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Paraguay: Financial System Stability Assessment—Update

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PARAGUAY

Financial System Stability Assessment—Update

Prepared by the Monetary and Capital Markets and Western Hemisphere Departments

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May 10, 2011

This Financial Sector Stability Assessment (FSSA) is based on the work of a joint IMF-WB Financial Sector Assessment Program (FSAP) Update mission to Asuncion, Paraguay, from November 10-24, 2010. The initial FSAP took place in 2005. The update team comprised Liliana Schumacher (mission chief, IMF); Mariano Cortés (mission chief, World Bank); Teresa Daban, Fabiana Melo, Sònia Muñoz, Sylwia Nowak, and Ryan Scuzzarella (all IMF); Rogelio Marchetti, Eduardo Urdapilleta, Martin Vazquez Suarez, Ilka Funke, and Karina Baba (all WB); José Rutman (Frm. Deputy General Manager, Central Bank of Argentina and former BCBS member); José Angelo Mazzillo Júnior (Head of the Department of Supervision of Credit Unions and Non-Banking Financial Institutions, Central Bank of Brazil); and Eduardo Melinsky (WB consultant). The main findings of the mission were:

- The regulation and supervision of banks have undergone major progress since the last FSAP, in particular, becoming more risk-based. However, the constraints imposed by the banking and central bank laws have limited the Central Bank of Paraguay (CBP)'s work in updating prudential requirements needed for an effective risk-based supervision. Further progress would require changes in the legal framework so that the laws would establish principles and would leave to the CBP the responsibility for establishing specific requirements. A key improvement in this regard would be the adoption of a capital adequacy ratio (CAR) definition in line with international standards.

- Very rapid credit growth threatens the recovery of macroeconomic and financial indicators. Delays in withdrawing the monetary policy stimulus applied in response to the global crisis have contributed to this development by allowing a buildup of excess liquidity and maintaining low interest rates for too long. The authorities have initiated a policy tightening recently. Nonetheless, there is still an urgent need to improve the liquidity management framework and adopt measures to induce financial institutions to build cushions to weather a sudden reversal of current conditions.

- Most banks appear resilient to shocks, although the exposure to large borrowers is important and some small banks are exposed to significant liquidity risk. Two systemic banks have CARs below or barely at the 10 percent minimum, if Basel I definitions were applied. A third bank is also weak but not systemic.

- The recapitalization of the CBP is a key step to revert its weak financial situation that limits its sterilization capacity and, in turn, its ability to conduct monetary policy and moderate credit growth.

The main author of this report is Liliana Schumacher, with contributions from the members of the team.

FSAP assessments are designed to assess the stability of the financial system as a whole and not that of individual institutions. They have been developed to help countries identify and remedy weaknesses in their financial sectors, thereby enhancing their resilience to macroeconomic shocks and contagion. FSAP assessments do not cover risks that are specific to individual institutions.

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GLOSSARY

ACH	Automated Clearing House
ADEFI	Association of Financial Entities
AFD	Agencia Financiera Para el Desarrollo
ALIDE	Latin American Association of Financial Development Institutions
AML	Anti-money laundering
AREAER	Annual Report on Exchange Arrangements and Exchange Restrictions
ATS	Automated transfer system
BB	Banco do Brazil
BVPASA	Bolsa de Valores de Asuncion (Asunción Stock Market)
BCB	Banco Central do Brasil
BCP	Basel Core Principles
BCU	Banco Central del Uruguay
BCRA	Banco Central de la Republica Argentina
BECH	Banco del Estado de Chile
BMI	Banco Multilateral de Inversiones, El Salvador
BNDES	Banco Nacional de Desenvolvimento Economico e Social, Brasil
BNF	Banco Nacional de Fomento
CAH	Crédito Agrícola de Habilitación
CAR	Capital adequacy ratio
CBP	Central Bank of Paraguay
CC	Cartas de compromiso (promissory notes)
CI	Cost-to-income ratio
CD	Certificate of Deposit
CFT	Combating the Financing of Terrorism
CONPACOOP	Confederación Paraguaya de Cooperativas (Paraguayan Confederation of Cooperatives)
COREMEC	Comitê de Regulação e Fiscalização dos Mercados Financeiro, de Capitais, de Seguros, de Previdência e Capitalização. (Regulatory and Supervisory Committee for Financial, Capital Markets, Insurance, Social
CRC	Security, and Capitalization
CRI	Central de Riesgos Crediticios
CSD	Credit reporting industry
DGRV	Central Securities Depository
	Deutscher Genossenschafts-und Raiffeisenverband e.V. German
ELA	Confederation of Cooperatives
FC	Emergency liquidity assistance
FGD	Financing Companies
FSAP	Deposit Insurance Fund
	Financial Stability Assessment Program

FSI	Financial Soundness Indicators
FSR	Financial Stability Report
GAFISUD	Grupo de Accion Financiera de Sudamerica (Financial Action Task Force on Money Laundering in South America)
IAIS	International Association of Insurance Supervisors
IDB	Inter-American Development Bank
IFS	International Financiar Statistics
INCOOP	Instituto Nacional de Cooperativismo
IMF	International Monetary Fund
IRM	Instrumentos de regulacion monetaria (Monetary regulation instruments)
IS	Insurance superintendence
LGBFOEC	Ley general de bancos, financieras, y otras entidades de credito (General law for banks, financing companies, and other credit entities)
LOLR	Lender of last resort
LOBC	Ley organica del banco central (Central bank law)
LRM	Letras de regulacion monetaria (Central bank bills)
MoA	Ministry of agriculture
MoF	Ministry of finance
MOU	Memorandum of understanding
MPC	Multi-purpose cooperative
PYG	Paraguayan Guarani
RAM	Risk assessment matrix
ROA	Return on assets
ROE	Return on equity
RRR	Renovated, refinanced and restructured loans
TA	Technical assistance
RTGS	Real time gross settlement
SBIFC	Superintendencia de Bancos e Instituciones Financieras de Chile
SB	Bank Superintendence
SBP	Superintendencia de Bancos de Paraguay
SEPRELAD	Secretaria de Prevencion de Lavado De Dinero o Bienes (Secretariat for the Prevention of Money and Asset Laundering)
SLC	Savings and loan cooperative
TBTF	Too big to fail
UAFGD	Administrative unit of the deposit insurance fund
WB	World Bank

EXECUTIVE SUMMARY

The regulation and supervision of banks in Paraguay have undergone major progress in many areas since the last Financial Sector Assessment Program (FSAP). A risk-based approach to supervision is being implemented, and several prudential norms have been strengthened, including on risk management, licensing, and "fit and proper" criteria for banks' board members and senior management. This progress has translated into enhanced compliance with international standards and a significant improvement of financial sector soundness, supported also by favorable macroeconomic conditions.

However, the regulatory constraints imposed by the banking and central bank laws have limited the Central Bank of Paraguay (CBP)'s further progress towards an effective risk-based supervisory framework. Given the increasing dynamism of the Paraguayan economy and its financial sector, a solution should be found to address this situation. The legal framework should be overhauled so that laws will establish principles and general requirements, while leaving to the CBP the responsibility for establishing the specific requirements and technical details.

Most banks appear resilient to shocks, although the exposure to large borrowers is high and some small banks are exposed to significant liquidity risk. Two systemic banks have CARs below or barely at the 10 percent minimum, if Basel I definitions were applied. A third bank is also weak but not systemic.

Very rapid credit growth is creating conditions for a repetition of past boom and bust cycles. Delays in withdrawing the monetary policy stimulus that was applied in response to the global crisis, have contributed to this development by allowing a buildup of excess liquidity and maintaining low interest rates for too long. While credit quality still appears good and corporate borrowers do not seem to be excessively leveraged, conditions are changing quickly as financial institutions are beginning to compete more aggressively for market share.

The mission strongly recommends the adoption of measures that would moderate credit growth and induce financial institutions to build cushions that can protect them and their clients from a sudden reversal of conditions. In this regard, the tightening of monetary policy should proceed faster, and regulations are needed quickly to bring the definition of bank capital closer to international standards and ensure adequate provisioning. The mission supports current plans to introduce forward-looking provisions.

The recapitalization of the CBP is a key step toward addressing this and future challenges to financial stability. The effective implementation of the CBP Capitalization Law, approved in April 2010, is crucial for the CBP to redress a weak financial situation that limits its sterilization capacity and, in turn, its ability to conduct monetary policy and moderate credit growth. The mission encourages the ministry of finance (MoF) to start formal discussions with the CBP and establish a work calendar so as to proceed quickly with this task.

Paraguay's banking system safety net is well developed but there is room for improvement. In particular the rules governing early corrective action, the resolution regime for systemic crises, and emergency liquidity assistance (ELA) should be strengthened. Additional contingent funding for the deposit insurance fund (FGD) is necessary given the large size of coverage.

There has also been some progress in the supervision of cooperatives with appropriate focus on the largest ones. However, their regulation and supervision still remain less stringent than those of banks. Moreover, Instituto Nacional de Cooperativismo (INCOOP) is constrained by insufficient resources and limited enforcement power. Its governance structure also means that INCOOP's supervisory role is compromised by conflicts of interest that diminish its independence.

The mission encourages INCOOP to strengthen its supervisory approach and to promote the development of a safety net for cooperatives. The mission recognizes the cooperatives' contribution to supporting economic growth and to making financial services available to segments of the population that have so far been largely neglected by the banking system. For this reason, it strongly encourages the sector and its supervisor to adopt (i) strong "fit and proper" rules that can ensure that only the most qualified persons (in terms of integrity, capacity, and independence) manage the savings of their members; and (ii) prudential rules and a safety net that can protect cooperatives from undue risks and adverse changes in macroeconomic conditions, thus limiting potential spillovers to other sectors. To avoid exacerbating moral hazard, the implementation of the liquidity scheme and the deposit insurance fund should proceed after the soundness of the largest cooperatives has been ascertained. There is some urgency to take action on these issues in light of the results of the liquidity stress tests undertaken on cooperatives.

In order to start building a strong macro-prudential policy framework, the mission recommends improving coordination and information sharing among all agencies responsible for financial stability, and financial sector oversight. To this end, the mission strongly encourages the authorities to set up a committee of all regulators at the highest level. The committee should have a clear mandate, an agenda with concrete deliverables, sufficient technical support teams, and the responsibility to report on progress regularly.

Table 1. Paraguay: FSAP Update Main Recommendations[1]

Recommendation	Priority	Time Frame
Macroeconomic Risks—Financial Institutions Soundness and Vulnerabilities		
Legislation should adopt a CAR definition consistent with the Basel Accord (Box 1)	H	MT
CBP should enhance the classification and provisioning framework and proceed with planned introduction of forward-looking provisions (¶23)	L	MT
Money and Debt Markets and Systemic Liquidity Management		
MOF should expedite the planned recapitalization of the CBP (¶17)	H	ST
CBP should enhance its capacity for systemic liquidity management (Section III).	H	MT
Payment and Security Settlement Systems		
Congressional approval should be obtained for the draft payment system law (¶19).	H	ST
CBP should expedite implementation of the new payment system and develop its oversight (¶19).	M	ST
Credit Information Systems and Creditor Rights Framework		
CBP should prepare legislation establishing a sound legal framework for the credit reporting industry (CRI) (¶46).	M	MT
Submit to parliament the law on organization and coordination of the registry general and the cadastre, and make electronic registries for immovable assets fully operational and available online (¶46)	M	MT
Financial Sector Oversight		
The banking law should be amended so that the law states the principles while delegating to the CBP the precise development of the prudential regulations (Section IV)	H	MT
INCOOP should align cooperative prudential framework with banking standards, in particular the capital adequacy and provisioning requirements of large cooperatives (¶25)	H	MT
The legislation should set up a committee of all regulators at the highest level, with a clear mandate, sufficient technical support, and well-defined deliverables (¶41)	M	MT
Financial Safety Net and Crisis Resolution Framework		
MOF should strengthen the FGD contingency funding (¶36)	H	ST
CBP should undertake a crisis simulation of the resilience of the financial safety net (¶33)	M	ST
Cooperatives should set up a liquidity assistance scheme and deposit insurance for cooperatives, following best practices.(¶37-40)	H	ST
Financial Sector Development Agenda		
The government should develop and implement a comprehensive agenda to foster financial inclusion in a sustainable manner (¶46)	M	MT
MoF should prepare legislation establishing a dedicated pension supervisor and undertake actuarial assessments of the various pension regimes—adhering to international standards—to anchor their parametric reform (¶45)	H	MT

[1] H/M: High or medium priority level. S/M: indicates the time span in which the recommendation could be implemented (short or medium term).

I. Financial System Structure and Recent Macroeconomic and Financial Trends

1. **Paraguay's financial system is dominated by commercial banks** (Table 3). Currently 15 commercial banks hold assets equivalent to 64 percent of total system assets, with the four largest representing about 60 percent of total bank assets. Foreign/domestic asset ownership is split 50:50, including one state-owned commercial bank. There are also 12 finance companies (FC) and 372 cooperatives holding assets equivalent to 3 percent and 15 percent of GDP respectively. Total financial system assets grew from 61 percent of GDP in 2005 to 84 percent in June 2010, mainly due to the growth of banks and cooperatives. Banks' loans are concentrated in the large agribusiness sector, whereas FC and cooperatives dominate the market for consumption loans, and loans to micro, small, and medium size enterprises.

2. **There are also four nonbank state-owned financial institutions holding assets of about 2 percent of GDP:** Agencia Financiera de Desarrollo (AFD), which provides long-term financing to commercial banks, mostly to fund mortgage loans; Fondo Ganadero, which loans to the cattle industry; Crédito Agrícola de Habilitación (CAH), which loans to farmers; and SENAVITAT which is a social housing financial corporation. These institutions fund their operations with transfers from the budget and loans from international development agencies.

3. **In spite of the incipient competition for market share, bank loans to clients represent only about 57 percent of bank assets** (Table 2). The rest is predominantly liquid resources held in central bank accounts. About 60 percent of bank liabilities are private deposits, while the rest is represented by liabilities to the public sector, to foreign creditors and a small amount of subordinated bonds.

