p>

Table 6. Sri Lanka Structure of Financial System

	02-Dec			04-Dec			06-Dec					
	Number	Assets Rs. Bn	% of Total Assets	% of GDP	Number	Assets Rs. Bn	% of Total Assets	% of GDP	Number	Assets Rs. Bn	% of Total Assets	% of GDP
Banking System	.....	1,175.1	66.0	74.1	36	1,536.5	64.7	75.7	37	2,216.6	67.2	79.1
Commercial Banks	23	930.5	52.3	58.7	22	1,219.8	51.4	60.1	23	1,851.2	56.1	66.1
State	2	456.5	25.6	28.8	2	526.5	22.2	25.9	2	752.3	22.8	26.8
Private	9	352.0	19.8	22.2	9	523.2	22.0	25.8	9	833.7	25.3	29.8
Foreign	10	122.0	6.9	7.7	11	170.1	7.2	8.4	11	265.2	8.0	9.5
Specialized	.....	244.6	13.7	15.4	14	316.7	13.3	15.6	14	365.4	11.1	13.0
Institutional Investors	.....	464.1	26.1	29.3	.....	612.4	25.8	30.2	.....	784.2	23.8	28.0
Private Provident Funds	.....	79.6	4.5	5.0	.....	104.8	4.4	5.2	.....	112.6	3.4	4.0
Employees Provident Fund	.....	296.9	16.7	18.7	.....	379.4	16.0	18.7	.....	492.1	14.9	17.6
Employees Trust Fund	.....	40.9	2.3	2.6	.....	51.8	2.2	2.6	.....	66.8	2.0	2.4
Insurance Institutions	11	42.3	2.4	2.7	15	72.2	3.0	3.6	13	107.3	3.3	3.8
Unit Trusts	13	4.4	0.2	0.3	13	4.2	0.2	0.2	.....	5.4	0.2	0.2
Non Banking Financial Institutions	.....	141.5	7.9	8.9	.....	224.2	9.4	11.0	.....	296.2	9.0	10.6
Finance Companies	25	40.7	2.3	2.6	28	66.2	2.8	3.3	29	113.1	3.4	4.0
Leasing Companies	.....	16.4	0.9	1.0	.....	34.4	1.4	1.7	72	66.8	2.0	2.4
Merchant Banks	12	13.5	0.8	0.9	10	21.0	0.9	1.0	10	31.3	0.9	1.1
Venture Capital Companies	7	2.5	0.1	0.2	.....	1.5	0.1	0.1	5	1.4	0.0	0.0
Primary Dealers	.....	40.1	2.3	2.5	.....	61.4	2.6	3.0	.....	50.9	1.5	1.8
Co-operative Rural Banks	.....	23.5	1.3	1.5	.....	33.5	1.4	1.7	.....	27.8	0.8	1.0
Thrift and Credit Co-ops	.....	4.8	0.3	0.3	.....	6.2	0.3	0.3	.....	4.9	0.1	0.2
Total Financial System 1/	.....	1,780.7	100.0	112.4	.....	2373.1	100.0	116.9	.....	3,297.0	100.0	117.7
Insurance Premium	n.a.	20.3	.....	1.3	n.a.	29.6	.....	1.5	n.a.	.....	.....	.....
Life and Retirement	n.a.	8.7	.....	0.5	n.a.	12.5	.....	0.6	n.a.	.....	.....	.....
Nonlife	n.a.	11.6	.....	0.7	n.a.	17.0	.....	0.8	n.a.	.....	.....	.....
Securities market capitalization	n.a.	1,121.3	.....	70.8	n.a.	1538.0	.....	75.8	n.a.	2,310.3	.....	82.5
Domestic Bond Market	n.a.	958.7	.....	60.5	n.a.	1155.9	.....	57.0	n.a.	1,475.5	.....	52.7
Government Debt	n.a.	948.4	.....	59.8	n.a.	1143.4	.....	56.3	n.a.	1,475.5	.....	52.7
Corporate debentures	n.a.	10.3	.....	0.6	n.a.	12.5	.....	0.6	n.a.	.....	.....	.....
Equities Market	n.a.	162.6	.....	10.3	n.a.	382.1	.....	18.8	n.a.	834.8	.....	29.8
<i>Memorandum Items</i>												
GDP (Rs bn)		1,584.8				2,029.4				2,802.0		
GDP (USD bn)		16.4				19.4				26.0		
Exchange Rate to USD (Year End)		96.7				104.6				107.6		

Sources: Sri Lankan authorities; staff estimates and calculations

1/ Does not include CBSL assets

Table 7. Sri Lanka Financial Soundness Indicators 2002–2007  
(All Licensed Commercial Banks)

