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Paraguay
Financial Sector Review

November 15, 2002

Finance, Private Sector & Infrastructure Department
Country Management Department for Argentina,Chile, Paraguay and Uruguay
Latin America and the Caribbean Region

CURRENCY EQUIVALENTS

(November 15, 2002)

Paraguayan Guaraní 6,550 = US$ 1.00

FISCAL YEAR

January 1 to December 31

ACRONYMS AND ABBREVIATIONS

BCP	Banco Central del Paraguay
BNF	Banco Nacional de Fomento
BNV	Banco Nacional de la Vivienda
CADEF	Calificación de Entidades Financieras
CAH	Crédito Agrícola de Habilitación
CAMEL	Capital, Assets, Management, Earnings, Liquidity
CAR	Capital Asset Ratio
CAULA-G	Calidad, Activo, Utilidad, Liquidez, Administración, Gestión
CNV	Comisión Nacional de Valores
CONAVI	Concejo Nacional de la Vivienda
DW	Durbin Watson (statistic)
FDC	Fondo de Desarrollo Campesino
FDI	Fondo de Desarrollo Industrial
FG	Fondo Ganadero
FX	Foreign Exchange
GDP	Gross Domestic Product
GOP	Government of Paraguay
IBRD	International Bank for Reconstruction and Development
IDB	Inter American Development Bank
IDP	Institutional Development Plan
INCOOP	Instituto Nacional de Cooperativismo
IOU	A signed promise to pay a debt (abbreviation for "I Owe You")
IPS	Instituto de Previsión Social
LOLR	Lender of Last Resort
M0	Monetary Base (currency in circulation plus deposits at central bank)
M1	Monetary Base (M0) plus demand deposits
M2	Monetary Base and demand deposits (M1) plus savings deposits
MERCOSUR	Mercado Común del Sur
MOF	Ministry of Finance
NGO	Non Governmental Organization
NIR	Net International Reserves
NPL	Non Performing Loans
OL	Organic Law
RWA	Risk Weighted Assets
SB	Superintendencia de Bancos
SME	Small and Medium Enterprise
UTEP	Unidad Técnica Ejecutora de Programas

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Macro Financial Context

The Paraguayan financial system finds itself in a highly vulnerable situation on account of a number of factors. First, the banking crises in Paraguay during 1995-98, while having closed many weak institutions, did not fully resolve the system's structural weaknesses, particularly given the anemic or negative growth during those years and the years following. Second, the more recent competitive devaluations of the Brazilian real, the fall in cotton prices, as well as the general regional economic slowdown exacerbated by the terrorist attacks in the United States continue to have an impact on the economy and on banking system profitability. The continuation of problems also suggests that earlier efforts to clean up the financial system were not sufficiently strong, and major changes are needed.

The banking system is highly dollarized with over 60% of total assets being denominated in dollars, and most of the assets in the Paraguayan banking sector (80%) are in the hands of foreign owned banks. The implication of this dollarization is that while banks' assets and liabilities are generally well hedged in terms of currency matching, many borrowers who have domestic currency earnings but owe dollar loans (about 54% of the system's loan portfolio) are exposed to exchange risks with ensuing credit risk effects which can impact banks' profitability. In a worse possible scenario of a depositor panic and a run on the currency, the government could defend this as its net available international reserves cover at least 75% of currency plus short term liquidity in the banking system. This scenario, however, is not likely due to the dominance of foreign banks who already hold substantial dollar assets. However, other financial or trade shocks might render reserves, which stand at less than 2 months of imports, insufficient.

Financial System Condition and Vulnerabilities

Bank earnings in the financial sector have been steadily declining as well as overall liquidity, when measured relative to deposits. This reflects lack of portfolio returns in a very slow economy as evidenced in non performing loans which stood at 20% at mid-2002. Some provisioning has been made, although excluding provisioned loans, the non performing ratio remains high at 14%. While banks' risk weighted capital adequacy ratios appear sound on the surface, a closer examination reveals that existing accounting and normative practices are over-estimating the solvency position of the financial system, in particular for some banks which may be much more vulnerable than their financial reports indicate. When prudent adjustments are made for capital and loss provisioning deficiencies (i.e., an accounting "stress" adjustment), a capital gap of US$ 127 million could be required for the system as a whole. The superintendency's bank rating system which is published by law, however, does not adjust for such risks and thus provides unclear signals as to banking system safety. The problem arises due to both the definition of capital in Paraguay and in the treatment of loan asset quality which disproportionately affects and lowers the capital of domestic banks.

A major factor obscuring the reality of banking system solvency is the practice of substituting needed loan provisions with collateral ("garantías") which underlie the loans. The main issue here is the relative illiquidity and delay inherent in unwinding such collateral as well as its potential over-valuation, making it an ineffective substitute for cash provisions. Along with the potential effects of the recent currency devaluations and low growth, particularly affecting domestic borrowers with dollar denominated loans, the additional effect on banks entails another capital decline of $13 million which added to the capital gap earlier mentioned,

results in a gross deficit of $140 million, under the accounting stress adjustment to the balance sheet, implying some four to five, mainly domestic insolvent banks in the system.

Reform / Restructuring of the State Owned Banks

The government has initiated proposals to restructure the state owned banks, in particular, BNF, the largest public development bank. This concern is primarily attributed to the continued losses of the bank and declining liquidity for which the government would like to act before it is called upon to bail out the bank with scarce fiscal funds. The restructuring of the public banks, however, should not center on recreating a new BNF in a different form, since BNF has many inefficiencies despite a good physical infrastructure and branch network across the country. For example, the bank's headquarters office in the Asunción represents the largest cost even though there are sufficient private market players in the capital city that could serve the same clientele.