Table 2. Paraguay: Banks' Aggregate Balance Sheet
December 2010 (in percent of total assets)

Assets		Liabilities	
Foreign Assets	9.4	Foreign Liabilities	7.3
Public Sector Assets	3.7	Public Sector Liabilities	10.8
Assets vis-à-vis BCP	22.4	Liabilitites vis-à-vis BCP	0.1
Legal Reserves	10.2		
Free Reserves	6.4		
Holding LRM	5.8		
Other Financial Int. Assets	1.5	Other Financial Int. Liabilities	3.6
Credit Private Sector	57.0	Private Sector Deposits	59.4
in Guaranies	33.0	in Guaranies	32.4
in US$	24.0	in US$	27.0
		Capital and Reserves	10.2
		Provisions	2.0
Other Assets	6.0	Other Liabilities	6.6
Total Assets	100.0	Total Liabilities	100.0

Source: CBP

Table 3. Paraguay: Financial System Structure

	Dec-05				Dec-09				June 2010			
	Number of institutions	Assets in millions of U.S. dollars	Assets in percent of total system's assets	Assets in percent of GDP	Number of institutions	Assets in millions of U.S. dollars	Assets in percent of total system's assets	Assets in percent of GDP	Number of institutions	Assets in millions of U.S. dollars	Assets in percent of total system's assets	Assets in percent of GDP
Commercial banks	**13**	**2,386.4**	**52.0**	**31.5**	**15**	**8,031.5**	**62.4**	**52.4**	**15**	**8,661.5**	**63.8**	**53.8**
Foreign-owned 1/	5	747.9	**16.3**	**9.9**	3	756.2	**5.9**	**4.9**	3	713.8	**5.3**	**4.4**
Majority foreign owned 1/	4	949.4	**20.7**	**12.5**	5	3,288.9	**25.6**	**21.4**	5	3,652.0	**26.9**	**22.7**
Domestic-owned 2/	3	420.3	**9.1**	**5.6**	6	3,392.5	**26.4**	**22.1**	6	3,667.3	**27.0**	**22.8**
State-owned 3/	1	268.7	**5.9**	**3.6**	1	593.9	**4.6**	**3.9**	1	628.3	**4.6**	**3.9**
Finance companies (*financieras*) 2/	**14**	**259.1**	**5.6**	**3.4**	**11**	**431.4**	**3.4**	**2.8**	**12**	**468.1**	**3.5**	**2.9**
Cooperatives	**306**	**900.7**	**19.6**	**11.9**	**391**	**2,317.6**	**18.0**	**15.1**	**372**	**2,359.4**	**17.4**	**14.6**
Type A financial cooperatives	20	365.3	**8.0**	**4.8**	20	965.2	**7.5**	**6.3**	20	1,005.5	**7.4**	**6.2**
Type A production cooperatives	20	445.5	**9.7**	**5.9**	20	1,059.8	**8.2**	**6.9**	20	1,070.9	**7.9**	**6.6**
Type B and C financial cooperatives	213	74.2	**1.6**	**1.0**	269	257.5	**2.0**	**1.7**	250	249.0	**1.8**	**1.5**
Type B and C production cooperatives	53	15.7	**0.3**	**0.2**	82	35.1	**0.3**	**0.2**	82	34.0	**0.3**	**0.2**
Institutional Investors	**41**	**1,014.9**	**22.1**	**13.4**	**39**	**1,991.8**	**43.4**	**13.0**	**38**	**1,988.4**	**14.7**	**12.3**
Insurance companies	35	91.5	**2.0**	**1.2**	33	203.4	**4.4**	**1.3**	32	240.9	**1.8**	**1.5**
Instituto de Previsión Social (IPS)	1	538.6	**11.7**	**7.1**	1	1,184.8	**25.8**	**7.7**	1	1,147.4	**8.5**	**7.1**
Pension funds 4/	5	384.7	**8.4**	**5.1**	5	603.6	**13.1**	**3.9**	5	600.1	**4.4**	**3.7**
Other institutions	**28**	**32.5**	**0.7**	**0.4**	**36**	**88.7**	**0.7**	**0.6**	**37**	**88.8**	**0.7**	**0.6**
Exchange houses	24	24.3	**0.5**	**0.3**	32	70.3	**0.5**	**0.5**	33	69.8	**0.5**	**0.4**
Deposits warehouses	4	8.2	**0.2**	**0.1**	4	18.4	**0.1**	**0.1**	4	19.0	**0.1**	**0.1**
Total financial system	**402**	**4,593.6**	**100.0**	**60.7**	**492**	**12,861.0**	**100.0**	**83.9**	**474**	**13,566.1**	**100.0**	**84.2**

Sources: CBP and INCOOP.

1/ China Trust Commercial Bank ceased its operations in 2005. HSBC, a majority foreign owned bank, acquired a foreign-owned Lloyd Bank in 2006. A domestic-owned Banco Regional bought ABN Amro in 2009.

2/ In 2007-2008, three financieras became banks: Visión, Familiar, and Itapúa.

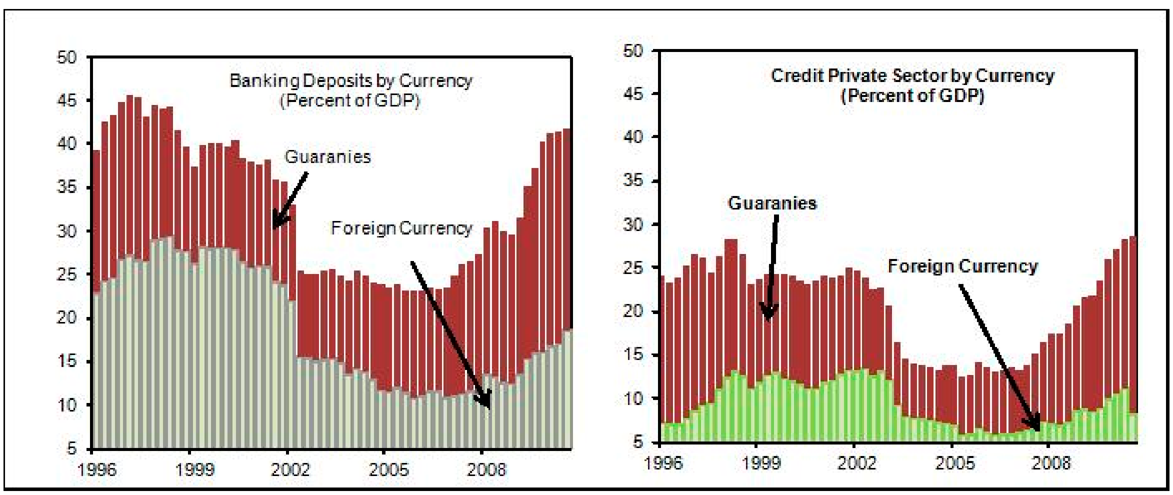
3/ In addition to the state-owned commercial bank (National Development Bank, BNF), there are four other public financial institutions: Agencia Financiera de Desarrollo (ADF, a Tier 2 bank that provides long-term financing to banks, mostly mortgages), Fondo Ganadero (which loans to cattle industry), Crédito Agrícola de Habilitación (which loans to farmers), and SENAVITAT (a social housing financial corporation). Only the BNF is a deposit-taking institution, while the other public financial institutions receive transfers from the budget and funding from the international development agencies. These four institutions held total assets representing about 2 percent of the GDP.

4/ Caja Itaipu, Caja ANDE, Caja Bancaria, CMCP, and Municipal.

4. **Since the 2005 FSAP to the present, Paraguay has experienced very favorable macroeconomic outcomes, and has been only temporarily affected by the global crisis.** This has helped the financial system recover from the devastating consequences of the financial crisis of 1995–2003 (Figure 1).[2]

- Between 2005–2008, real GDP rose by 5 percent a year, policy and regulatory frameworks were strengthened in several areas, including banking, supported by two IMF arrangements. The CBP's focus shifted to price stability, while maintaining exchange rate flexibility and inflation in the single digit range for most of the period.
- In 2009, the global financial crisis coupled with a severe drought tipped the economy into a recession from which it rebounded vigorously in 2010 driven by a bumper soy crop, buoyant demand from trading partners and a strong monetary stimulus. Real GDP growth was 15.3 percent in 2010 and is expected to remain above potential, at 5.6 percent, in 2011.

Figure 1. Paraguay: Evolution of Credit and Deposits by Currency (1996–2010)



Source: CBP and IMF staff estimates.

[2] Paraguay had several financial crises between 1995–2003. About half of the banks and two thirds of nonbank financial institutions were liquidated.

II. Macroeconomic Risks and Financial Institutions' Soundness

A. Macroeconomic Risks

5. **In spite of significant improvements in financial soundness, the banking system still exhibits several vulnerabilities, of which fast credit growth is the most worrisome.** Delays in withdrawing the monetary policy stimulus applied in response to the global crisis have contributed to this development by allowing a buildup of excess liquidity and maintaining low interest rates for too long (Figure 2). This has led to unsustainable high rates of credit growth and inflationary pressures. Credit growth peaked at 75 percent (y-o-y) in May 2008, decelerated during the 2009 crisis, and rose again in 2010. Although decelerating, credit growth still stood at over 40 percent (y-o-y) in January 2011. The main drivers of credit growth are consumption and the services sector, while credit to agribusiness has slowed down considerably from its 2010 peak. Price developments to date suggest that the inflation rate could rise to over 10 percent in 2011, propelled both by excess demand pressures and by international oil and food price increases.

6. **Additional vulnerabilities are as follows:**

- **Financial dollarization:** Dollarization ratios, at about 40 percent for deposits and 45 percent for loans, are still high. Owing to limits defined by prudential regulations, banks net open foreign positions are low, but indirect foreign-exchange risk remains since about a quarter of loans to the service and retail sectors are denominated in foreign currency. Partial dollarization can also pose a challenge to the traditional LOLR central bank role, but the high level of central bank net international reserves (165 percent of dollar deposits as of end December 2010), as well as high reserve requirements made in dollars for dollar deposits, help mitigate systemic liquidity risk in foreign currency.

- **Short-term funding:**

  Around 70 percent of bank deposits are sight, driven by depositors' preference and by banks' search for cheap funding. Of these, about 65 percent are large. Moreover, depositor confidence has proved sensitive to rumors.

Table 4. Paraguay: Deposit Distribution by Size and Maturity

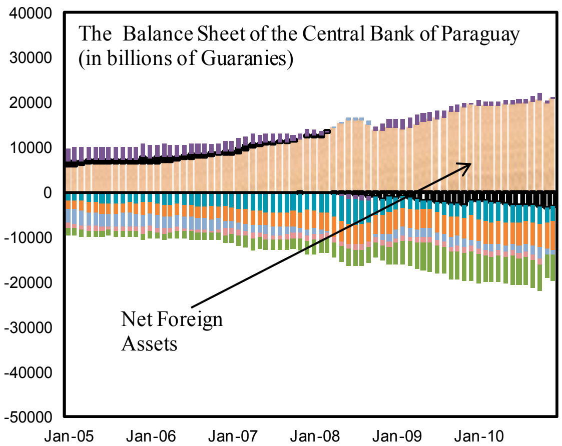
(In percent of total deposits, September 2010)

	Total Deposits			
	Guaranies		U.S.$	
	Sight	Time	Sight	Time
> US$94,500	24.3	11.1	20.4	10.5
< US$94,500	17.0	6.1	7.7	2.9

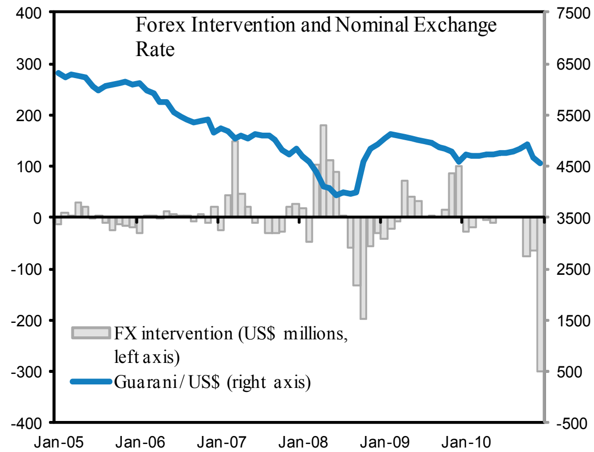
Source: Paraguay's Deposit Insurance Fund Agency.

Figure 2. Paraguay: Recent Developments in Credit Growth and Monetary and Exchange Rate Policies[1/]

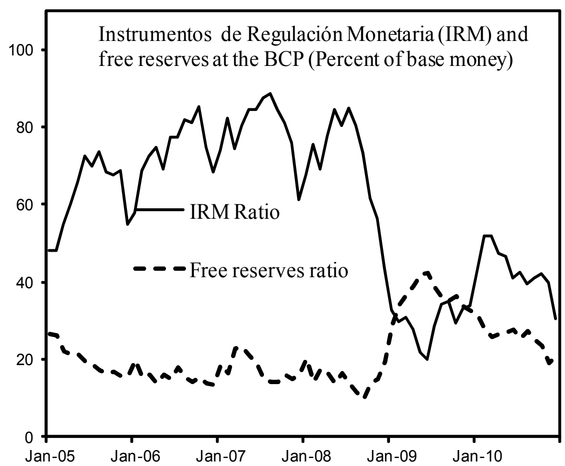
Reflecting increasing foreign inflows 2/, international reserves have expanded substantially since 2005...



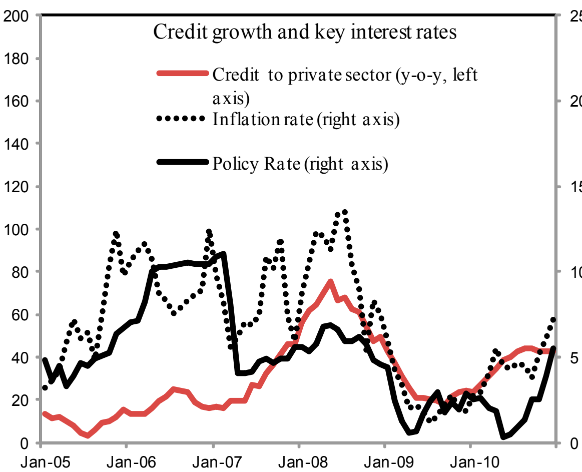
...which translated into a provision of ample liquidity, through interventions that were only partially sterilized...



With the real policy rate largely in negative territory, banks have reduced their holdings of both central bank's bills and excess reserves...



...which has accentuated the swings in the cycle of the credit to the private sector and led to inflationary pressures.



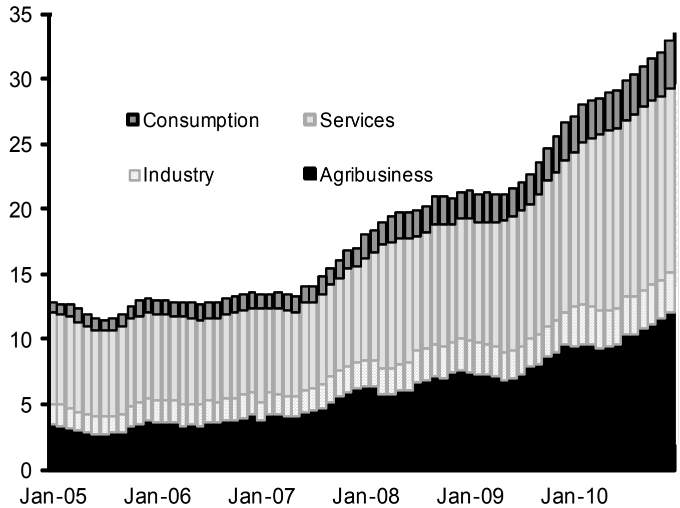
Source: CBP

1/ The de jure exchange rate arrangement is floating. The de facto exchange rate is classified by AREAER as other managed arrangement given the strong focus of the authorities on exchange rate stability. In the last few years, the CBP has established a clear hierarchy of policy objectives, and placed price stabilization at the top of the objective list. The CBP consistently announces an inflation target of 5 percent with a +/-2.5 percent band. However, market participants still have strong expectations that the CBP would secure a stable exchange rate. The authorities have stated their intention to migrate towards an Inflation Targeting regime over the medium-term.