	<i>(In Percent)</i>					
<b>Indicators</b>	2002	2003	2004	2005	2006	6/2007*
<b>Capital Adequacy</b>	9.3	8.9	9.3	12.2	11.3	11.2
Core Capital Ratio (Tier 1)	10.3	10.3	10.3	12.8	12.7	12.6
Capital Adequacy Ratio (CAR)	93.7	52.3	29.8	16.5	13.1	13.5
Net Nonperforming to Capital Ratio						
<b>Asset Quality</b>						
<b>Gross-Nonperforming Ratio</b>						
With interest in suspense	19.1	16.4	11.3	8.8	7.4	7.4
Without interest in suspense	14.5	12.5	8.9	6.8	5.5	5.4
<b>Net Nonperforming Ratio</b>						
(Net of interest in suspense and loan loss provisions)	7.2	5.1	2.8	1.9	1.8	2.0
Provision Coverage Ratio	50.4	58.7	68.3	72.1	67.2	63.4
<b>Profitability</b>						
Return on Assets (ROA)-Before Tax	1.1	1.4	1.4	1.7	1.8	1.8
Return on Assets (ROA)-After Tax	0.9	1.1	1.1	1.2	1.3	1.2
Return on Equity (ROE)	20.5	21.1	18.3	16.8	17.4	16.5
Cost to Income Ratio	82.5	77.2	77.5	78.6	77.5	78.8
Staff Cost to Operating Expenses	47.4	48.7	46.4	44.4	42.7	42.2
interest Margin	3.2	4.2	4.0	4.1	4.4	4.4
Interest Income to Total Income Ratio	82.4	76.6	75.3	79.9	83.4	85.9
<b>Liquidity Indicators</b>						
<b>Statutory Liquid Asset Ratio</b>						
Domestic Banking Unit Operations (DBU)	33.2	26.1	26.3	24.2	23.9	25.8
Foreign Currency Banking Unit Operations (FCBU)	n.a.	n.a.	35.2	37.3	43.1	39.2
Liquid Assets (Average)/ Total Assets	27.7	21.8	26.6	24.2	23.4	24.2
<b>Assets/ Funding Structure</b>						
Capital Funds	4.7	5.8	5.9	7.2	7.3	7.5
Deposits	74.4	74.0	75.8	71.3	69.4	68.0
Borrowings	13.8	13.8	13.3	16.8	18.6	19.9
Loans and Advances	60.8	58.7	61.7	61.7	64.5	65.1
Investments	20.3	23.3	20.3	17.9	16.6	16.1
Ratio of Credit to Deposits	81.8	79.4	81.4	86.6	92.8	95.8

Source: Central Bank of Sri Lanka

\* Provisional Data

#### Appendix IV. Stress Tests: Methodology and Results

86. **Sensitivity tests were conducted on the main banking institutions to assess their resilience to a variety of potential shocks.** The sample of banking institutions included 12 banks (10 commercial and 2 specialized banks) representing about 91 percent of total assets. The tests were performed on exposures, on a bank-by-bank basis, as of end-2006. Bank solvency was tested against isolated movements in the exchange rate, interest rate, and deterioration in asset quality. Data to test for contagion in banks and for risks in finance companies and leasing companies were not available. The results of the sensitivity tests are presented in Tables 8 and 9 in terms of the impact of the different shocks on the capital adequacy ratio.<sup>5</sup> In addition, bank liquidity was assessed against large deposit withdrawals. The results for the liquidity tests are shown in Table 10 in terms of the impact of different scenario assumptions on the liquidity ratio.

87. **The credit risk sensitivity test examined the changes required in bank's provisioning if a percentage of all debtors in each loan category were reclassified and downgraded by one notch in all banks.**<sup>6</sup> The resulting provisioning shortfall caused a reduction in capital, affecting the CAR and bank solvency. While CARs were affected, only one bank became insolvent in the case of 20 percent reclassification.

88. **To test for credit concentration, two different assumptions were used covering the default of the single largest, and the two and three largest borrower groups (excluding central government<sup>7</sup>) in each bank.** The second and third assumptions had a direct bearing on the CAR; 10 banks representing 86 percent of the banking system were

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<sup>5</sup> Sensitivity tests aim at assessing the banking system vulnerabilities to changes in risk factors individually, unlike macro stress tests, which require a macro model that spells out the joint changes in risk factors given a macro economic scenario. Therefore, limitations to the sensitivity tests include focus on only one risk factor and simplifying operational assumptions, using aggregate data, no feedback effects from banks, and no policy response by authorities to changes in risk factors.

<sup>6</sup> Current loans were downgraded by two notches.