In contrast to what is reported, the capital gap of BNF, when best practices of international prudential bank accounting standards are applied, is estimated at $47 million, i.e., the bank has negative equity and is insolvent. The largest borrowers are those with the highest non performing loans, some of which are for the commercial sector which a development bank should not be engaged in. The bank's target customer should be the small agricultural entrepreneur and the bank should downsize to serve such a clientele only. However, the Caja Agrícola de Habilitación (CAH) has a much broader clientele in that same sector, therefore any restructuring proposal should attempt to maintain the agricultural portfolio of BNF and merging it with CAH which also has field offices and is skilled at dealing with micro entrepreneurs.

A restructuring plan to downsize BNF should include the removal of the social security deposits from its balance sheet. Its new funding base could still include those few private deposits in the field since they have no other options, and some of the public enterprise deposits. The good loans in the commercial and development portfolios which should no longer constitute the new bank's business, would be matched with private deposits from Asunción and with the social security deposits, and sold in part or in whole, to solvent and stable banks. This approach would reduce some of the costs of liquidating the residual dead portfolio of the bank. The residual bad assets would be earmarked for liquidation, and residual liabilities which constitute international agency obligations would revert to the Treasury.

As a whole, the first tier public banking institutions in Paraguay provide heavily subsidized lending and serve some of the same markets as the private sector. Besides the merger of BNF and CAH, the other first tier institutions (Fondo de Desarrollo Campesino, Banco Nacional de la Vivienda) should be unwound and liquidated, and the Fondo Ganadero which caters to large cattle and agro business owners should be privatized. The second tier public institutions in Paraguay (Fondo de Desarrollo Industrial, UTEP) are small and represent funds financed by external credits, rather than banks per se. They include in their operations some interest rate and exchange rate subsidies, policies which should be changed, and these institutions could easily merge into a single entity as a specialized second tier development fund.

Banking Regulation & Supervision – Institutional Assessment

The major challenge facing the Paraguayan supervisory authorities is to be prepared in the short term to stabilize those institutions in the system that might be prone to experience crises. Identifying them and devising contingency plans to avoid or resolve their potential failure should constitute a first concern in the following months. Among one of the basic issues to address in terms of supervisory effectiveness, is the independence of the banking supervisor within the central bank. Legally, the central bank is the de facto supervisor and the

superintendent has few powers. Political interference has historically shortened the terms of officials whether they be the president of the central bank, its board of directors, or the superintendent. To begin increasing the autonomy of banking supervision, the time in assignment period for these officials should be lengthened and made to not coincide with the electoral cycle, and the banking superintendent should become a member of the board. While consideration of a separate superintendency is an alternative, the risks are also high that without the central bank's protective umbrella, such a superintendency may actually lose independence functionally, budgetarily and politically. In order to ensure that the superintendency marshals its resources effectively, the bank resolution and liquidation functions should be split off from the mainstream supervision functions of the superintendency.

In terms of regulatory norms and accounting practices, there are many needed urgent reforms, given the lack of standardization in solvency reporting. These include the weighting of assets for calculation of capital according to international standards, reintroducing interest suspensions and reversals for NPLs as required under international standards, precluding direct or indirect new lending to improve loan classifications, minimizing recourse to collateral as a substitute for loan provisioning, establishing a register for authorized professional independent appraisers and firm rules for collateral appraisal and valuation, and increasing minimum provisioning for category 1 and 2 loan assets.

Assessment of bank management performance and application of sanctions due to deficient administration, is a key area requiring further development in banking regulation and supervision. Besides being more pro-active in calling board and general assembly meetings of stockholders in order to effect quick compliance, the superintendency should enforce cease and desist orders and remove management where necessary under a defined framework regarding imprudent/unsound practices subject to prosecution and sanction. To implement such, it is recommended that a prompt action and enforcement matrix be developed and communicated to the banking community, to clearly define management actions subject to penalties, and avert deterioration early on.

Safety Net Mechanisms and Deposit Insurance

The safety net experience in Paraguay has resulted in heavy fiscal and central bank losses since the 1994-96 banking crisis. Approximately 11% of GDP was expended on various rescue packages, of which 8% of GDP in historical cost terms remains un-repaid and outstanding. The lending of last resort facilities existing currently are generally well structured although a few modifications could protect them against any moral hazard element. Pricing of the LOLR facilities should be established in advance and should reflect an above market rate referenced to market instruments. To avoid misuse of the facility as in the past, indications of bank insolvency should immediately preclude any continued use of the facility whose rules should prevent regulatory forbearance.

However, liquidity support should go beyond LOLR facilities and the private market should also develop similar mechanisms besides the existing limited interbank and call money markets. Since the central bank bill market (akin to T-bills) is one of the most active fixed income primary markets, it is recommended to establish an automated trading mechanism potentially managed by the central bank, to promote the efficient development of a liquid *secondary* market in government securities. Besides the benefits of generating additional funds in the system by providing a collateral instrument to increase money market liquidity, this would also help to establish a more reliable benchmark yield for private short term and longer term fixed income securities.

Deposit Insurance

Paraguay's current deposit insurance system consists of a direct state funded guarantee. A new law is being considered to establish a premium based insurance fund managed by the central bank. However, given the past bail outs using state and central bank funds, it is recommended that a new deposit insurance scheme be private sector owned and function as an autonomous corporate entity. The proposed deposit insurance fund would have an estimated funding target equal to 10% of system deposits equal to about $2 bn. currently. Once the target is achieved, any losses paid by the fund above the 10% target would be need to covered by a government "excess of loss" reinsurance policy for systemic risks.