2/ Foreign currency inflows in Paraguay in recent years reflected several factors including booming agribusiness exports, repatriation of capitals by Paraguayan citizens living abroad, FDI, and borrowing by the central government.

- **Exposure to macroeconomic volatility:** Paraguay is a small and very open economy, highly dependent on agribusiness, and international trade. Economic activity is very vulnerable to swings in demand in key trading partners and weather cycles, while inflation is highly exposed to fluctuations in world commodity prices and the nominal exchange rate. The financial sector is vulnerable to such shocks, as credit to the agribusiness sector and commerce accounts for almost 65 percent of banks' loan portfolio and these two sectors have made a significant contribution to the recovery in the credit-to-GDP ratio.

Figure 3. Paraguay: Banking Credit to the Private Sector by Sectors (in percent of GDP)



Source: CBP

B. Financial Soundness Indicators and Stress Tests for Banks[3]

7. **The methodology for the risk assessment of banks comprised stress tests** (Table 5) **and FSIs** (Tables 7, 8 and 9)**, including an adjusted CAR in line with Basel I** (Box 1), **used as a starting point for the stress tests**. The main stress tests undertaken were:

- Impact of two extreme macroeconomic scenarios using a macroeconomic model of credit risk. The scenarios were (i) a GDP decline by 5 percent in 2011 and by 5 percent in 2012 due to the impact of two droughts and falling commodity prices; and (ii) high inflation of about 12.5 percent y-o-y, with nominal policy rates in the 14-15 percent range for two consecutive years;
- Estimates of the nonperforming loan (NPL) ratio that would bring the CAR to the regulatory minimum of 10 percent or lower;
- Failure of the largest and the two largest borrowers;
- A stress test on systemic liquidity that simulates a five-day run on deposits.[4]

[3] Further details related to the stress tests methodology were described in a technical note. The scenarios were agreed with the authorities. Stress tests were not undertaken for FCs. However, the mission recommended their close monitoring since they are highly exposed to consumption loans (over 30 percent of their loans), and are among the fastest growing institutions in the system.

[4] Deposit withdrawal rates and haircuts for liquid assets used in the stress tests were based on evidence from past panics, as well as specific features of Paraguay, such as the predominance of very large demand deposits.

8. **The results of the stress tests indicate that most banks appear resilient to shocks, although the exposure to large borrowers is high and some small banks are exposed to significant liquidity risk.** Two systemic banks' CARs would fall to under the 10 percent minimum under most stress tests.[5] A third bank is also weak but not systemic.

9. **More generally, the following vulnerabilities are worth noting:**

- The NPL ratio is low (2 percent as of December 2010) but NPLs are growing quickly (15.2 percent in 2010).[6]

- The leverage of the largest borrowers appears within an acceptable range but there are some large exposures to borrowers with a high leverage ratio.[7]

- No data is available on household leverage. However, some banks expressed concerns that aggressive competition for new customers could push the debt of smaller borrowers and households to unsustainable levels quite quickly.

- Specific provisions for the system at 74 percent of NPLs appear to be among the lowest in the region (Figure 9). The mission supported the recent increase in general provisions and the authorities' plans to introduce forward-looking provisions. It also recommended improving the provisioning treatment of refinanced and restructured loans (¶23).

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5 In fact, for one of these banks, the adjusted capital to asset ratio is below 10 percent before any shock is simulated (see Box 1).

6 Given the rapid credit growth, large parts of banks' loan books are unseasoned, most likely biasing down NPLs.

7 Leverage was measured as the ratio of total liabilities to balance sheet capital. As of June 2010, the median leverage for the largest 10 borrowers was 0.8, which implies that for half of the large borrowers, their liabilities represented 80 percent or more of their capital. However, for some large borrowers (non financial corporations) leverage reached up to 4. See ¶ 22, second bullet; and Appendix 2, ¶25 and ¶26 on large exposures limits.

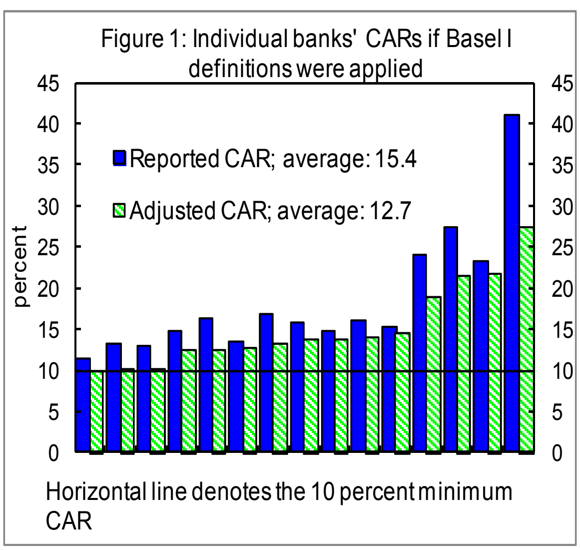
Box 1. Paraguay: The Quality of Bank Capital and Basel III

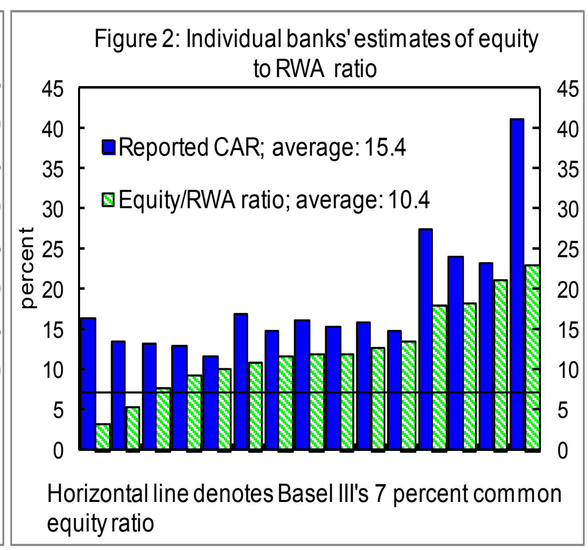
CARs in Paraguay are not measured according to the recommendations of the Basel Accord (Basel I). The mission adjusted the reported CARs on two accounts: the definition of capital and the risk weights. Specifically: (a) revaluation reserves were included as Tier 2 capital after a 55 percent discount; (b) the amount of Tier 2 capital was limited to 100 percent of Tier 1 capital; (c) subordinated debt included in the regulatory capital was limited to 50 percent of Tier 2 capital; and (d) risk weights for loans guaranteed by mortgages, warrants, and other collaterals were adjusted from 50 percent to 100 percent, except for household mortgages. Figure 1 in this Box shows the reported and adjusted CARs. After the adjustments, one institution's CAR falls slightly below the 10 percent adjusted regulatory CAR, while two others are very close to the minimum.

The mission also attempted to estimate how far banks are from meeting the proposed Basel III requirements related to the minimum 4.5 percent of common equity to risk weighted assets and the additional conservation buffer of 2.5 percent to risk weighted assets. However, it could only calculate the equity to risk-weighted assets because the definition of regulatory capital in Paraguay does not distinguish between common and preferred equity; and according to Paraguayan law, the features of preferred shares can change on a case-by-case basis. Figure 2 in this box shows that under the optimistic assumption that all stock enjoys the loss-absorbency features required by Basel III, most banks would have enough high- quality capital.

The CBP Board of Directors has recently approved an increase of the minimum paid-in capital to obtain or maintain a banking license. This initiative will improve the quality of capital and will limit entrance to the better capitalized institutions.

However, both the numerator and the denominator of the capital adequacy ratio still need to be reviewed to become aligned with Basel standards. The authorities should also consider the amendments to the definition of capital recently announced by the Basel Committee (Basel III).





Source: CBP and IMF staff estimates.

Table 5. Paraguay. Stress Tests for Banks—Summary Results

Bank code	Scenario 1: Two Droughts/Falling Commodity Prices 1/	Scenario 2: High Inflation/ High Interest Rates 1/	NPL Ratio that Brings CAR to 10 Percent 2/	Impact on CAR of the Largest Borrower's Default 1/	Impact on CAR of the 2 Largest Borrowers' Default 1/	50 Percent Appreciation of Nominal Exchange Rate 1/	25 Percent Depreciation of Nominal Exchange Rate 1/	Liquidity Shock: Banks Illiquid after 5 Days 3/
Bank G	+	+	+	+	+		+	+
Bank I	+	+	+	+	+	+		
Bank D	+	+	+	+	+		+	
Bank H					+			+
Bank F			+		+			
Bank A			+					+
Bank O			+					
Bank J								+
Bank M					+			
Bank C								+
Bank E								
Bank N								
Bank L								
Bank K								
Bank B								
Cost of capitalization under each scenario (Percent of GDP)	**0.17**	**0.24**	**0.01**	**0.10**	**0.25**	**0.01**	**0.01**	

Source: CBP and IMF staff calculations.
1/ A cross in this column indicates that the bank's capital adequacy ratio falls below 10 percent under the stress scenario described at the top.
2/ A cross in this column indicates that the bank's post-shock NPL ratio is below the system-wide average.
3/ A cross in this column indicates that the bank exhausts its liquid assets after a 5 days' run.

C. Financial Soundness Indicators and Stress Tests for S&L Cooperatives

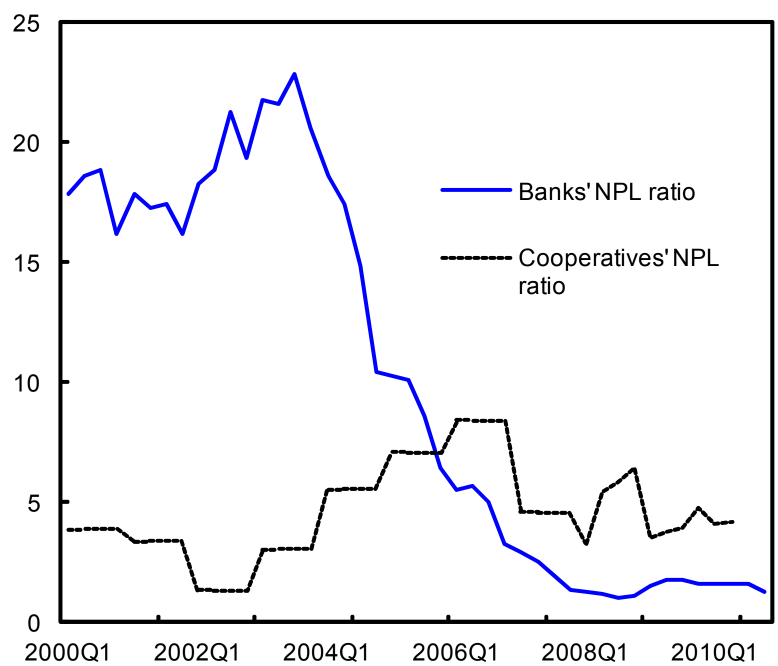
10. **Vulnerabilities in the financial cooperatives are more significant than in banks.**

- Loans in the cooperative sector are growing moderately (11.7 percent y/y by June 2010) but deposits are growing faster than loans.[8] This puts pressure on cooperative margins and their ability to make profits and remain capitalized (some cooperatives have seen negative returns recently).

- The NPL ratio in the cooperative sector is about three times the bank ratio.

- Cooperatives lack a lender of last resort (LOLR) and a deposit insurance scheme. They are subject to less stringent supervision, weaker reporting requirements, and lower liquidity buffers than banks.

Figure 4. Paraguay: Evolution of NPLs to Total Loans Ratio in Banks and Cooperatives (in percent)



Source: CBP and Incoop.

11. **Some cooperatives could pose or be exposed to systemic risk**:

- Some cooperatives are larger than banks (e.g., the eleventh largest financial institution in Paraguay is a financial cooperative with about 3 percent of total system financial assets).
- Risks arising from claims among banks and cooperatives are systemic for cooperatives and one bank. Most (up to 90 percent) of the cooperatives' deposits in the banking sector are located at one of the largest banks in Paraguay (representing about a fifth of this bank's total deposits).[9]

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[8] Typically, cooperatives pay higher interest rates on deposits than banks, reflecting lower regulatory costs (cooperatives are not subject to reserve requirements, nor do they pay deposit insurance premium) and, possibly, a perception of higher risk. In a context of low interest rates, there is an incentive to make deposits in cooperatives and borrow from banks.

[9] At the end of 2009, banking loans to cooperatives represented only 2.5 percent of banks' loan portfolio; whereas cooperatives' deposits amounted to 3.3 percent of banks' deposits, with significant concentration in one bank.

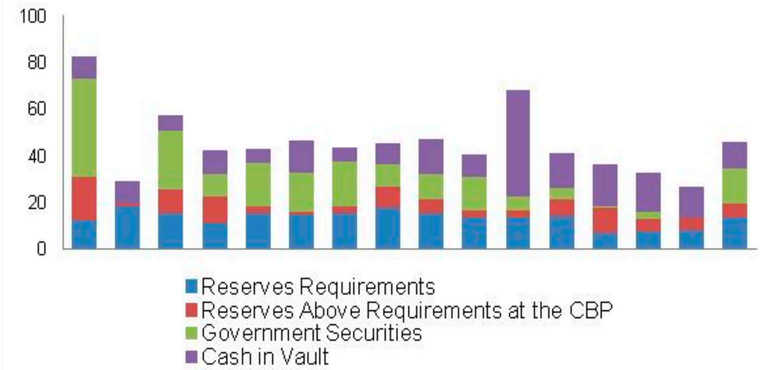
12. **Although cooperatives appear well capitalized, reflecting regular contributions by members, the mission cautioned against complacency.**[10] There are open questions regarding the usefulness of reported capital for assessing risks owing to shortcomings in the definitions of capital and risk-weights; low provisioning requirement; lack of regulations about related parties; adequacy of loan classification; and the way in which cooperatives themselves implement this classification.

13. **Stress tests of the largest 10 cooperatives indicate that most cooperatives are highly exposed to liquidity risks.** This highlights the urgency of setting up deposit insurance and emergency liquidity funds, supported by stronger supervision.

III. Monetary Policy, Market Infrastructure, and Systemic Liquidity Management

14. **Bank excess reserves in Paraguay are chronically high.**[11] This is the result of several structural factors that oblige banks to hold a large volume of cash for precautionary purposes. These factors include a large proportion of short term deposits, the lack of an efficient instrument for the CBP to manage liquidity, an unclear repo legal framework, and a rudimentary payment system.[12] This chronic situation has been compounded by the relatively expansionary monetary policy of recent years, which has led to a substantial build up of Guarani-denominated excess reserves by banks, held as deposits at the CBP or in bank vaults. It also reflects the CBP's negative capital, which limits the scope of its sterilization operations.

Figure 5. Paraguay: Liquidity Holdings by Banks, September 2010
(in percent of deposits)



Source: CBP and IMF staff calculations.