<sup>7</sup> The central government is the single largest exposure of the banking system accounting for more than a quarter of total assets and more than 4 times regulatory capital at end-2006, with state banks in the sample alone having an exposure around 10 times capital. This exposure consisted mainly of securities (70 percent), term loans, overdrafts, and letters of credit that have short-term maturities. If exposure to the SOEs is also taken into account, then this figure is even higher, with some SOEs accounting for two to four times the capital of one state LCB. Therefore, even though the probability of default by the public sector is perceived to be very low, banking system capital remains exposed to fiscal shocks. Conversely, in the case that the state banks in the sample are impacted in the manner discussed in the extreme stress scenarios, the costs of recapitalizing them would range between 1 percent to 2 percent of GDP.

undercapitalized, of which two banks were found to be insolvent. While such a systemic default is an unlikely event, it brings out the concerns raised in the BCP assessment on the large exposure regime.

89. **The exposure to the exchange rate risk was measured by the net open position of individual institutions.** The effects of an appreciation or depreciation in the exchange rate on the CAR were insignificant. However, these marginal effects of a depreciation of the exchange rate do not take into account the indirect effects this could have on a borrower's capacity to repay foreign currency-denominated loans, as borrowers without natural hedges would face a higher exchange rate when acquiring foreign currency to repay loans under adverse economic conditions.

90. **The exposure of the banking system to interest rate risk was assessed using a simplified GAP analysis, which has an effect on net interest income.** The sensitivity tests incorporating increases in short-term interest rates, equivalent to 5 percent and 10 percent changes over a year (corresponding to two- and four-standard deviations over a year in the period 1995–2006), led to a substantial decline in the CAR below the minimum capital requirement in some important banks, as there existed large maturity mismatches between assets and liabilities in these institutions.<sup>8</sup> Indeed, two institutions became insolvent as their CAR fell below zero.

91. **The liquidity sensitivity test relied on identifying sources and uses of funds under the assumption of increased likelihood of deposits and other funds being withdrawn and assets becoming illiquid.** The banking system coped well with three scenarios in which 10 percent and 20 percent of total deposits and all nonresident deposits, respectively, were withdrawn, assuming that all liquid assets were immediately available to meet the deposit withdrawal. However, when the assumptions are adjusted to incorporate limited availability and discounts on certain instruments considered liquid for regulatory purposes, the liquidity ratios of banks were found to be severely impaired. Under this scenario, a 20 percent deposit withdrawal resulted in banks representing 80 percent of the banking system asset becoming illiquid and insolvent.

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<sup>8</sup> The interest rate sensitivity test assumes that banks maintain the size of the gaps during the year and, therefore, fail to readjust their balance sheets to minimize their maturity gaps and reduce the inherent interest rate risk. In addition, the sensitivity test assumes that changes in deposit and loan rates remain constant, implying that both rates react to changes in policy rates or other events in the same way. Evidently, both assumptions can be relaxed but require a macro or a financial model determining how the maturity gap, as well as the deposit and loan rates, move through time in response to changes in policy rates, for instance.

92. **The reported increase in short-term foreign currency borrowings of the banking system can also lead to rollover risks, and any disruption to funding in foreign currency can affect bank solvency.** The supervisors do not currently monitor maturity by currency, and data were available for only six private banks (representing half the banking system assets) in the sample. The analysis of maturity data highlights this rollover risk, as net short-term foreign currency liabilities of less than a month represented above 30 percent of regulatory capital of these banks, as of end-2006. However, the rollover risks are mitigated as nonresident foreign currency deposits have proved to be relatively stable.

Table 8. Sri Lanka: Credit and Concentration Risk Sensitivity Tests

		Effects on the Capital Adequacy (CAR) Ratio 1/ (In Percentage)					
		CAR After Shocks 2/					
	CAR, 12/31/20 06 2/	5% Re- classification of Outstanding Loans 5/	10% Re- classification of Outstanding Loans 5/	20% Re- classification of Outstanding Loans 5/	Largest Borrower's Default 6/	2 Largest Borrowers' Default 6/	3 Largest Borrowers' Default 6/
Average	12.1%	11.5%	10.7%	9.0%	6.6%	2.8%	0.1%
Minimum	5.6%	4.5%	2.8%	-0.9%	-27.7%	-54.7%	-74.3%
Maximum	15.7%	15.6%	15.6%	14.6%	12.7%	12.7%	11.9%
Number of Financial Institutions							
CAR:							
Above 20%	0	0	0	0	0	0	0
10% to 20%	10	10	6	4	7	3	2
5% to 10%	2	1	5	7	3	6	6
0% to 5%	0	1	1	0	1	2	2
Below 0%	0	0	0	1	1	1	2
Total	12	12	12	12	12	12	12
Below minimum CAR 2/ % of the system assets	22.1%	22.1%	58.1%	77.7%	54.2%	76.8%	86.0%
% of the public bank assets	15.8%	15.8%	26.9%	44.6%	44.6%	44.6%	44.6%

Source: Central Bank of Sri Lanka and FSAP staff calculations.