Another issue arises in terms of the deposit insurance fund's ability to cover payments in its early years before it has reached the target capitalization level. During such a stage, the government should offer a "co-insurance" policy for levels below 10% of deposits, but any such co-insurance would be charged to the fund, for example, via a line of credit repayable with future premiums or premium assessments. Even with all these safeguards, an insurance fund could go bankrupt if frequent claims arose in its early years. To prevent, this, a transition period should be established whereby the coverage of any losses (i.e., payment of deposits) could be pro-rated among the old and new systems so that during the first years of operation, the new system would be responsible for a steadily increasing share of potential loss coverage while the old system would have the reverse, i.e., a steadily decreasing share of loss coverage.

While initially, the deposit insurance system could use flat premiums for all, eventually it would be prudent to migrate to risk based premiums. The latter approach could be implemented by means of end-of-year premium rebates to those banks maintaining sound condition. However, prior to this, some modification to the current CADEF bank rating system used by the superintendency, would be required to incorporate a rating factor based on qualitative assessments of bank management rather than on the mechanical application of financial ratios as prime determinants. This rating system, in any case, should not be published publicly as is required today, and its methodology needs concerted examination and review.

The eventual role of the deposit insurance fund would be for it to hold responsibility for the resolution of weak banks following the stage of intervention by the superintendency. Since the resources of the fund would be critical in establishing a viable restructuring/resolution/sale strategy for assets and liabilities of weak banks once intervened, it would be imperative for the fund to operate on the basis of least cost principles in terms of the usage of funds for deposit insurance as well as any fiscal resources used in conjunction with fund resources. The restructuring responsibilities of the deposit insurance fund would be to take over the operations of banks following their intervention by the superintendency, resolve the banks through the sale of their acceptable assets and matching deposits and liablities, use the deposit insurance funds to pay residual insured deposits, and provide any other bridge financing borrowed from the Treasury as needed to maximize the matching of assets and liabilities for transfer to purchasing banks. Any residual non performing assets would be transferred for liquidation to specialized firms.

Bank Resolution Procedures

Paraguay's current banking resolution procedures are limited once banks are intervented, with the likely option being liquidation, either judicial or extra-judicial which normally entails a higher cost to the State in terms of immediate payments for all insured depositors. Conceptually

therefore, and to institutionalize market friendly methods for resolving failed banks, a reform to Banking Law 861 should include a formal stage of Resolution/Restructuring Regime following intervention and prior to Liquidation. A regime for the resolution of weak banks, however, can be incapacitated by a lack of effective enforcement of prompt corrective actions prior to triggering intervention. Since deficient bank management generally is an accurate early indicator of potential bank problems, the regulation and establishment of a schedule of corrective actions associated with specific fines in this area, would help to reverse negative trends at an early stage, while insuring compliance due to the associated monetary penalties. The lack of technical immunity of central bank and superintendency officials is also an impediment towards the quick application of sanctions, given that lawsuits permit third parties to sue officials as natural persons. Such judicial actions should be limited to suits against the institution (e.g.: the central bank) but not be permitted against staff conducting their duties in an official capacity.

In this context the key elements of a bank resolution regime to be incorporated in the banking law, should include (i) increased use of management performance indicators and solvency stress testing to trigger intervention, (ii) design and application of a crisis contingency plan, (iii) identifying and carving out performing loan assets for transfer with deposits to other banks, (iv) defining the residual bad bank, (v) determining the least cost option in terms using deposit insurance or fiscal funds, (vi) using trustee agencies to securitize the transferred portfolios for better market reception, and (vii) selling the securitized instruments with portfolio backing to purchasing banks. The contingency plan is a critical element in this process, and will help to resolve bank failures with in a structured manner and with forethought. Some of the key elements in such a plan include the identification of target banks, discrimination between solvency and liquidity problems, definition of a sector consolidation strategy, consultation with the industry, simulating financial engineering scenarios and capital gap estimates, and implementing the plan deliberately.

Portfolio securitization can be used to speed up the process of transferring assets to other entities before an exhaustive audit of such assets is required. In this sense, the main features of such a scheme entail designing bond securities over-collateralized by underlying loans, and having these pay regular coupons to bank buyers who take on the collection of debt service for the underlying portfolio. Over collateralization is key to ensure that the securitized bonds are well backed by cash flows.

In terms of the write-off or sale of non performing assets and the liquidation of the residual bad bank, a key differentiation should be made between the functions of the trustee/restructuring/deposit insurance agency and the function of collection of non performing loans and/or liquidation of underlying assets. The latter function is *not* a typical responsibility of the restructuring/resolution agency and should not be mixed with that function. This is because the resolution agency works on short term restructuring arrangements while the 'collection/liquidation' function is longer term. Based on the experience in Paraguay where bank liquidations have been lengthy and drawn out, some recommendations include reinstituting compensation to liquidators based on a variable (percentage) commission on proceeds recovered at cash value. In addition, the bidding system to obtain offers from liquidators should be limited to bids from private firms for overseeing an entire portfolio of assets from many banks under liquidation, rather than the current system of utilizing individual liquidators for individual banks.

Judicial Process, Bankruptcy Law and Collateral Registry

The liquidation process is hampered by legal delays and misunderstanding regarding the definition of ownership. Since such constraints militate against effective bank restructuring

exercises, it is recommended that a Debt Court be established in Paraguay to solely handle issues relating to the fair disposition of assets under liquidation proceedings. However, such a court should have institutional tools such as a centralized registry to record the valuation of collateral underlying bank assets, and where standards would be set for collateral quality and valuation. A proper property titling effort would greatly support a viable collateral registry and promote access to credit. Some very necessary reforms in this general area also include the removal of the bankruptcy law clause providing major debt forgiveness to enterprises with 25+ years of existence. The law should also incorporate a clear definition of property ownership rights as linked to the balance sheet value of equity rather than as a right which permits holding on to any assets even if the firm itself has liabilities surpassing the value of such assets.