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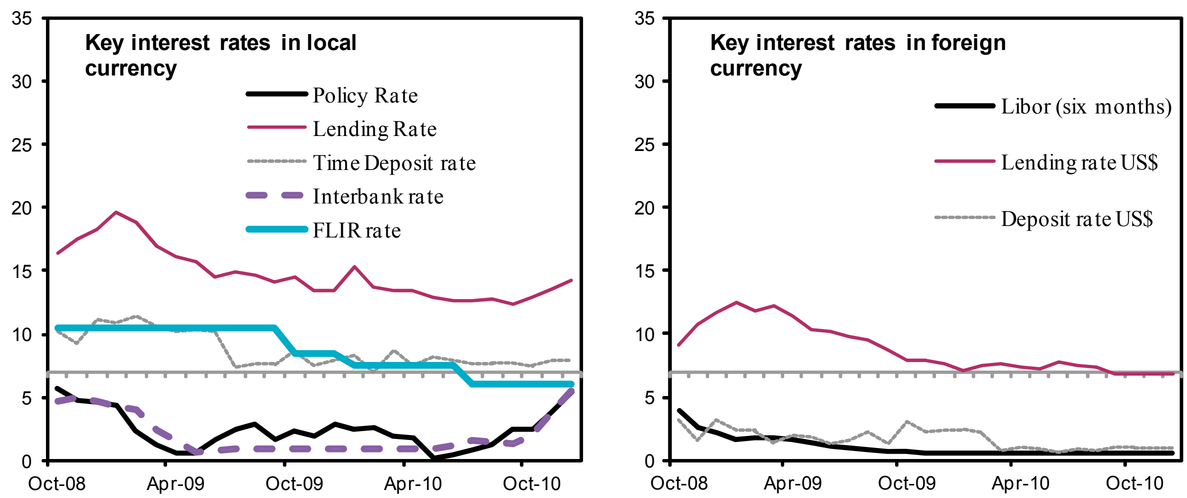
[10] Members need to be current in their monthly membership fee in order to benefit from loans and other services.

[11] Bank excess reserves are those above legal requirements held as deposits at the CBP or as cash in vault.

[12] The payment system is still based on the use of checks for both retail and large value payments, which are cleared manually at the three existing CBP-sponsored clearing houses on a daily basis, and settled the following day on banks' accounts at the CBP.

15. **The prevalent large volume of bank excess reserves generates perverse market incentives and undermines the CBP's ability to promote financial stability and conduct monetary policy.** High liquidity buffers impose important costs on banks and drive up interest rate spreads. Excess reserves also inhibit the development of an active interbank market, limit the CBP's ability to control credit growth, weaken the monetary transmission mechanisms, and could make it harder for the CBP to migrate toward an inflation targeting regime.

Figure 6. Paraguay: Key Interest Rates in Guarani and U.S. Dollars



Sources: CBP and IMF staff calculations

16. **The authorities need to step up their efforts to withdraw current excess reserves, based on more effective liquidity forecasts.** Important steps forward have been taken since 2005. However, the assessment and projections of systemic liquidity are not still at the center of the CBP's decision-making process. To address this situation, the CBP should adopt a consistent framework for forecasting and managing systemic liquidity. This would require stepping up ongoing efforts to gather timely information from the MoF on budget execution and from banks on their demand for reserves.

17. **To improve systemic liquidity management, it is also critical to implement the recapitalization of the CBP.** In April 2010, the law authorizing the MoF to recapitalize the BCP through the transfer of Treasury bonds was passed by Congress. The law is based on recapitalization needs of about 6.25 percent of GDP assessed by a Fund's TA mission in 2006, although given ongoing large losses, the CBP's recapitalization needs have increased in recent years. An immediate implementation of this law is key. The CBP's weak balance sheet constrains the CBP's efforts to withdraw excess liquidity, out of concern about the effects of monetary tightening on its net worth. The CBP has submitted a proposal to the MoF on the financial features of the bonds and studies are underway at the MoF on this topic, but the two institutions have not established yet a calendar for the effective implementation of the law.

18. **Reform efforts should also target the modernization of the framework for the formulation and implementation of monetary policy.** Since 2005 important progress has been made in increasing awareness of the CBP's inflation target of 5 percent within a +/-2.5 percent band, while decisions are increasingly informed by model-based analysis and communicated to the public. However, there is still a need for the CBP Board to adopt a more pre-emptive approach instead of only reacting when the actual observed inflation rate has already approached the middle-point of the target band. The CBP also frequently relies on exchange rate interventions to inject or withdraw liquidity, an approach that risks signaling that it also targets the exchange rate. Against this background, the CBP should strengthen and clarify its operational framework with the implementation of a well-designed overnight facility.

19. **In parallel, the authorities need to foster deeper and more liquid money and foreign exchange markets and press ahead with the reform of the payment system.** The authorities should clarify and disseminate the legal framework governing repo operations and clarify the ownership status of the IRM. The Treasury should adopt a well-designed debt management strategy and pursue a constant presence in the market. In this regard, the CBP could use the recapitalization bonds to conduct open market operations. The CBP also needs to adopt more transparent and market-based mechanisms to conduct interventions in the foreign exchange market (e.g., auctions), when necessary to smooth excess volatility or on the government's behalf. To eliminate the risks and substantial settlement costs posed by the current payment system, it is critical to seek the prompt approval of the draft Law on the Payment Systems, which envisages the implementation of a new system in October 2011.

IV. Financial Sector Oversight

A. The Regulation and Supervision of Banks[13]

20. **The regulation and supervision of banks have seen major progress in many areas since the last FSAP:**

- Regulations on credit, market, and liquidity risks have been issued. Contacts with boards and managers of supervised institutions have become more frequent and examinations are more risk-based.
- The CBP has strengthened licensing and transfer of ownership requirements, and imposed "fit and proper" criteria for bank board members and managers.
- Supervisors' qualifications have been strengthened and training programs have been established. Reportedly, the purchase by the CBP of an insurance policy covering eventual

[13] For more detail on this section, see Appendix 2. CBP is the supervision authority for the banking system. Within CBP, supervisory functions are carried out by the bank superintendence.

legal costs for staff has significantly buttressed supervisors' de facto operational independence.

- The enforcement of corrective actions has been improved by using suasion and regularization plans instead of punitive measures. Punitive measures, including fines, are available to the central bank under the central bank law. However, they can be appealed and during the appeal, their effects are suspended.
- The commitment to improvements in supervision has also been evidenced by the complete overhaul of the anti-money laundering (AML)-related supervision and regulatory framework recognized by both GAFISUD and FATF.[14]

21. **However, the constraints imposed by the banking and central bank laws have limited CBP's progress in updating prudential requirements.** These laws are unusually detailed and prescriptive, and determine quantitative limits, risk weights, and even the amount of fines, with very limited delegated capacity to the CBP. For that reason, deficiencies in the capital adequacy indicated in the last FSAP assessment have not been addressed, as the CBP has no power to change the definition of capital, or the required solvency ratio for each bank to reflect its risk profile.

22. **These constraints have led the CBP to focus on available tools for supervision, in some cases regardless of their degree of suitability**. For example:

- To enhance the quality of capital, the CBP doubled minimum paid-in capital to obtain or maintain a bank license, and raised general provisioning, instead of establishing differentiated minimum CARs and provisions according to the risk profile of individual banks.
- Although the CBP does not have power to change the definition of connected groups nor the limits applicable to large borrowers and to lending to related parties, it has increased monitoring of large borrowers by creating its own definition for monitoring purposes. It has also imposed additional levels of general provisions depending on the level of compliance with credit risk management requirements. However, the law needs to grant the CBP more discretion in order to facilitate the measurement and enforcement of large borrowers' limits. This is especially relevant in Paraguay where bank concentration and lending to related parties were important features of past bank failures.

23. **There are also some shortcomings that could be addressed within the current legal framework.** For example:

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[14] FATF, in its February 2011 meeting, recognized Paraguay's progress. It also indicated that certain strategic deficiencies remain and that Paraguay should continue implementation of its action plan (e.g. with regard to controls on cross-border cash transactions).

- Salary scales and the internal career structure at the CBP are still not adequate and the superintendence faces increasing difficulties to retain staff for this reason.

- The regulatory treatment of the so called "renovated, refinanced and restructured (RRR) loans" could be enhanced. Under the renovated heading, banks include credit operations of a revolving nature and even outright long-term loans. They are reported as short-term transactions and this has a significant impact for risk assessment.[15] Under refinanced and restructured headings, banks include restructured loans to borrowers with deteriorating credit quality. This can lead to an underestimation of required provisions. Regulations related to RRR loans should be strengthened and simplified. Institutions should be required to properly identify transactions' terms and credit quality, and more stringent criteria for loan classification and specific provisions should be applied. For example, the release of provisions for a refinanced loan should only be permitted to take place gradually and once there is evidence of improvements in the client's creditworthiness.

B. The Regulation and Supervision of Cooperatives

24. **Paraguay has a dual supervisory system.** The CBP is in charge of supervising banks and INCOOP, an autonomous agency, is in charge of regulating and supervising financial intermediation undertaken by all type and size cooperatives.

25. **INCOOP has adequate regulatory authority and supervision is rightly focused on the largest cooperatives. However, rules are urgently needed to improve governance in cooperatives, supervision is not risk-based, and enforcement power is limited.**

- Corporate governance in the cooperative sector needs to be enhanced in general and become more professional, in particular, in the largest S&L cooperatives. INCOOP needs to issue "fit and proper" requirements for board members and senior management.

- The existing procedures manuals are fairly well designed for "compliance" supervision, but have yet to encompass a clear risk-based approach, especially regarding credit risks, which should be particularly stringent. Moreover, the prudential regulations for large S&L cooperatives should converge to those of banks, in particular when it comes to the definition of capital. Apart from size, INCOOP also needs to monitor other sources of systemic risk, in particular common exposures of medium size cooperatives and potential links with the banking sector.

- The law allows suspension of the enforcement of INCOOP's corrective actions while appeals are under review by the judiciary. This could have serious stability consequences when it

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[15] For example, the non disbursed part of a credit line should be considered an off-balance sheet commitment and subject to capital requirements. However, this will not happen if the loan is recorded as a short term loan. For liquidity risk assessment, the true mismatching gap is underestimated.

comes to the application of corrective measures. Furthermore, it could also undermine the supervisors' capacity to exercise their legal powers.

- Moreover, the composition of INCOOP's board raises concerns about its independence. The INCOOP board consists of five members, three of which are elected, respectively, by the savings and loan cooperatives (SLC), production cooperatives (PCs), and multi-purpose cooperatives (MPC); one is appointed by the Paraguayan Confederation of Cooperatives (CONPACOOP); while the board chairman and INCOOP president is appointed by the president of the country from a list of three names chosen by all cooperatives in an election process**.** There appears to be a material risk of interference by the sector on critical decisions that limits the exercise of INCOOP's supervisory power. To overcome this shortcoming in governance, Board members should be appointed by the president of the country based on a list prepared following a fit and proper criteria assessment. Board members should not have simultaneous managerial responsibilities in cooperatives. INCOOP should enhance its accountability by producing an annual report with information on its performance, including financial statements.

26. **INCOOP lacks adequate resources to perform its mission and suffers from significant staff turnover.** INCOOP has problems retaining personnel and turnover is extremely high because of the low salary scale. For example, an examiner's monthly salary ranges from US$360 to US$540.

27. **INCOOP has recently received technical assistance on improving off site supervision from the German Confederation of Cooperatives (DGRV) for S&L cooperatives. The first phase of an early warning system was put in place in January 2011.** The system will automatically capture the monthly financial statements of the 23 largest S&Ls on a monthly basis. For this system to be effective, however, INCOOP needs to ensure the quality of the information received. Additional training for INCOOP supervisors would ensure proper interpretation of the information received as well as help detect any errors.

28. **For the smaller and geographically-dispersed cooperatives, INCOOP could delegate some of its supervisory processes.** For example, these processes could be managed by second-level cooperatives or by a cooperative bank that also provides access to the payment system. Alternatively, INCOOP could certify external auditors to perform auditing tasks.[16]

[16] A cooperative bank is a bank whose shareholders are cooperatives. There is at present one advanced project in Paraguay to create a cooperative bank under the supervision of the CBP.

V. Financial Safety Net

A. Crisis Management Framework

29. **The CBP's ability to act as a lender of last resort could be limited by its negative capital.** Sterilizing monetary expansion could prove difficult for the CBP because its negative capital position limits its actions. The effective implementation of the CBP capitalization law would be key to strengthen the capacity of the CBP to act as a LOLR.

30. **Internal procedures to provide ELA need to be updated and well disseminated to ensure timely disbursement**. Regulations for the approval and disbursement of ELA have not been updated since 2002, thus they do not reflect the new legal framework for bank resolution and deposit insurance. A revised regulation widely disseminated among the areas in charge would be important for the effective functioning of this instrument. The scheme could be further enhanced by introducing a pre-qualification of the collateral.

31. **The bank resolution framework is adequate for a non-systemic crisis situation although quick valuation of assets and quick asset to deposit information remain a challenge.** Valuation of assets during bank resolutions proved a problem in the last crisis, since many loans held by failed banks were fraudulent. Supervisors should consider making effective use of two options available under the current law to improve the speediness of asset valuation: (i) an early valuation of assets during the regularization plan; and (ii) an asset transfer to a trust fund. Implementing a system for quick access to information on effective deposit coverage would be important for the timely payment of the deposit guarantee.[17]

32. **The legal framework for systemic crisis situations has some features that can exacerbate moral hazard.** The "declaration of systemic risk," included in the Paraguayan law, includes a contingency plan prepared by the CBP, but does not require the removal of the troubled banks' managers when needed. Options like a temporary administration by the SBP or the establishment of a bridge bank, that would allow overriding shareholders' rights, are not available. This could hamper timely intervention in case of rapidly deteriorating conditions, threatening financial stability and creating moral hazard.[18]

33. **A crisis simulation exercise would help test the resilience of the financial safety net and identify weaknesses in dealing with individual and systemic situations.** The bank resolution framework has been tested twice with poor results for the case of two small financial companies and there is no experience declaring a systemic risk situation.

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[17] Effective deposit coverage is the insured deposit amount net of any depositor's debt with the bank.

[18] The contingency plan can include, among other measures, an extension of the deposit insurance coverage; exceptional funding for the FGD; and the creation of a temporary fund for bank recapitalization.

B. Crisis Preparedness Framework

34. **The main constraint for the effective enforcement of corrective measures at an early stage is the legal framework.** Although compliance with corrective measures is mandatory, in practice there is no effective way to enforce compliance, as corrective actions are subject to appeal and their effects are suspended while the proceedings last. As a consequence, threats of a regularization plan are the only current way to enforce corrective actions. Even in this case, the CBP has little discretion to decide on the reasons that can trigger a regularization plans. More discretion would make this tool more effective.[19]

35. **The deposit insurance system broadly complies with international standards, but coverage is high and above the regional average**. The agency works as a pay-box and can contribute to the bank resolution process under the "least-cost solution." At US$23,800 or 9.6 times GDP per capita, Paraguay has the second largest coverage in America (Figure 7). About 95 percent of depositors and 19 percent of deposits are fully covered (Figure 8). Accordingly, the risk premium is also among the highest in the region. The large coverage was believed necessary to promote confidence in the banking system after the banking crisis of 1995-2003. However, it creates excessive moral hazard and favors large deposits. These factors, in turn, make the system riskier. Given improvements in supervision and in banks' soundness indicators, the authorities need to consider reducing coverage.[20]

36. **Additional contingent funding is necessary given the current coverage.** The total resources (excluding treasury bonds) of the FGD amounted to 1.6 percent of total deposits and 8.2 percent of insured deposits as of September 2010. This sum covers the amount of insured deposits of all financial companies and all banks individually, except for the four largest. This reinforces the need to complete the remaining US$24 million capitalization of the FGD by the government and for a flexible mechanism to provide adequate contingent funding.