Table 9. Sri Lanka: Interest Rate and Exchange Rate Risk Sensitivity Tests  
Effects on the Capital Adequacy Ratio<sup>1/</sup>

	CAR, 12/31/2006 2/	CAR After Shocks 2/									
		20% Appreciation of the Exchange Rate 3/	20% Depreciation of the Exchange Rate 3/	10% Decrease in Interest Rates 4/	5% Decrease in Interest Rates 4/	1% Decrease in Interest Rates 4/	1% Increase in Interest Rates 4/	5% Increase in Interest Rates 4/	10% Increase in Interest Rates 4/		
Average	12.1%	12.1%	12.1%	16.1%	14.3%	12.6%	11.6%	9.4%	5.7%		
Minimum	5.6%	5.5%	5.7%	10.5%	10.3%	6.6%	4.6%	-6.2%	-34.6%		
Maximum	15.7%	15.9%	15.6%	35.0%	25.4%	15.8%	15.5%	15.3%	15.1%		
Number of Financial Institutions											
CAR:											
Above 20%	0	0	0	1	1	0	0	0	0	0	
10% to 20%	10	9	9	11	11	11	9	7	6	6	
5% to 10%	2	2	2	0	0	1	2	3	4	4	
0% to 5%	0	0	0	0	0	0	1	1	0	0	
Below 0%	0	0	0	0	0	0	0	1	2	2	
Total	12	11	11	12	12	12	12	12	12	12	
Below minimum CAR 2/ % of the system assets	22.1%	22.1%	22.1%	0.0%	0.0%	15.8%	33.2%	60.1%	70.7%		
% of the public bank assets	15.8%	15.8%	15.8%	0.0%	0.0%	15.8%	26.9%	44.6%	44.6%		

Source: Central Bank of Sri Lanka and FSAP staff calculations.

1/ Banks include 10 commercial and 2 specialized banks representing 91 percent of the banking system assets.

2/ 10 -percent minimum capital adequacy ratio (CAR).

3/ Effect through the net open position (NOP). One specialized institution does not have a NOP.

4/ Effect through the cumulative gap in assets and liabilities with maturities less than a year.

5/ Effect through a loan reclassification and an increase in provisions. Collateral prices fall by the same percentage.

6/ Full provisioning of nonperforming loans.

Table 10. Sri Lanka: Liquidity Risk Sensitivity Tests

Effects on the Liquidity Ratios (LR) of a 10% and a 20% Withdrawal in Total Deposits and of a 100% Withdrawal in Non Resident Deposits 1/ 2/

(In Percentage)

	LR, 12/31/2006	LR after:					
		10%-Deposit Withdrawal		20%-Deposit Withdrawal		100%-Non Resident Deposit Withdrawal 3/	
		All Liquid Assets 4/	Few Liquid Assets 5/	All Liquid Assets 4/	Few Liquid Assets 5/	All Liquid Assets 4/	Few Liquid Assets 5/
Average	25.6%	17.6%	6.5%	7.6%	-5.2%	18.4%	7.8%
Minimum	20.6%	12.2%	-5.1%	1.6%	-17.2%	2.9%	-1.8%
Maximum	38.2%	32.1%	14.2%	24.7%	1.7%	38.2%	13.6%
LR:		Number of Financial Institutions					
Above 20%	11	4	0	1	0	3	0
10% to 20%	0	7	1	2	0	7	5
0% to 10%	0	0	9	8	1	1	5
Below 0%	0	0	1	0	10	0	1
Total 10/ Below minimum LR	11	11	11	11	11	11	11
6/ % of the system assets	0%	66.6%	79.9%	77.9%	79.9%	71.6%	79.9%
% of public bank assets	0%	33.5%	33.5%	33.5%	33.5%	33.5%	33.5%

Source: Central Bank of Sri Lanka and FSAP staff calculations

1/ LR calculated according to the prudential regulations.

2/ One specialized and 10 commercial banks representing 80 percent of the banking system assets were included.

3/ Nonresident deposits represent 10 percent of total deposits in the 11 systemically important banks.

4/ Liquid assets include balances with domestic and correspondent banks, balances with own FCBUs, 50 percent of commercial papers and promissory notes, money at call, good receipts, import bills, export bills, inland bills, cash items in collection, treasury, and Sri Lanka Development Bonds.

5/ The few liquid assets include balances with domestic and correspondent banks, balances with own FCBUs, export bills, treasury and Sri Lanka Development bonds. The latter bonds are discounted at the same percentage as the deposit withdrawal.

6/ 20-percent minimum liquidity ratios (LR).