Pension Reform

The reform of the pension system in Paraguay is crucial at this juncture given that (i) the current pay-as-you-go social security public pension system is not fiscally sustainable from an actuarial and benefits payment perspective; (ii) the investments of the current system are at risk due to their being deposited in the BNF – this fact can also have an effect on the stability of the banking system if expectations exist that the social security funds will eventually be transferred since such a withdrawal may have a contagion effect and a tightening of liquidity in the rest of the system; and (iii) the current system, even at its best delivers very low returns on pension investment funds, thus compromising the potential benefits which workers could receive. A more effectively structured private system would generate higher returns and thus provide incentives for affiliates to migrate away from the public system, something the government should encourage to reduce its contingent fiscal liabilities. A new draft law for reform of both the public pension system and a new private system, is underway. While the law takes account of past lessons and best practices, a few recommendations are suggested to ensure the success of the proposed system:

The new private pension administrators should charge commissions to affiliates based on assets managed rather than as a percentage of salaries. This implies less cash flow to the fund managers from the start, but it would be more attractive to affiliates who would see more positive returns on their contributions in the early years.

For both the public and private system, the investment regime should permit heavy weighting in foreign hard currency securities. This is particularly critical in Paraguay where pension funds have been misused and historical and potential future devaluations could erode both the pension value to affiliates and increase fiscal liabilities. In addition, the investment funds managed by pension fund administrators should at least include more than one so that near-retirees who wish to transfer can be assured of a steady income based on a specialized fixed income fund.

I. MACRO FINANCIAL DEVELOPMENTS

A diagnosis of Paraguay's financial sector was conducted within the context of a deteriorating external environment which included the devaluation of the Brazilian real, the U.S. slowdown exacerbated by the recent terrorist attacks, and the fall in cotton prices. It was also conducted in the wake of financial sector weaknesses which began in the mid 1990s and which consolidated part of the banking system while leaving a few remaining weak banks and finance companies.

Besides the discouraging external environment, economic problems were exacerbated with Brazil's most recent spate of devaluations which prompted the Paraguayan monetary authorities to do likewise, albeit with some delay, to maintain export competitiveness via the country's main trading partner. However, given Paraguay's significantly dollarized economy, such devaluations have also put indirect stress on the banking system since a large portion (64%) of loans are denominated in US dollars and for borrowers with no hard currency income (approximately 85% of borrowers), any devaluation translates into a higher debt servicing load in local currency terms, thus increasing credit risk and possibilities of default on payments. Therefore, about 54% of the loan portfolio is at risk of payment difficulties due to current and potential devaluations, and thus any further devaluations could highly stress the banking system. To put it into perspective, since the third quarter of 2000 until the end of the third quarter of 2002, the Paraguayan guaraní had devalued by 77% against the US dollar compared to the Brazilian real's devaluation of 99% during the same period. Within the four year period from third quarter 1998 through September 2002, the comparative devaluations were 118% for the guaraní and 209% for the Brazilian real[1].

It is estimated based on historical data, that for every percentage point of devaluation, the level of banking system non performing loans increases by 0.3%, therefore, the 35% devaluation during the last year would translate to an increase of 10.5% (0.3 * 0.35)in non performing loans. With the current reported stock of non performing loans listed at 17% of all loans, the recent devaluation, assuming a lagged effect, should raise this to almost 19%.

International Reserves and Monetary Indicators

As a test of a potential run on the currency which might be induced by a bank run, the level of net international reserves was compared to currency in circulation plus short term local currency liquid assets (modified M0). If one were to take the full amount of net international reserves ($563 m.) as a percentage of the currency in circulation ($212 m. as of 8/31/02, the ratio of currency coverage would be 2.66 or 266%. However, a more prudent indicator would be the ratio of net international reserves over currency plus bills used for open market operations plus call money debt of the central bank. Using this indicator, the coverage of the currency and these short term liquid assets would be 182%.

A more conservative measure, however, would be to deduct from the numerator, i.e., the net international reserves, those bank reserve deposits in the central bank that are dollar denominated ($212 m.). This would effectively leave the government's available and usable net international reserves at only $351 m. For the denominator the same as above would be used (i.e., currency in circulation plus very short term liquid assets), and in addition, the local

[1] While the Guaraní also appreciated in real terms against the Brazilian Real, it devalued against the trade weighted real effective exchange rate.

currency bank deposits held in the central bank would also be included since these could be withdrawn on short notice. Thus, this more conservative ratio of available international reserves over a modified M0, would provide a coverage of the currency and s.t. liquid assets in the amount of 89%, i.e., less than full coverage. However, even though ***the government could defend a potential run on the currency if this meant depleting a large part of its hard currency reserves, an additional reserve build up would be prudent since past financial shocks in Paraguay quickly depleted its foreign reserves which now stand at less than two months of imports, a somewhat tight margin. As it stands, the reserve backing appears adequate for managing the float of the currency and the government policy does not pretend to defend the currency under a fixed rate scenario.*** Nevertheless, while reserves may appear adequate for this particular purpose, additional shocks related to trade payments may render them somewhat limited for covering international payment obligations, if necessary.