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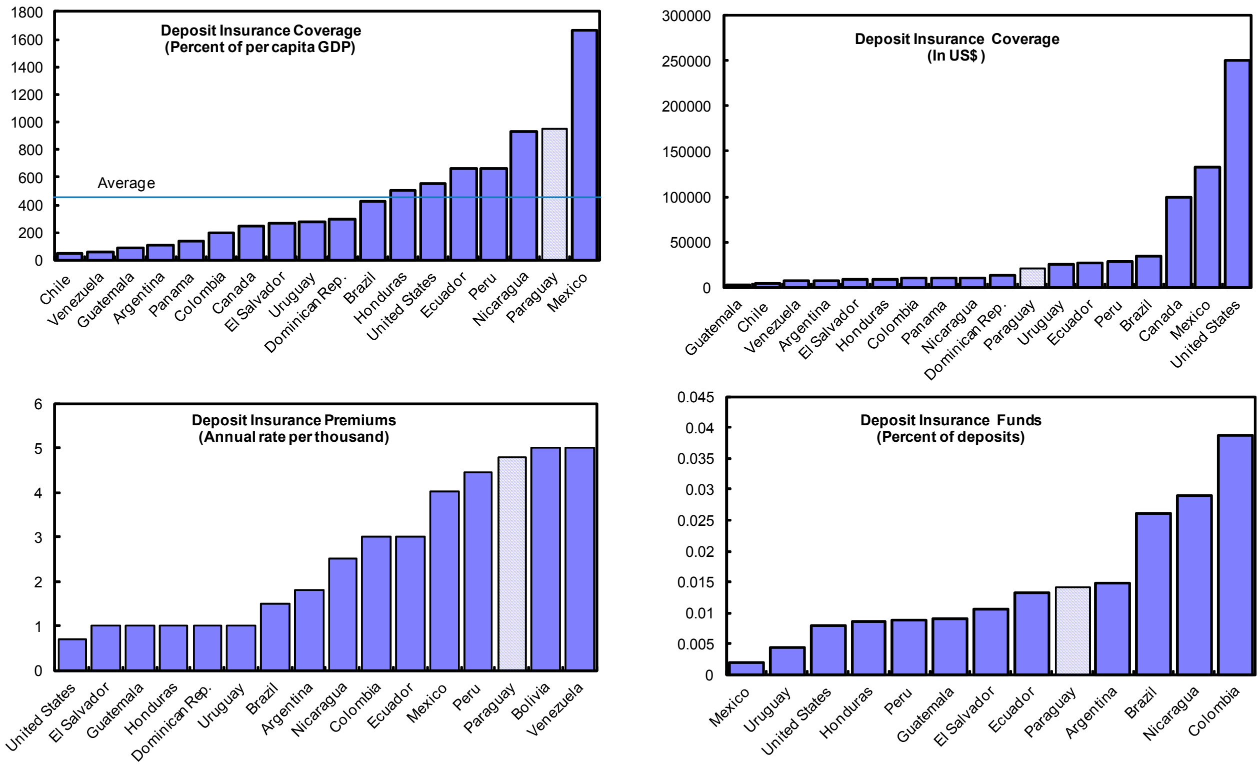
[19] A regularization plan is requested by the BSP under specific circumstances indicated in the law (e.g. deteriorating capital ratios). The institution has to propose a set of actions to address the problem. Failure to implement the plan within 90 days triggers the use of resolution tools. Bank managers are not removed during a regularization plan.

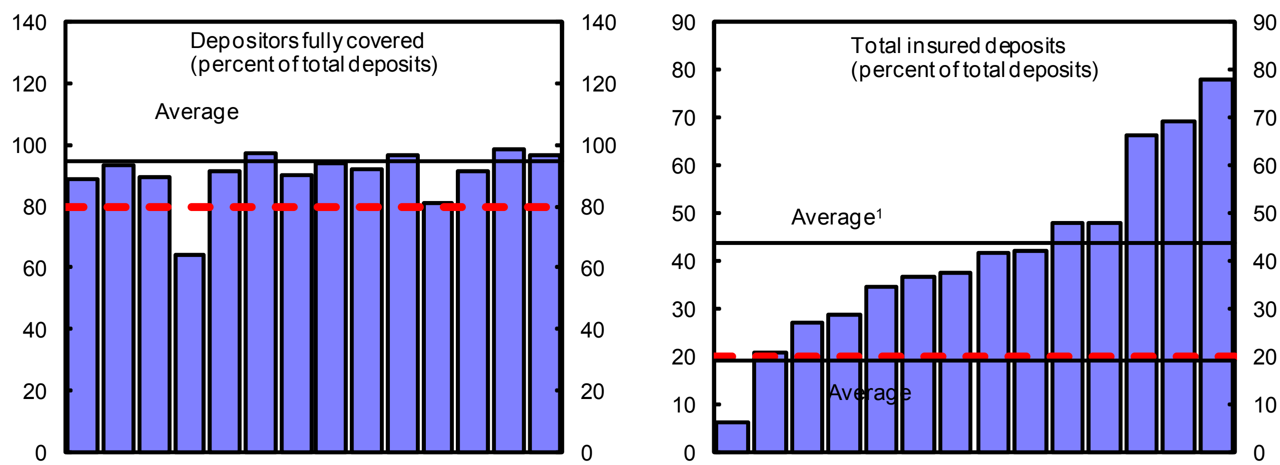
[20] The authorities are planning to introduce a risk-adjusted premium.

Figure 7. Paraguay: Cross Country Comparison of Deposit Insurance Schemes in America



Source: CBP, IFS, IMF staff calculations, and Bolzico, J., E. Gozzi, and F. Rossini (2010), "Financial Safety Net in American Countries - A Comparative Analysis".

Figure 8. Paraguay: Deposit Insurance Coverage by Bank



Source: Staff calculations based on UAFGD data.
Note: The dashed line indicates the 80/20 rule. The 80/20 rule states that an adequate deposit insurance coverage should cover approximately 80 percent of depositors but only 20 percent of deposit amounts.
1/ After netting depositors' debt

C. Cooperatives

37. **There is at present no LOLR for cooperatives.** A pilot plan, prepared by INCOOP, for liquidity assistance encompassing the largest five cooperatives, was put in place in January 2011. Following this proposal, INCOOP should manage a portfolio of assets provided by cooperatives to be delivered as collateral to banks which, in turn, should provide credit lines when needed. This scheme is more like a collective contingency plan rather than a liquidity facility. Through this initial phase, INCOOP expects to cover 54 percent of the difference between deposits and liquid assets, for which a credit line of US$50 million would be sufficient. Participation is voluntary. The mission recommended that non participants should be required to present an alternative contingency plans for managing their liquidity risk.

Resolution Framework

38. **INCOOP has an adequate range of tools and procedures to deal with troubled cooperatives. However, in practice, INCOOP finds it difficult to exercise these powers**. These procedures are divided into four different stages according to the gravity of the situation: corrective measures, action plan prepared by the troubled cooperative, on-site surveillance and intervention. If these measures are not sufficient to restore solvency, the license is removed and the institution liquidated. INCOOP also has powers to promote mergers, acquisitions and voluntary liquidations as established in the law. A more independent board would be key to enhance INCOOP's enforcing powers.

Deposit Insurance

39. **There are two proposals for a deposit insurance scheme for cooperatives, one prepared by INCOOP and another one by CONPACOOP**. Both suggest the establishment of a private fund with a capitalization period of around five years, during which time there would be no deposit coverage. Membership would be compulsory and for this reason the deposit insurance scheme requires to be established by law.

40. **The establishment of any liquidity support and a deposit insurance fund should follow best practices.** In particular, they should proceed after the soundness of the largest cooperatives has been ascertained, supervision has improved, and proper procedures to deal with troubled cooperatives can be effectively implemented.

D. Coordinating Arrangements Among Supervisors and to Preserve Financial Stability

41. **The mission recommended the creation of an interagency forum to discuss financial stability issues and harmonize prudential norms.** In order to address these issues, and to prepare the road for a macroprudential and systemic risk framework, a committee of all regulators, including INCOOP, could be created with participation at the highest level. Given that the CBP regulates and supervises systemic financial institutions, this committee should be chaired by the CBP governor. The committee should have a clear mandate, an agenda with

concrete deliverables, sufficient technical support teams and the responsibility to report on progress regularly. The two existing technical committees at the CBP could be strengthened and could serve as a support to the council. Enhanced corporate governance of the INCOOP would be key for an efficient functioning of the council.[21]

42. **Cooperation with international supervisors has been enhanced.** Formal information sharing arrangements are in place with Mercosur countries and effective informal arrangements are being formalized with Peru and Spain. However, there is no crisis management or contingency plan for dealing with distress originated at the level of the parent bank.

VI. Other Financial Intermediaries, Financial Infrastructure and Developmental Issues

A. Other Financial Intermediaries

43. **State-owned institutions are not a concern from a financial stability perspective but do not intermediate resources efficiently and transparently.** They are relatively small when compared to peers in the region and only one (out of five) is a deposit-taking institution. They are expected to provide credit to segments of the economy that private banks do not reach. However, actual transactions diverge from their stated goals. The mission recommended the development of a clearly defined strategy for state-owned banks so that they complement private sector activity.

44. **There has not been clear progress in the pension system since the initial FSAP**. The system consists of several different pay-as-you-go defined benefits regimes. Three out of six regimes related to central government employees have a cash flow deficit, which is covered by the government (who does not make employer contributions). The Instituto de Previsión Social (IPS)—the largest non central government regime—needs important parametric adjustments to maintain long-term financial stability.

45. **Paraguay lacks a comprehensive regulatory framework for pension schemes, including investment guidance, risk-return monitoring and accounting rules.** Current accounting rules mask the system's fragile actuarial condition. Reliable data on assets and liabilities are often missing due to the lack of reporting requirement. The mission recommended to create by law a pension supervisor, and to conduct actuarial assessments adhering to international standards to help anchor a parametric reform and the harmonization of benefits across regimes.

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[21] These committees are: (i) The Financial Stability Committee, whose objective is to produce the financial stability report (FSR); and (ii) the Committee of Financial Intermediaries, focusing on supervisory topics and reforms to banking laws and regulations.

B. Financial Infrastructure

46. **The credit information industry lacks comprehensive regulatory and oversight frameworks**. The system is fragmented and information sharing is ad-hoc. The mission recommended launching a major reform program of credit reporting systems in the country taking into account the new international standards that will be issued in early-2011 by a task force coordinated by the World Bank in cooperation with the Bank for International Settlements (BIS). The mission also made recommendations to improve the institutional framework for creditor rights and insolvency.

C. Developmental Issues

47. **Paraguay's level of financial intermediation compares well to other countries in the region and comparator countries worldwide but barriers to financial access persist particularly for the informal population.** The ratio of bank credit and deposits to GDP is similar or above many other countries in the region, but the average account value for deposits and the size of credit—scaled by per-capita GDP—continues to be on the high side for the banking system. Furthermore, an estimated 70–80 percent of the population only uses cash for their transaction, as they do not have access to an account or pre-paid card

48. **The mission recommended to introduce a basic bank account and to speed up current efforts to foster financial inclusion.** These include branchless banking via nonbank agents and mobile network operators. Given that the industry is moving already in this direction there is also a clear need to regulate security standards.

Table 6. Paraguay: Selected Economic Indicators

I. Social and Demographic Indicators

Population 2008 (millions)	6.2	Gini index (2007/2008)	58.4
Unemployment rate (2009)	6.4	Life expectancy at birth (2007, pro	71.7
Percentage of population below the poverty line (2009)	37.9	Adult illiteracy rate (2008)	5.2
Rank in UNDP development index (2008)	98 of 179	GDP per capita (US$, 2009)	2,264.9

II. Economic Indicators

				Projections	
	2008	2009	2010	2011	2012
(Annual percentage change, unless otherwise indicated)					
Income and prices					
Real GDP	5.8	-3.8	15.3	5.6	4.5
Nominal GDP	19.7	-4.0	20.0	14.8	12.1
Real GDP per-capita growth	3.8	-5.7	13.0	3.5	2.5
Consumer prices (end of period)	7.5	1.9	7.2	10.7	7.5
Consumer prices (annual average)	10.2	2.6	4.7	9.6	9.0
Monetary sector					
Currency issue	15.0	11.3	18.5	15.0	11.3
Credit to private sector	49.3	24.1	42.9	27.9	19.6
Private sector deposits	30.8	26.7	26.1	21.0	20.8
External sector					
Exports (fob)	38.8	-25.6	43.2	17.4	3.7
Imports (cif)	43.8	-22.7	44.0	17.2	3.5
Terms of trade	2.2	-7.7	-2.7	7.8	-4.7
Real effective exchange rate 1/	16.3	-7.4	1.4	…	…
(In percent of GDP, unless otherwise indicated)					
Current account	**-1.8**	**0.6**	**-3.2**	**-4.1**	**-3.7**
Trade balance	-6.2	-7.3	-8.3	-8.0	-7.2
Exports	46.1	40.8	45.0	44.1	40.4
Registered	26.4	22.3	24.5	25.1	23.0
Unregistered	19.7	18.5	20.4	18.9	17.5
Imports	52.3	48.1	53.2	52.0	47.6
Of which: Oil Imports	7.7	6.5	5.5	6.5	6.1
Other (export and import of services, income, current transfers)	4.4	7.9	5.0	3.9	3.5
Of which: Remittances	2.5	3.7	2.8	2.4	2.2
Capital account and financial account	**3.4**	**4.0**	**4.3**	**5.4**	**4.0**
General Government	0.1	1.2	0.7	0.3	-0.1
Private Sector	3.3	2.7	3.6	5.1	4.0
Of which: Direct Investment	1.6	1.4	2.3	2.0	1.8
Errors and Omissions	0.3	1.4	0.6	0.0	0.0
Net international reserves (in millions of U.S. dollars)	**2,864**	**3,861**	**4,168**	**4,468**	**4,525**
(Stock in months of next year imports of goods and services)	4.7	4.4	3.5	4.2	4.2
(Stock over total external short term debt)	2.9	3.5	3.4	…	…
Gross domestic investment	**18.1**	**15.5**	**16.9**	**18.8**	**20.4**
Private sector	14.3	10.0	12.3	13.3	14.2
Public sector	3.7	5.5	4.7	5.5	6.2
Gross national saving	**16.3**	**16.1**	**13.7**	**14.7**	**16.6**
Private sector	9.8	10.3	7.7	9.4	12.0
Public sector	6.4	5.9	6.0	5.4	4.6
External saving (+) Disavings (-)	-1.8	0.6	-3.2	-4.1	-3.7
Central Government revenues	17.3	19.7	19.2	19.8	19.5
Of which: Tax revenues	11.8	13.0	13.4	14.1	14.1
Central Government expenditures	14.8	19.1	17.8	19.7	20.7
Of which: Wages and salaries	7.1	8.6	8.2	8.2	8.3
Transfers	3.5	4.2	3.8	4.3	4.8
Capital Expenditure	2.7	4.6	3.8	4.6	5.3
Central Government primary balance	3.1	0.7	1.8	0.6	-0.8
Central Government overall balance	2.5	0.6	1.4	0.1	-1.2
Consolidatd public debt (in percent of GDP)	**23.2**	**23.0**	**18.7**	**17.8**	**17.0**
Of which: External	16.8	15.3	13.1	10.8	10.0
Domestic	2.2	2.7	1.8	2.0	2.3
LRM 2/	4.2	5.0	3.7	5.1	4.7
Memorandum items:					
GDP (in billions of Guaranies)	73,622	70,705	84,836	97,384	109,132
GDP (in millions of U.S. dollars)	16,905	14,216	18,475	22,143	25,025

Sources: Central Bank of Paraguay; Ministry of Finance; and Fund staff estimates and projections.
1/ Average annual change; a positive change indicates an appreciation.
2/ Letras de Regulación Monetaria.