Percent Coverage of Currency & Short Term Liquidity by International Reserves

Ratio 1	*Ratio 2*	*Ratio 3*
Total net international reserves / Currency	Total net international reserves / (currency + open market c.b. bills + call money liabilities)	Total net international reserves - $ bank reserve deposits at central bank / (currency + open market c.b. bills + call money liabilities + bank local currency deposits at c.b.)
266%	182%	89%

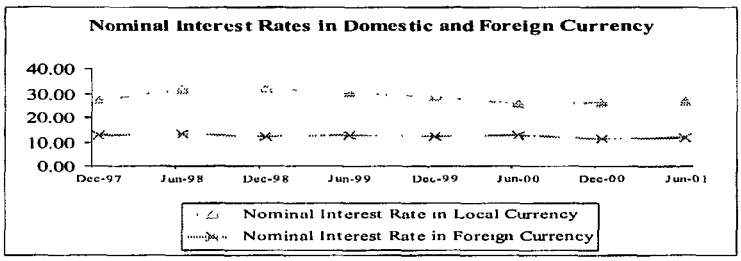
Breakdown of Ratio 3
($ millions)

I. Net international reserves (NIR)	563.0
Less: $ bank deposits in BCP[2]	211.7
Available NIR	**351.3**
II. Currency in Circulation	211.6
Central Bank Bills	93.3
Call Money Liabilities	4.2
Bank Local Currency Deposits in BCP	83.7
Sub-total M0 (modified)	**392.7**
III. Net International Reserves (available) / M0 + banking system liquidity	**89%**
IV. Shortfall for full forex backing of currency	**(41.4)**

Reserve Requirements

Banking reserve requirements are inversely proportional to the maturity term of deposits. This puts a higher reserve cost on short term deposits and thus should encourage banks to offer longer term instruments. However, given depositor preference for short term deposits and banks' preferences for shorter term lending, the result is a relatively high reserve/deposit ratio which increases intermediation costs particularly on dollar denominated loans, and therefore on lending rates. For deposits in domestic currency the reserve requirement is: 15% for up deposits up to 1year maturity; 7% for maturities between 1 and 1½ years; and zero for over 1½ years. For dollar deposits, the requirement is: 27% for up to one year; 15% for between 1 and 1½ years; 5% for between 1½ to 3 years; and zero above 3 years.

[2] Banco Central del Paraguay.



Monetary and Credit Growth and the Banking System

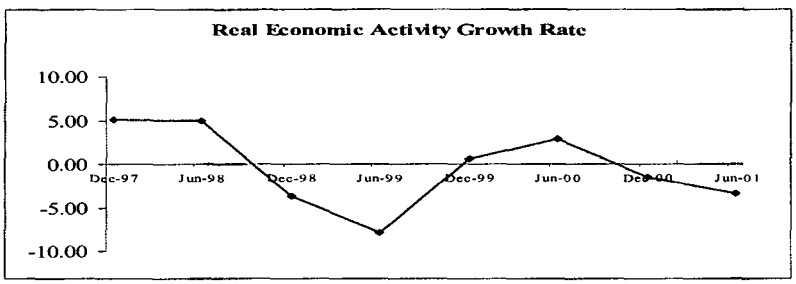
Money supply indicators show that M1 grew by 9.8% in the year-on-year period ending in May 2002, just before the Banco Alemán intervention. Much of the growth, also reflected in apparent credit gains, was due to the existence of dollar denominated loans which, due to the guaraní devaluation during the same period, showed high growth in total credit expressed in local currency. However M2 only grew by 4.6% during that period while M3 which includes foreign currency deposits grew by 8.1%. Therefore this reflects an increased preference for deposits in foreign currency versus local currency instruments, which in turn increased the guaraní value of dollar denominated loans in the financial system (even though in dollar terms alone, these actually decreased). The preference for foreign currency deposits was spurred on by the ongoing devaluations of the guaraní, and while having a negative impact from the point of view of confidence in the currency, it did help to further dollarize the banking system. While this makes it less vulnerable to currency risks for which the system continues to be "long" in dollars, it generates more vulnerabilities from corporate credit risks induced by increased local currency debt servicing costs on dollar denominated loans. While liquidity still remains at high levels given that banks are less willing to lend presently, the increasing weakness of the banking system due to decreased earnings, is also reflected in lower overall accumulation of liquid assets in relation to deposits:

LIQUIDITY OF THE BANKING SYSTEM
(liquid assets as % of deposits)

Liquidity	Dec-97	Dec-98	Dec-99	Dec-00	Jul-02
Banks	**36.82**	**44.15**	**41.35**	**34.67**	**42.37**
Branches of Foreign Banks	41.71	46.29	38.35	32.49	44.7
Foreign Banks	46.35	46.90	42.48	33.06	41.68
Domestic Banks	29.45	32.47	30.95	30.69	35.17
Public Banks	16.22	33.68	62.62	63.00	31.04
Intervened Bank (1)	26.77	32.98	23.66	38.37	-
Finance Companies	**n.a**	**n.a.**	**40.68**	**34.46**	**20.66**

(1) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened
Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)

As bank earnings decline due to lower cash inflow and higher provisioning needs, liquidity, while still high due to a lack of alternative investment opportunities, has been steadily declining and thus provides increasingly less protection against possible deposit withdrawals. The risks and vulnerabilities of Paraguay's banks are further elaborated in the next section.



II. FINANCIAL SYSTEM CONDITION & VULNERABILITIES

The Paraguayan financial system is dominated by banks which comprise over 88% of all financial intermediaries and 90% of licensed deposit taking institutions. Foreign banks hold 82% of banking system assets and 85% of deposits, although the large international foreign banks (five) which are the strongest group of banks in Paraguay, represent 50% of all bank assets.