Table 7. Paraguay: Financial Soundness Indicators—Banks

(In percent, unless otherwise stated)

	2005	2006	2007	2008	2009	2010
Capital adequacy ratios						
Regulatory capital to risk-weighted assets	22.2	20.1	16.9	16.3	16.3	15.4
Asset quality						
NPLs to gross total loans	11.6	5.1	3.2	2.6	2.3	2.0
NPLs net of provisions to capital 1/	77.3	20.6	12.7	7.3	1.5	0.8
Total provisions to distressed assets 1/	38.1	61.8	68.2	78.8	94.7	97.5
Total provisions to gross lending 1/	4.4	3.2	2.2	2.1	2.1	2.0
Earnings and profitability						
ROA	2.6	3.3	3.1	3.5	2.7	2.7
ROE	27.3	35.3	38.2	43.9	33.4	24.8
Net interest income to gross income	40.9	27.2	46.9	18.1	41.2	35.9
Noninterest expenses to gross income	79.2	82.3	69.2	86.8	73.8	77.5
Personnel expenses to noninterest expenses	43.8	23.1	46.1	13.7	41.8	36.1
Total liabilities to capital (ratio)	17.6	17.8	21.0	20.7	19.6	19.6
Liquidity						
Liquid assets to total assets	43.9	43.8	44.3	37.0	41.2	33.5
Liquid assets to total short-term liabilities	66.5	73.0	73.8	70.4	74.0	64.6
FX denominated liabilities to total liabilities	52.3	47.8	41.7	47.5	42.9	45.8
Sectoral distribution of loans to total loans						
Agribusiness	22.2	23.2	26.9	26.5	25.3	21.3
Livestock	5.9	7.8	9.7	9.2	10.7	11.1
Industry	12.9	12.6	12.0	11.2	9.3	9.7
Wholesale	18.4	16.8	12.8	13.0	12.0	12.2
Retail	5.1	5.1	4.6	6.3	7.7	8.9
Services	26.9	25.8	11.6	10.8	11.5	13.0
Consumption	8.5	8.5	8.4	9.4	10.4	13.1
Exports	0.1	0.1	0.1	0.1	0.1	0.1
Financial Services	0.0	0.0	14.0	13.5	13.0	10.6
Asset composition						
FX loans to total loans	36.7	37.7	37.5	38.4	35.3	37.1

Source: Central Bank of Paraguay

1/ Provisions are calculated as the sum of generic provisions and loan loss provisions.

Table 8. Paraguay: Financial Soundness Indicators—Finance Companies

(In percent, unless otherwise stated)

	2005	2006	2007	2008	2009	2010
Capital adequacy ratios						
Regulatory capital to risk-weighted assets	18.0	18.7	17.6	20.2	20.6	20.1
Asset quality						
NPLs to gross total loans	5.6	6.3	4.0	4.1	4.8	3.9
NPLs net of provisions to capital 1/	15.1	16.4	5.9	2.9	-3.9	-6.2
Total provisions to distressed assets 1/	59.3	63.8	82.9	91.5	110.4	122.6
Total provisions to gross lending 1/	3.3	4.0	3.3	3.7	5.4	4.7
Earnings and profitability						
ROA	4.0	4.0	4.3	5.1	3.8	3.6
ROE	25.9	26.8	31.2	36.2	26.0	20.1
Net interest income to gross income	69.5	63.9	56.2	46.4	46.7	34.8
Noninterest expenses to gross income	66.2	65.3	68.6	71.6	72.4	83.0
Personnel expenses to noninterest expenses	90.4	82.2	70.9	55.3	56.6	41.6
Total liabilities to capital (ratio)	7.1	7.9	9.3	8.9	8.1	7.7
Liquidity						
Liquid assets to total assets	17.7	19.3	17.1	18.2	17.8	13.9
Liquid assets to total short-term liabilities	100.5	111.7	91.9	120.6	105.2	96.4
FX denominated liabilities to total liabilities	21.8	21.4	21.6	23.2	21.8	20.6
Sectoral distribution of loans to total loans						
Financieras						
Agribusiness	13.9	14.2	10.1	9.8	12.5	15.4
Livestock	1.5	2.3	3.3	3.5	5.6	11.8
Industry	2.4	2.2	2.3	2.4	2.7	4.0
Wholesale	5.7	5.3	5.1	6.2	6.1	10.4
Retail	32.8	33.7	32.6	30.1	24.7	14.8
Services	11.0	9.9	12.6	6.9	7.8	9.2
Consumption	32.7	32.2	28.9	33.9	29.7	27.0
Exports	0.0	0.0	0.0	0.0	0.0	0.0
Financial Services	0.0	0.0	5.0	7.1	11.0	7.4
Asset composition						
FX loans to total loans	17.8	17.8	19.1	18.8	16.7	14.8

Source: Central Bank of Paraguay

1/ Provisions are calculated as the sum of generic provisions and loan loss provisions.

Table 9. Paraguay: Financial Soundness Indicators—S&L Cooperatives Type A

(in percent, unless otherwise stated)

	2005	2006	2007	2008	2009	June 2010
Capital adequacy ratios						
Regulatory capital to risk-weighted assets	…	…	38.1	35.4	37.6	37.7
Asset quality						
NPLs to gross total loans 1/	…	…	5.7	6.8	7.7	8.5
NPLs net of provisions to capital 1/	…	…	7.0	8.4	9.2	10.9
Specific provisions to distressed assets	…	…	60.6	62.1	62.5	61.3
Specific provisions to gross lending	…	…	3.5	4.2	4.8	5.2
Earnings and profitability						
ROA 2/	…	…	2.2	2.6	2.1	1.5
ROE 2/	…	…	9.8	11.3	9.2	6.6
Net interest income to gross income 2/	…	…	69.8	68.8	73.1	72.0
Noninterest expenses to gross income 2/	…	…	76.0	76.4	76.1	78.9
Personnel expenses to noninterest expenses 2/	…	…	28.7	27.0	30.4	30.2
Total liabilities to capital	310.3	309.4	344.7	334.9	331.0	355.8
Liquidity						
Liquid assets to total assets	23.2	20.3	23.5	18.7	20.7	20.9
Liquid assets to total short-term liabilities	38.7	35.5	40.7	33.2	38.1	37.7
Customer deposits to total (non-interbank) loans	105.8	96.5	104.6	96.8	95.8	97.2

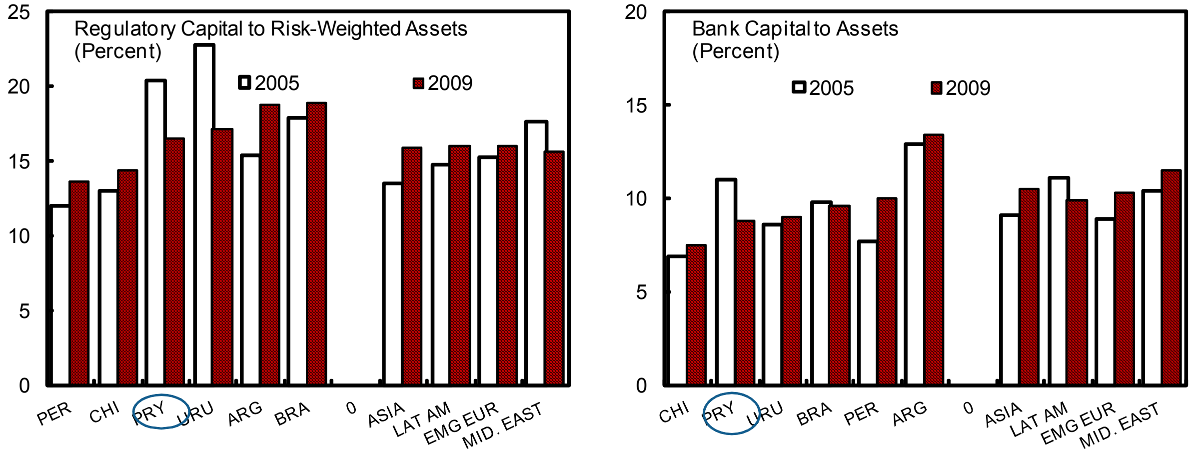
Source: INCOOP.

1/ Nonperforming loans are classified as loans with arrears of 60 days or more.

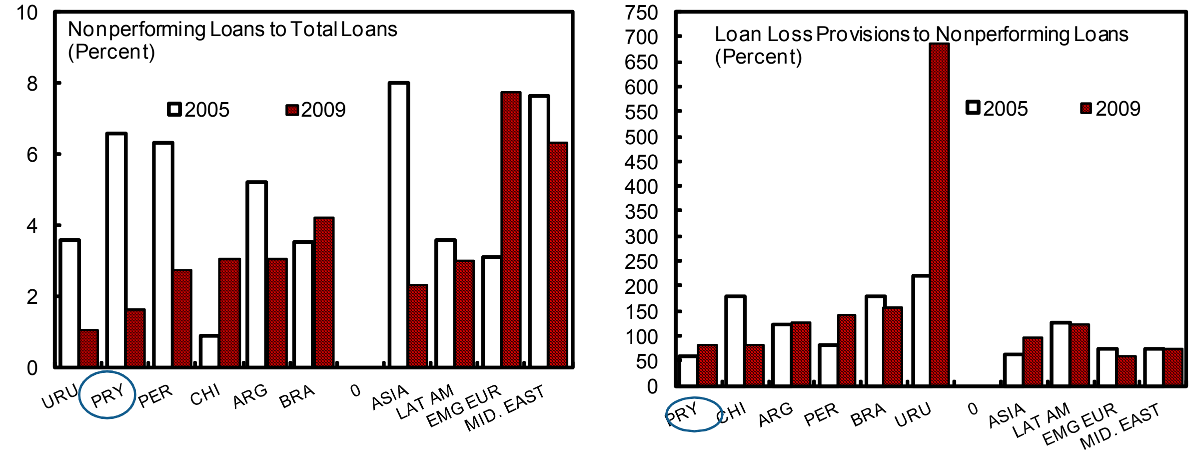
2/ Annualized for June 2010.

Figure 9. Paraguay: Comparative Financial Soundness Indicators

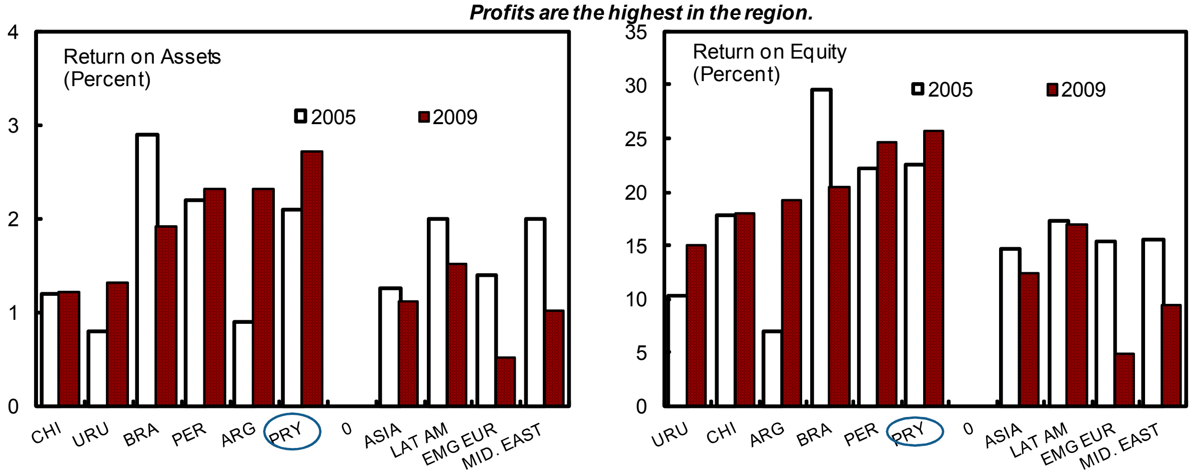
Capital levels fell and are low compared with the region. There are also definition issues.



NPLs fell but the provisions remain the lowest in the region.



Profits are the highest in the region.



Sources: National authorities; and IMF staff calculations.
Note: Due to differences in national accounting, taxation, and supervisory regimes, FSI data are not strictly comparable across countries.

Appendix I. Paraguay: Risk Assessment Matrix

	Overall Level of Concern	
Nature/Source of Main Threats	**Likelihood of Severe Realization of Threat Sometime in the Next Three Years**	**Expected Impact on Financial Stability if Threat is Realized**
A fall in GDP over two years of about 5 percent per year. .	*Assessment: MEDIUM/HIGH.* The GDP fall could be associated with a sharp decline in commodity prices. Based on historical experience, a commodity price drop of 30 percent is not unlikely. The GDP decline could also occur if there are two droughts in a row. As a reference, in 2009, GDP fell by about 4 percent in one year, to a large extent due to a drought.	*Assessment: HIGH.* The agribusiness sector accounts for about 25 percent of total loans. The effects of a one-year drought could be mitigated by refinancing loans; but a multi-year drought would likely lead to a major deterioration in asset quality. This relevance of this risk was confirmed by the stress tests.
Increased competition by financial institutions (that in the current context of low interest rates and abundant liquidity are turning to retail lending and micro banking) leads to a reduction in cooperative net interest margins.	*Assessment: HIGH.* Cooperatives already find it difficult to lower interest rates they pay on deposits but are forced to lower lending rates. This is leading to a compression of net interest margins. To the extent that cooperatives are slow to adjust their operating costs, their cash flow and capacity to provision for nonperforming loans will be impaired.	*Assessment: MEDIUM* A reduction in cooperatives' net interest margins can put pressure on financially fragile cooperatives and could force mergers among cooperatives and closures that INCOOP may find difficult to manage.
Failure of a large borrower.	*Assessment: MEDIUM.* In general leverage and credit risks are contained.	*Assessment: HIGH* Stress tests indicate that failure of the largest borrowers would inflict important losses to some of the largest banks
A failure of a foreign parent bank.	*Assessment: LOW.* Most foreign parent banks are located in Spain and Brazil. They appear to be relatively robust (based on information such as the recent EU stress tests).	*Assessment: MEDIUM.* About 50 percent of the banking system is foreign owned (total and majority foreign-owned) and coordination mechanisms with foreign supervisors are limited.
A pure liquidity shock, (e.g., due to rumors affecting the reputation of one bank or a large cooperative)	*Assessment:* MEDIUM. Rumors, often unfounded, are not uncommon in Paraguay. Cooperatives do not have access to LOLR, and their deposits are not insured, increasing the potential impact of shocks.	*Assessment: HIGH.* Deposits are very short term. Over 60 percent of bank deposits are wholesale. Stress tests indicate that some banks would struggle to survive a liquidity run.

Appendix II. Paraguay: Report on the Observance of Standards and Codes. Summary Assessment of Compliance with the Basel Core Principles for Effective Banking Supervision

49. **The assessment of the current state of implementation of the Basel Core Principles (CPs) in Paraguay has been completed as part of a Financial Sector Assessment Program (FSAP) update undertaken jointly by the International Monetary Fund (IMF) and the World Bank (WB).** The assessment was conducted in November 2010 to update the 2005 assessment.[22] The assessment is not necessarily directly comparable to that of the previous FSAP, performed using the pre-2006 methodology, since the bar to measure the effectiveness of a supervisory framework was raised by the 2006 update of the core principles methodology.

Information and Methodology Used for Assessment

50. **The assessment is based on several sources:** (i) a self-assessment concluded in October 2010 by the Paraguayan authorities; (ii) in-depth interviews with officials from the Central Bank of Paraguay (CBP), especially superintendence's (SB); (ii) relevant laws and regulations which constitute the regulatory framework; (iii) relevant official pronouncements and other documentation on the supervisory framework; (iv) primary evidence on the nature and extent of the supervisory practice; (v) sundry information on the structure and development of the country's financial sector, and more specifically, the country's banking sector; and (vi) meetings with banks' senior staff, the banking association and senior representatives of auditing firms. In addition to gaining an understanding of the regulatory and supervisory frameworks, the assessors also verified the application of key elements of these frameworks, by gaining access to original evidence pertaining to onsite and offsite supervision. The assessors had full cooperation from the authorities and received the information necessary for the assessment, including access to supervisory reports.

51. **The assessment was performed in accordance with the guidelines set out in the Core Principles Methodology,[23] and compliance was assessed with the "essential" criteria only.**

Institutional and Macro-Prudential Setting, Market Structure—Overview

52. **Paraguay has a dual supervisory system, with the CBP in charge of supervising banks and financing companies, and INCOOP, in charge of regulating and supervising cooperatives.** The SB is defined as a technical body within the BCP that enjoys functional, administrative and financial autonomy.

53. **Paraguay's financial system is dominated by commercial banks.**[24] Currently 15 commercial banks hold assets equivalent to 64 percent of total system assets, with the four

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[22] The assessment was conducted by Fabiana Melo (IMF) and Martin Vazquez Suarez (WB).

[23] Issued by the Basel Committee, October 2006.

largest representing about 60 percent of total bank assets. Foreign/domestic asset ownership is split 50:50, including one state-owned commercial bank. There are also 12 finance companies (FC) and 372 cooperatives holding assets equivalent to 3 percent and 15 percent of GDP respectively. Total financial system assets grew from 61 percent of GDP in 2005 to 84 percent in June 2010, mainly due to the growth of banks and cooperatives. Banks' loans are concentrated in the large agribusiness sector, whereas FC and cooperatives dominate the market for consumption loans, and loans to micro, small, and medium size enterprises.

Preconditions for Effective Banking Supervision

54. **Between the 2005 FSAP and 2008, Paraguay has experienced some of the best macroeconomic outcomes in recent years.** Between 2005–2008, real GDP rose by 5 percent a year, policy and regulatory frameworks were strengthened in several areas, including banking, supported by two IMF arrangements. The CBP's focus shifted to price stability, while maintaining exchange rate flexibility and inflation in the single digit range for most of the period.

55. **In 2009, the global financial crisis coupled with a severe drought tipped the economy into a recession from which it rebounded vigorously in 2010**. The recovery was driven by a bumper soy crop, buoyant demand from trading partners, and a strong monetary stimulus. Real GDP growth was 15.3 percent in 2010 and is expected to remain above potential, at 5.6 percent, in 2011.

56. **There are three credit information systems in operation in Paraguay.** The SB operates the public registry Central de Riesgos Crediticios (CRC), which contains both positive and negative credit information reported monthly by regulated financial entities. It records all credits on an individual basis and has no minimum floor on loan size. There are two private systems in operation. The legal framework contemplates several means for protecting credit**.** Security interests could be created on real estate or movable assets, including mortgages on real estate; pledges *prendas con registro* over movables assets; warrants; and cash collateral. Personal guaranties are also widely used as complements. Registries for property rights, secured transactions, and other charges are unified under a single general direction, but the registration system is inefficient as most transactions and consultation are not yet computerized. Loans secured by warrants, cash collateral and guarantee trusts are enforceable through effective non-judicial procedures, but enforcement of the rest of unsecured and secured credits using judicial procedures takes very long.

57. **The bank resolution framework is adequate for a non-systemic crisis situation although challenges remain of achieving a rapid valuation of assets.** The triggers for resolution

[24] The predominance of commercial banks in Paraguay's financial sector makes it important to judge the reliability of accounting and auditing information. In the Report on the Observance of Standards and Codes (ROSC) on Accounting and Auditing issued by the World Bank in June 2006 it was stated that, contrary to the very deficient situation outside this sector, the "banking laws and regulations [in Paraguay] provide a clear and comprehensive framework for accounting practices within financial institutions."

are clearly specified in the law. The resolution framework is based on the Purchase and Assumption (P&A) process, with the support of the Deposit Guarantee Fund FGD under the least-cost solution criterion. The deposit insurance system broadly complies with international standards. There is consistency among the objectives, mandate, and powers given to the deposit insurance agency, which is a pay-box with the possibility of supporting bank resolution under the least-cost solution. The Administrative Unit of the Deposit Insurance Fund (UAFGD) has adequate information on deposits to comply with its mandate in a timely manner. The deposit insurance coverage and premium are high and well above the average in the region.

Main Findings

58. **The regulation and supervision of banks in Paraguay have seen a major progress since the last FSAP, reflecting a willingness to strengthen the technical capacities of the CBP as supervisor of the financial system.** The internal structure and approach to supervision have been greatly enhanced, and Fund technical assistance (TA) on the adoption of risk-based supervision has been helpful. The supervisory approach has improved in a number of ways. Supervisory processes, while still in process of modernization, have improved, and on-site examinations have become increasingly more risk-oriented. Supervisors` qualifications have been strengthened and training programs have been established.

59. **However, the framework established by the banking law (LGBFOEC) 861/96 and the central bank law (LOBC) 489/95 have limited CBP's progress in updating prudential requirements.** These laws are unusually detailed and prescriptive, and determine quantitative limits, indicate definitions, and prescribe risk weights, recognizing limited delegated capacity to the CBP to determine the details. While the authorities have achieved some success in improving capital and risk monitoring through alternative means, these measures may have unintended effects and render the set of actual requirements complex and opaque. Giving the increasing dynamism of the Paraguayan economy and its financial sector, and the possibility of current high credit growth rates concealing a deterioration of credit standards, this shortcoming needs to be addressed. Changes in the legal framework need to be adopted so that the laws would establish principles and general requirements and let the CBP and Superintendence determine the specific requirements and technical details of the regulatory regimen.

Core Principles (CPs)

60. **The CPs may be grouped into seven major categories:** (i) objectives, independence, transparency, powers and cooperation (CP1); (ii) licensing and structure (CPs 2–5); (iii) prudential regulations and requirements (CP 6–18); (iv) methods of ongoing supervision (CP 19–22); (v) accounting and disclosure (CP 23); (vi) corrective and remedial powers of supervisors (CP 23); and (vii) consolidated and cross-border banking supervision. (CP 24–25)

Objectives, Independence, Transparency, Powers, and Cooperation (CP 1)

61. **The LOBC 489/95 and the LGBFOEC 861/96 specify the responsibilities and objectives of the CBP in the supervision of banks.** These laws establish the mandate, accountability and regulatory capacity of the supervisory authorities. The legal framework is clear about authorization and supervision powers, as well as powers for requiring information from the banks and banking groups. However, the high level of detail in LGBFOEC 861/96 has curtailed the timely update of prudential regulations.

62. **There is no evidence of political or industry interference in the governance and activities of the banking supervision.** Supervisors need to undertake formal training. In spite of the efforts made to guarantee adequate human and physical resources, it is clear that budgetary restrictions have hindered not only the retention of trained staff but also acquisition of equipment and modernization of supervisory activities. Legal protection has been improved with Law 2334/07, which establishes that employees of the CBP and SB are not to be sued for the actions taken while in duty. In addition, CBP purchased in 2009 an insurance policy to cover possible costs of legal defense of a supervisor. The policy remains in effect until the legal process is concluded.

63. **Laws establish corrective actions and disciplinary actions.** While corrective actions (see CP23) are not put on hold if appealed, sanctions and fines can be suspended by appeal and the “due process” may involve long judicial procedures. Therefore, there is a real limitation to the supervisor’s ability to enforce sanctions and penalties because they are suspended while appeal process is in course.

64. **Cooperation with international supervisors has been enhanced, with formal and informal information sharing arrangements in place with all home supervisors.** Internally, cooperation and information exchange have increased with the Comision de Valores, but exchange of information with INCOOP has been very limited so far.

Licensing and Structure (CPs 2–5)

65. **The use of the term “bank” is defined in the law, which also describes the permissible activities of each type of financial intermediary.** The law also sets licensing criteria such as constitution and governance requirements, business plan and program of activities, the internal control and audit systems proposed, a list of the company’s founding shareholders, with an indication of their shareholding interest, as well as information on the persons who will serve on its Board and in key management positions, and minimum capital. The CBP may deny applications when the project, shareholders, board, or management are not suitable and cannot guarantee sound and prudent management

66. **Ultimate beneficial owners must be identified.** Recent regulations issued in 2010 established that proposed shareholders must present documentation on criminal records, judicial records, certification that they are not under a bankruptcy or intervention process, and proof of financial capacity and origin of the sources of capital, as well as other documentation deemed necessary.[25] In case the founding shareholders are juridical persons, the chain of shareholders must be established until the physical person that will be the beneficial owner. The CBP has built technical capacity to evaluate business plans and to use this analysis for follow up during off -and on-site supervision.

67. **The law requires the CBP to apply to foreign branches and subsidiaries the same conditions and requirements established for local institutions.** Applications for authorization to open branches of foreign institutions must demonstrate that the applicants have received the authorization of their home supervisor, and also the minutes of the board/shareholders decision by the parent bank to authorize the branch.

68. **The supervisor receives information of all changes in ownership, and changes involving more than 10 percent of corporate capital must be previously authorized.** The supervisor can reject changes if they do not meet the same criteria used to authorize new banks. Identification of beneficial owners and all physical persons involved is required. If an institution fails to request the authorization from the CBP, the law allows for appropriate action. Banks can acquire shares in domestic non-financial entities, vehicles constituted to provide exclusive services to the bank, and in banks and financial entities abroad, each subject to limits to regulatory capital. Investment in non-financial companies and in vehicles must be divested before one year. If the bank fails to do so, it must set aside as provisions the full amount of the participation. Banks can invest up to 20 percent of their regulatory capital in shares of financial companies abroad, with the prior authorization of CBP.

Prudential Regulations and Requirements (CPs 6–18)

69. **Banks must keep a minimum capital (patrimonio efectivo) to risk weighted assets, calculated on a consolidated basis, of at least 8 percent.** CBP can increase the Capital Adequacy Ratio (CAR) up to 12 percent without requiring legal change and has effectively done so in 1996, raising it to 10 percent. The definition of capital is legally established and includes paid-up capital, subordinated debt, retained earnings (audited) reserves, and the balance of asset revaluation reserve. Previous FSAP noted that revaluation reserves were not limited, but in January 2010 CBP established a scheduled limitation of the amount of revaluation reserves starting at 100 percent in

[25] Since the last FSAP, few authorizations have been granted: three financing companies were authorized to become banks; there were two mergers (Lloyds was acquired by HSBS local subsidiary, and ABN AMRO merged with Banco Regional); one financing company was authorized in 2010; and 9 new foreign exchange dealers were authorized. Recently a Uruguayan entity had its license revoked because the origin of resources could not be identified.

December 31, 2009 to 70 percent in December 31, 2012. Although there is no distinction between Tier I and Tier II capital, subordinated debt is limited to 50 percent of paid-up capital and reserves. The minimum CAR is calculated using a simplified risk weighting system, also established in the legal text, with risk weights (RW) of 0, 20, 50 and 100 percent. The CBP has no explicit capacity to change the regulatory capital definition or the prudential capital requirements through regulation, or to require the solvency ratio to reflect the risk profile of individual banks. This has led the CBP to use alternative tools —for instance, by requiring more absolute minimum paid-in capital or the total provisioning, and by requiring a "risk based" and "bank specific" general provisioning add-on instead of establishing differentiated minimum CAR according to the risk profile of individual banks.

70. **There are currently two central bank regulations dealing with risk management.** Resolution 1/74/2008 deals with credit risk management, and Resolution 2/2009 with "financial risk," which includes market risk (excluding commodities) and liquidity risk. Both require banks to have documented risk management policies (which need to be approved by the board) to identify, manage and allocate capital. The credit risk regulation, although does not mention capital, requires the policy and strategy to be "sustainable", as to guarantee the continuity of the institution. Exposures to market risk are to be marked to the market. Both resolutions are very recent, and the supervision has not yet proceeded with verifying compliance. The CBP is keen that the supervised institutions first develop a "risk management culture" before capital requirements are introduced. However, it is clear that current regulations and supervisory approach are mostly focused on credit risk.

71. **Control of credit risk is increasingly based on the interaction of off-site and on-site supervision, which has resulted in on-site inspections being more effective in the use of their scarce resources.** Evidence was provided on the importance given to credit risk direct assessment by Intendencia de Inspeccion in on-site inspections and on the actual verification of the quality of credit risk management and internal controls in supervised entities. Inspectors have direct access to internal documentation and systems, and interact with Credit Registries Offices (CRO) and equivalents. The banks' senior management has fluid exchange of information with SB on strategic matters.

72. **Prudential regulations provide for the reporting of loans whose initial terms have been modified, including postponement of principal repayment, as well as changes in the loan terms for increasingly stressed borrowers, the so-called renovated, refinanced, and restructured credits.** It is usual practice that banks report under the heading of "renovated loans" revolving credit lines or longer-term loans with predetermined disbursement tranches. Under the "refinanced and restructured headings" banks report situations of deteriorating credit quality. These credits can be reclassified to better credit categories and provisions can be released if some conditions are met. These regulations are ambiguous and may be misused to conceal the actual level of impairment in credit portfolios, especially in periods of stress.