STRUCTURE OF THE FINANCIAL SYSTEM AS OF JULY 2002
(millions of US dollars equivalent)

	ASSETS	%	DEPOSITS	%	LOANS	%	EQUITY	%
BANKS	1,861	88%	1,369	91%	1,115	88%	246	83%
BRANCHES OF FOREIGN BANKS	914	43%	709	47%	507	40%	130	44%
FOREIGN BANKS	609	29%	459	30%	362	29%	76	26%
DOMESTIC BANKS	184	9%	123	8%	121	10%	17	6%
STATE BANKS	154	7%	78	5%	125	10%	23	8%
FINANCE COMPANIES	217	10%	142	9%	153	12%	51	17%
EXCHANGE HOUSES	21	1%	-		-		-	
DEPOSIT WAREHOUSES	5	0%	-		-		-	
TOTAL	2,104	100%	1,511	100%	1,268	100%	296	100%

Source: Banking Superintendency. Data as of 7/31/2002. Figures in US$ millions

The Paraguayan bank solvency reporting system and the Superintenency's (SB) rating system generally place all banks in a satisfactorily capitalized condition. However, the rating system which the banking law currently requires the SB to publicly publish (CADEF), is based on information reported by the banks with little or no adjustments made to accounts to reflect underlying operational and financial risks, and in some cases international standards. In order to detect vulnerabilities in the system some specific adjustments and stress test projections based on recent developments, were undertaken.

Paraguay: Financial System Structure by Assets
(in US$ millions)

Banks	Finance Co's.	Stock Mkt. Capitaliz.	Insurance Co's.	S & L	Cooperatives
$2,600	$279	$233	$115	$42	$370
	Stocks traded year-on-year 2000-01			$3.7	
	Bonds traded year-on-year 2000-01			$2.5	

Non Performing Loans

As of mid-2002, the Paraguayan banking system which represents about 90% of assets of deposit taking institutions, had an aggregate non performing ratio of 20%. If provisions are taken into account, then the unprovisioned non performing portfolio for all banks would stand at 14%. These levels of non performing assets may also not fully take into account refinanced or restructured loans which in some cases become reclassified if a borrower has paid at least 10% of previous debts, therefore, if one were to use stricter criteria, these ratios would be higher. This level of non performing loans makes the financial system highly vulnerable not only from a general solvency viewpoint but also because such circumstances put pressure on interest rates to rise in order for banks to compensate their income from losses on the non performing portfolio and new provisioning needs.

Paraguay: Non performing loan ratios in the Banking System

Non performing loans (NPLs) / Total loans	20%
Unprovisioned NPLs / Total loans minus provisions	14%
NPLs / Total loans, excluding BNF	22%
Unprovisioned NPLs / Total loans, minus prov.; excl. BNF	15%

In addition, the already fragile state of the system is compounded by past and recent currency devaluations. While banks' dollar denominated loans and investments surpass their dollar denominated deposits, thus providing them with a "long" hedge in dollars, borrowers are generally exposed to exchange risks on debt servicing costs given the high dollarization of debts in the economy. As 64% of loans are dollar denominated, and it is estimated that 85% of borrowers (in terms of borrowed amounts) are unhedged, this means that about 54% (= 0.85 * 64%) of the loan portfolio is subject to risk due to devaluation. As per the macroeconomic stress testing demonstrated further below, this effect implies a translation of a 0.3% increase in non performing loans on the entire portfolio, for every 1% devaluation. However, if it is assumed that this effect is concentrated in the non-hedged dollar portfolio (0.3% / 0.54 = 0.56%) this means that for every devaluation point, the increase in non performing loans on the non-hedged borrowers' portfolio would amount to over 50% of the devaluation change, e.g.: a 10% devaluation would translate into a 5.6% increase in the non performing loan stock of the unhedged dollar borrowers. This would correspond to a 3% increase in the overall stock of outstanding non performing loans. The ex ante policy tools to address this problem should include *(a) prudential regulations setting dollar lending limits for banks to unhedged borrowers, (b) setting bank management standards which include underlying asset risk management, and (c) educating the banking public on the prudent use of currency hedging derivatives such a futures or exchange rate forward contracts.*

Banking fragility is also evident in the steadily declining earnings generated (table below). While the reported figures over estimate the magnitudes of earnings figures such as net return on assets, the trends are clearly downward and the recent reversal in by end 2001 is more reflective of the decreased value of local currency assets in dollar terms (the denominator) rather than an actual change in profitability. In the following section, the reported financial accounts of the banking sector, which also appear to report adequate capital despite increasing non performing loan ratios, are adjusted according to prudential accounting practices in order to filter out the weakest institutions with the highest vulnerabilities.

NET RETURN ON AVERAGE EARNING ASSETS (ROA) OF THE BANKING SYSTEM (%)

ROA	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Dec-01
Banks	**6.38**	**4.10**	**3.44**	**3.48**	**2.21**	**1.85**	**1.44**	**2.51**
Branches of Foreign Banks	11.05	7.27	5.86	5.11	3.38	2.60	2.29	3.14
Foreign Banks	8.25	4.63	4.28	2.03	1.52	1.62	1.02	1.84
Domestic Banks	3.37	1.85	2.88	2.65	1.21	0.81	0.99	1.24
Public Banks	-2 31	-1.50	-6.93	0.80	0.15	0.01	-0.52	0.30
Intervened Bank (1)	10.55	4.80	2.91	3.01	0.28	-2.81	0.21	-
Finance Co.'s	**n.a.**	**n.a.**	**n.a.**	**5.14**	**3.56**	**4.71**	**4.39**	**5.06**

(1) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened
Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)

A number of accounting 'stress' adjustments were made to the reported accounts of the banking system in order to more realistically reflect the liquidity and solvency positions of the banks. ***Once these adjustments are made, the total capital gap of banks required to meet the***

regulated risk-weighted capital of 10 percent, versus what is currently reported officially, amounts to $127 million equivalent. The total reduction of capital from what is being reported by banks and finance companies, reflects a gross change of $233 million. The difference between the two figures reflects available net existing capital above the zero level, after all the adjustments are made.