73. **Resolution 1/60/2007 defines “large borrowers” as individuals or companies (and their connected counterparties) that represent 3 percent or more of the regulatory capital of the bank.** Large borrowers are also those that have aggregate outstanding loans representing 6 percent or more of the total regulatory capital of the banking system as a whole. That information is available to banks through the CBP’s Central de Riesgo, and such large borrowers are also subject to differentiated documentation, risk classification and provisioning requirements. It is important to note that Resolution 1/74/2008 links compliance with the requirements of credit risk management to additional general provisions—the higher the level of compliance, the less general provisions are needed.

74. **Since 2005, the CBP has achieved progress in monitoring large borrowers and connected lending.** The section in charge of reviewing the property nets to identify connected borrowers has been strengthened. However, currently information is verified on-site based on information provided by the banks, which is mostly based on paper reports that need to be processed by inspectors. There is a project to modernize the Central de Riesgos and migrate most of this information to electronic form, which should help CBP identify groups. CBP resents the lack of open presumption capacity to decide on connected lending on a case by case basis. Given the business concentration in the Paraguay economy, and the number and importance of connected companies and family owned business, deficiencies are considered material.

75. **Banks are required to monitor the location of the exposures (on-and-off balance sheet), and report them quarterly.** Exposures are controlled per institution and per country, and include details such as risk classification and type of exposure. On an aggregate basis, supervisors also analyze trends and concentrations. There are limits and special provisioning requirements to exposures abroad that have a practical effect of limiting country and transfer risk.

76. **There is a relatively new regulation regarding market and liquidity risks, which establishes qualitative requirements for risk management.** It provides for a clear separation of functions (i.e., front vs. middle office), and reinforcement of internal controls, and determines that banks must clearly identify and measure market risk by the use of internal models, including a mandatory performance of back testing and stress tests. These general requirements are developed by the entities’ boards and their efficacy is tested by the Division de Riesgos Financieros, but the division’s capacity needs to be strengthened in order to be able to accomplish this task effectively. Liquidity is still managed by accumulating large buffers of liquid assets to meet contingencies and unusual liquidity demands. There is no guidance or regulation regarding operational risk, except a detailed guidance for information technology (IT). Initial discussions on a qualitative rule on operational risk are underway. For interest rate risk in the banking book, there is no specific guidance. As there is no official definition of banking and trading book, it is assumed that the resolution that covers financial risk management would also cover interest rate risks in the banking book.

77. **The law identifies the main responsibilities of Board members and senior management.** Banks are required to have an Internal Control Unit, reporting directly to the Board, to control

accounting, internal processes, and other risks, and the establishment of the audit committee. External auditors are required to make explicit judgment on the quality of the entity's internal controls.

78. **Paraguay has made progress in anti-money laundering and combating the financing of terrorism (AML/CFT) since 2005, approving several legal and regulatory updates.** Law 1015/1997 defines the entities responsible for AML/CFT regulation and supervision. The Secretariat for the Prevention of Money and Asset Laundering (SEPRELAD), which is attached to the Office of the President of the Republic, is the main authority responsible for implementing the AML preventive mechanisms established in Law 1015/1997. Responsibility for the enforcement of AML/CFT requirements is divided among the SBP and the IS, which are the technical supervisory bodies within the CBP, the National Securities Commission, and the INCOOP. Articles 14 to 16 of Law 1015/1997 provide for the requirement to undertake customer due diligence (CDD) measures by financial institutions. SEPRELAD issued Resolution 172/2010 to regulate compliance with the CDD requirement, which provides for a mandatory *Manual for AML/CFT Prevention* in each financial institution. The Manual is required to include policies and processes to designate compliance officers, screening policies for professional standards, mandatory AML/CFT training, functions of the compliance officer and internal auditor, and staff reporting. SB has established and trained a special unit for AML/CFT supervision, in partnership with SEPRELAD, and has already started its program for AML/CFT supervision.

Methods of Ongoing Supervision (CP 19–21)

79. **While the supervisory system in Paraguay still suffers from shortcomings, there has been remarkable improvement in some areas, since the 2005 FSAP.** The reform of SB procedures and processes has increased efficiency and promoted coordination among different components. The establishment of the Division de Estabilidad Financiera has provided a macroeconomic and systemic approach. All this has resulted in heightened awareness of relevant developments, and earlier identification of incipient problems. While evidence has been provided on preemptive actions taken by the SB on emerging risks, the current insufficiency of resources and minimum coordination with the cooperatives supervisor (INCOOP) hamper effective understanding of exposures and risk in the financial sector as a whole.

80. **On-site inspection teams are increasingly respected for their technical capabilities and professionalism.** Off-site supervision was significantly reinforced since the last FSAP by improving infrastructure and increasing qualification but still relies too heavily on ad-hoc information to perform their duties.

81. **The SB has legal powers over reporting for supervisory purposes.** The law gives to inspectors full access to accounting records and internal information, and also establishes mandatory revisions by external auditors. The SB can reject an auditor without indicating the cause, and the quality of their work is regularly assessed. Fraud in information provided in supervisory report is one of the reasons for the initiation of a regularization plan (see CP 23).

Accounting and Disclosure (CP 22)

82. **The SB has the legal power to establish and modify accounting and valuation regulations.** It requires supervised entities to reflect accurately its financial position and risks and allows the SB to adjust assets valuations so as to reflect their commercial value, to require for liability recognition and to write off assets that no longer represent real values, as well as to demand provision for doubtful operations. The accounting plan was issued in 1995, and the level of disclosures required is lower than some banks have voluntary advanced. However, it is important to note that the current accounting framework is commensurate with the lack of complexity of the Paraguayan banking sector and it has performed well in the past. Nonetheless, a rigorous evaluation of the implications of an eventual migration to international standards seems to be advisable.

Corrective and Remedial Powers of Supervisors (CP 23)

83. **The legal framework related to corrective and remedial action in Paraguay involves, among other tools, ongoing supervision requiring correction of weaknesses.** The most significant mechanism, when daily suasion proves insufficient, is the regularization plan, which can be started for a number of reasons explicitly stated in Law before the financial situation of a bank becomes seriously deteriorated. In all cases, distribution of dividends and expansion of activities are automatically suspended, but the other specific features of the regularization plan are commensurate with the gravity of the situation. Thus the plan may involve, among other actions, limits on operations, removal of managers and board members, and the establishment of a program to sell or merge the bank with a stronger institution. The other measures available to the CBP under LOBC 489/95, including fines, are considered penalties and as such undergo the legal procedures *sumario administrativo* that involve due process and appeals, during which their effects are suspended.

Consolidated and Cross-Border Bank Supervision (CP 24—25)

84. **There are no significant banking groups or subgroups—either domestic or international—whose parent bank is a Paraguayan entity.** Thus, the practical application of CP24 is rather limited. However, the law 861/96 already recognizes important powers to the CBP to deal with formal or *de facto* banking groups. The SB has the authority to issue regulation for consolidating accounting statements for credit institutions that are deemed to operate as a unified decision-making entity.

85. **The CBP has the legal powers to establish information sharing arrangements with foreign supervisors and has achieved a good level with cooperation with the relevant home supervisors**. There are currently formal agreements with Mercosur countries and Memoranda of Understanding with Peru and Spain and in the final stages. There are also informal arrangements, including participation in training and colleges of supervisors. The law prescribes the confidentiality treatment of all information received by supervisors while in their functions.

Table 1. Recommendations to Improve Compliance with the Basel Core Principles for Effective Banking Supervision

Reference Principle	Recommended Action
1. Objectives, Independence, Powers, Transparency and Cooperation	
1.1. Responsibilities and Objectives	
	Prudential regulations need to be updated in a timely manner. This involves change in legislation (LGBFOEC 861/96 and LOBC 489/95)
1.2. Independence, Accountability, and Transparency	
	The CBP needs to review the salary scale and career structure for supervisory professionals, in order to ensure adequate capacity building and to retain qualified professionals who it is currently losing to the market.
1.3. Legal Framework	
	The CBP needs to have powers to change prudential regulations without changing laws. It is recommended that LGBFOEC 861/96 and LOBC 489/95 be amended so as to delegate powers to the CBP to issue prudential regulations and to apply due discretion, in order to improve the quality of supervision by making it more risk-based and pre-emptive.
1.4. Legal Powers	
	There is a need for amendments to the law to ensure the supervisor's ability to enforce sanctions and penalties. These changes mentioned would allow supervision more grounds to substantiate the processes that culminate in sanctions. A reduction in appeal times/levels could also be subject to legislative change.
1.6. Coordination	
	Establish an effective information exchange mechanisms with the INCOOP
6. Capital Adequacy	

Table 1. Recommendations to Improve Compliance with the Basel Core Principles for Effective Banking Supervision	
Reference Principle	**Recommended Action**
	1) Both the numerator and the denominator of the capital adequacy ratio need to be reviewed so that they become more aligned with the Basel standards. More specifically, it is recommended to undertake a substantial revision of the definition of regulatory capital—including deductions and limits to computability— significantly increase the scope of capital requirements, so as to demand capital for all material risks, and reconsider current risk-weights.
	2) Supervisors need to be able to adjust capital requirements to the risk profile of each bank.
	3) Calculate capital requirements on solo and consolidated basis.
7. Risk Management Process	
	Introduce guidance/regulation regarding risk management requirements for all risks, including an assessment of overall capital adequacy in relation to the entity overall risk profile.
8. Credit Risk	
	1) Supervised entities must be explicitly required to have well-defined criteria for approving renovated, refinanced, and restructured loans and these criteria should be available to the SB on a regular basis.
	2) Supervised entities must be explicitly required to evaluate their borrowers' capacity and will to pay and have documentation on their evaluations, for all borrowers and not just for large borrowers.
9. Problem Assets, Provisioning, and Reserves	
	1) Amend regulations on credit classification and provisions to induce a more a proactive attitude in banking institutions as regards the determination of their credit portfolio quality, by requiring the identification of deteriorating assets and their subsequent reclassification. Provisions should be based on early signs of distress in addition to the current criteria based on time since first default.
	2) Amend regulations regarding renovated, refinanced, and restructured operations to ensure that no operations under these headings are misreported.

Table 1. Recommendations to Improve Compliance with the Basel Core Principles for Effective Banking Supervision	
Reference Principle	**Recommended Action**
10. Large Exposure Limits	
	1) Legal (or regulatory) changes are needed to ensure that the supervisor has the open presumption capacity to decide on connected lending on a case by case basis.
	2) Calculate limits on large exposures on both solo and consolidated basis.
	3) Establish and effective exchange of information with INCOOP to identify large borrowers.
11. Exposure to Related Parties	
	Legal (or regulatory) changes are needed to ensure the supervisor has the open presumption capacity to decide on connected groups and related lending on a case-by-case basis.
13. Market risks	
	1) Reinforce the capacity of the Division de Riesgos Financieros so that it can effectively supervise implementation of Res. 2/2009 on market risk.
	2) Develop a regulatory framework to require (in due time) capital requirements for market risk exposures.
14. Liquidity Risk	
	1) Reinforce the capacity of the Division de Riesgos Financieros so that it can effectively supervise implementation of Res. 2/2009 in regard to liquidity risk.
	2) Revise the liquidity operational frameworks of the systemic private entities identified by the SB to determine the degree of development of the internal procedures prescribed by Resolution 2/2009.
15. Operational Risks	
	Issue prudential regulation relative to operational risk identification, assessment, monitoring and mitigation of operational risk by banks.
16. Interest Rate Risk in the Banking Book	
	1) Develop a regulatory framework for the identification, monitor and control of interest risk in the banking book.

Table 1. Recommendations to Improve Compliance with the Basel Core Principles for Effective Banking Supervision	
Reference Principle	**Recommended Action**
	2) Expand and reinforce the capacity of the Division de Riesgos Financieros to effectively supervise the management of interest rate risk in the banking book.
17. Internal Control and Audit	
	Reinforce the capacity of the SB to require re-structuring of boards in case of serious breach of internal control requirements (i.e., if they could result in jeopardizing the stability of the institution).
19. Supervisory Approach	
	Establish effective information exchange mechanisms with the INCOOP
20. Supervisory Techniques	
	Implement the Reingeniería Informática project so as it becomes operative as planned in December 2011.
21. Supervisory Reporting	1) Reinforce off-site supervision so as the new information to be reported by supervised entities can be properly analyzed.
	2) Implement the Reingeniería Informática project so as it becomes operative as planned in Dec 2011
22. Accounting and Disclosure	
	1) Evaluate rigorously and area-by-area the potential impact of an eventual migration to international accounting standards (i.e., International Financial Reporting Standards (IFRS)) and the desirable timing and sequencing of a successive implementation of this accounting framework.
	2) Enhance requirements for public disclosure, so that comparability, relevance, reliability, and timeless of disclosed information is promoted. This enhanced disclosure must include qualitative and quantitative information on the bank’s financial position and performance, risk management strategies and practices, risk exposures, transactions with related parties, accounting policies, and management and governance frameworks.

Table 1. Recommendations to Improve Compliance with the Basel Core Principles for Effective Banking Supervision	
Reference Principle	**Recommended Action**
23. Corrective and Remedial Powers of Supervisors	
	1) Change law to allow the CBP to initiate preventive measures when the situation is not yet warranting a regularization plan. 2) Change law to allow the CBP more discretion regarding initialization of the regularization plan.
24. Consolidated Supervision	
	Modify prudential regulation to ensure that prudential requirements are established, required, reported and supervised on a consolidated basis, as well as on a solo basis.

AUTHORITIES' RESPONSE

86. **The authorities expressed agreement with the main recommendations**. This applies in particular to those recommendations related to the need of legal changes to grant more regulatory and supervisory powers to the CBP.

87. **They also informed the team of some actions taken after the FSAP mission was concluded. Specifically:**

- They informed that the prudential regulations that were under study at the time of the FSAP and were mentioned in the report (related to increases in capital and general provisions) were approved by the CBP and can be found in their website: http://www.bcp.gov.py/index.php?option=com_content&task=view&id=247&Itemid=322&limit=1&limitstart=2

- With regard to CP 9, they reported that the regulation that modifies Res. 1/2007 and incorporates new criteria for non performing loans was published on November 24, 2010. In this respect, the SB believes that establishing non performing loans at 30 days will promote better management by the supervised institutions and promote better payment culture by the debtors in the system.

- They also informed that the framework for renovated, refinanced and restructured operations is under study and changes are likely to take place shortly.

88. **Regarding CP 18, they highlighted the following statement by the Financial Action Task Force (FATF) review**:

“Paraguay has made an overall outstanding progress to improve its AML/CFT regime. Regarding the key deficiencies outlined in this action plan, Paraguay has taken serious steps pursuant to address them in a timely manner. These remarkable efforts and their high level political commitment have been reflected in the issuance of proper legislation, the authorities’ broader coordination capacity and the strengthening of their institutional framework. All that notwithstanding, a few deficiencies remain, especially in relation to Special Recommendation III (SRIII), where the enactment of proper Bill is pending, as well as the establishment of specific procedures for its effective compliance. For the forthcoming months Paraguayan authorities will have to demonstrate the effectiveness of the legislation in force and of several mechanisms put in place, particularly those addressing Special Recommendation IX (SRIX).”

With regard to SRIII, the authorities informed that the provisions relating to the freezing of terrorist assets were submitted to Congress in January 2011.