The adjustments and stress tests made to the banking sector balance sheets are of three different types:

1. *Definition of Capital:* Downward adjustments in the calculation of risk weighted capital based on modifications to the risk assigned to balance sheet assets in conformance with Basle principles, and adjustments to reported capital.
2. *Provisioning Methodology:* Upward adjustments to loan loss provisions required (implying charges to capital), based on Basle conventions and estimations of collectibility/liquidity of reported collateral and repossessed property, utilized in lieu of other guarantees. These adjustments apply to outstanding loans, and refinanced/restructured loans, and also add small generic provisions to category 1 & 2 loans given the high country risk.
3. *Exogenous Stresses:* Adjustments based on exogenous stress effects on the non performing portfolios due to exchange rate devaluations and lower economic growth. Such effects increase the share of the non performing portfolio and required provisions, and hence reduce available capital.

For the adjustments to capital (the CAR or capital/asset ratio, the primary effect among others, comes from the upward adjustment to the denominator, that is, valuing loan assets at increased risk (i.e.: closer to full value) by adjusting underlying collateral used as guarantees of asset quality (see Appendix 1 for other adjustments). While Basle permits a lower asset risk weighting of 50% when backed by real estate residential mortgage collateral, Paraguayan law permits the same weighting for commercial mortgages which under international best practice standards would be weighted at 100%. In addition, since collateral takes time to liquidate in Paraguay, its value is discounted by an average period of three years that it takes to go through the judicial process, therefore, in such cases, even the value of residential mortgage collateral is effectively lowered and thus the loan asset must be weighted with higher risk which correspondingly requires more capital. ***The result is that for banks in aggregate, the reported risk weighted CAR changes from 17.2 to 12.6.***

The other financial statement adjustments pertain to the loan portfolio valuation. The main adjustment which was also alluded to above, pertains to the discounting of the value of collateral underlying loans, since collateral is highly used in Paraguay in lieu of cash provisions for non performing loans. Therefore a reduction in collateral value would require an increase in provisions and thus a "hit" to capital. Similar adjustments are made for renewed, refinanced and restructured loans, repossessed properties, as well as an inclusion of generic provisions for category 1 loans and minimum 10% provisions for category 2 loans. ***Following the earlier CAR adjustment to 12.6, these loan portfolio adjustments for provisions bring the aggregate CAR down to 4.7.*** Within the resultant scale generated by these accounting/stress adjustments, it is clear that those banks with a resultant ratio of less than zero are insolvent while those between zero and 3.0 (i.e., the domestic banks) are highly vulnerable and could already be technically insolvent.

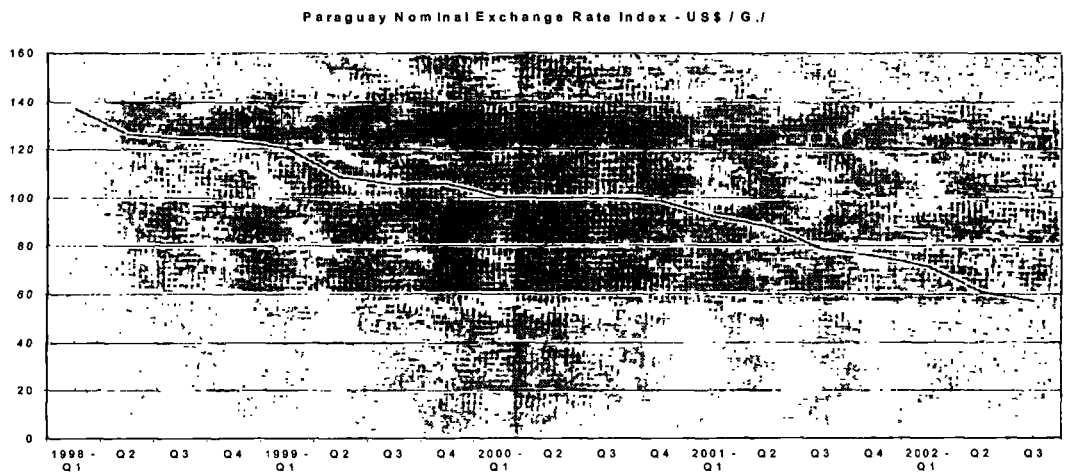
Change in Capital Asset Ratio from Risk Weighted Capital and Balance Sheet Adjustments

	Reported CAR	Adjusted CAR based on RWA	Effect of Balance Sheet Stress Adjustments
Foreign Bank Branches	16.6	12.7	6.2
Foreign/Regional Banks	17.0	13.2	6.5
Domestic Banks	14.6	8.9	2.9
Public Sector Bank	23.9	13.2	-6.0
Intervened Bank	12.9	8.5	-6.1
Total Banks	17.2	12.6	4.7
Finance Companies	29.0	26.9	21.8

The additional exogenous variable stress test results show that a 30% nominal exchange shock (consistent with the recent experience over the last 12 months) and a 3% real economic activity shock generate additional non performing loans and required provisions which results in some reduction in CAR ratios although much less important than the ones documented above regarding balance sheet adjustments. This, nevertheless, indicates that the current situation of the financial system is already weak and that a shock of whatever nature, even if it has a limited impact, could potentially trigger default for a number of weak banks. The average effect of exchange rate changes is a factor of 0.3 meaning that for every 1% exchange rate movement, the non performing loans ratio increases by 0.3%, therefore, a 30% devaluation has an average effect of a 9% rise in the level of non performing loans. The overall effect on capital is an additional reduction of $13 million.

The aggregate effect on the banking system capital including finance companies, therefore, using all of the prudential financial and stress adjustments above, results in a decline of $220 million in capital versus what was originally reported. ***If one adds back the residual capital remaining in the banks following these adjustments, and calculates the resultant gap required to achieve statutory solvency before taking into account the exogenous stresses, the net capital requirement would amount to $127 million equivalent.***

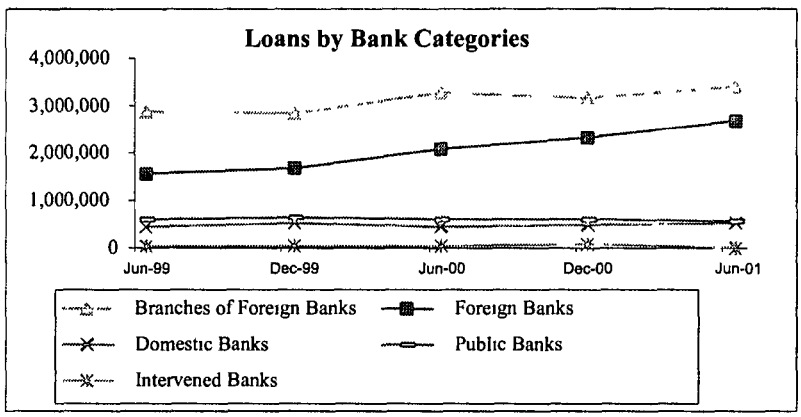
If the exchange rate depreciation and real growth decline factors are added in as an effect with a significant probability of materializing, the net capital requirement to achieve legal solvency status under the stress scenario would rise to a total of $140 million.



BANKING SYSTEM BALANCE SHEET
As of July 31, 2002

(Millions Of Guaranies)

	BANCOS	ASSETS Total	%	DEPOSITS Total	%	EQUITY Total	%
	FOREIGN BANK BRANCHES						
1	Citibank N A	1,897,443	17 28%	1,513,845	18 74%	263,765	18 20%
2	Lloyds TSB Bank P L C	1,028,372	9 37%	819,692	10 15%	126,800	8 75%
3	ABN Amro Bank N V.	1,554,788	14 16%	1,306,796	16 18%	190,549	13 15%
4	Banco Do Brasil S A	439,577	4 00%	268,440	3 32%	79,273	5 47%
5	Banco de la Nación Argentina	121,201	1 10%	78,207	0 97%	32,712	2 26%
6	I N G Barings N V	206,597	1 88%	142,279	1 76%	53,330	3 68%
7	Chinatrust Commercial Bank	147,146	1 34%	51,106	0 63%	18,680	1 29%
	SUB-TOTAL	**5,395,125**	**49.14%**	**4,180,364**	**51.75%**	**765,108**	**52.80%**
	MAJORITY FOREIGN OWNED						
1	Banco Asunción S A	261,213	2 38%	171,630	2 12%	64,727	4 47%
2	Interbanco S A	783,505	7 14%	636,500	7 88%	98,568	6 80%
3	Banco Sudameris S A E C A.	1,099,684	10 02%	768,488	9 51%	71,171	4 91%
4	Banco Bilbo Viscaya Argentaria Paraguay S A	867,991	7 91%	681,361	8 44%	112,991	7 80%
5	Banco del Paraná S A	96,088	0.88%	63,634	0 79%	25,886	1 79%
6	Banco Integración S A	235,400	2.14%	189,870	2 35%	41,354	2 85%
7	Banco Continental S A E C A	246,665	2.25%	198,937	2 46%	33,608	2 32%
	SUB-TOTAL	**3,590,546**	**32.70%**	**2,710,421**	**33.56%**	**448,305**	**30.93%**
	MAJORITY LOCAL OWNED						
1	Banco Regional S A	355,349	3 24%	274,803	3 40%	35,684	2 46%
2	Banco Amambay S A	215,135	1 96%	160,425	1 99%	28,167	1 94%
3	Multibanco S A E C A	513,534	4 68%	292,676	3 62%	36,649	2.53%
	SUB-TOTAL	**1,084,018**	**9.87%**	**727,903**	**9.01%**	**100,500**	**6.93%**
	TOTAL PRIVATE BANKS	**10,069,689**	**91.72%**	**7,618,688**	**94.32%**	**1,313,913**	**90 66%**
	STATE BANKS						
1	Banco Nacional de Fomento (BNF)	909,245	8 28%	458,679	5 68%	135,287	9 34%
	SUB-TOTAL	**909,245**	**8.28%**	**458,679**	**5 68%**	**135,287**	**9.34%**
	TOTAL ALL BANKS	**10,978,934**	**100.00%**	**8,077,367**	**100.00%**	**1,449,200**	**100.00%**



III. REFORM / RESTRUCTURING OF THE PUBLIC BANKS

Sector Overview

There are currently 2 public banks and 5 other state-owned institutions operating in the Paraguayan financial sector. Together, these public institutions have total assets of about US$ 450 million, which corresponds to about 17% of the total financial sector assets[3] and 5% of Paraguay's GDP. The Banco Nacional de Fomento is by far the largest state-owned financial institution in Paraguay. It manages about 60% of the total assets in its peer group, and about 11% of banking sector assets. It is the only state-owned institution to accept deposits from the public. The remaining entities are just used as conduits to channel subsidized funds, mainly from the international donor community. Accordingly, the loans granted by these institutions, including BNF, are offered at rates substantially lower than those of private sector institutions. Five out the seven institutions are offering their services directly to their target group, whereas the two remaining ones, UTEP and FDI are operating as a second-tier institutions, using other financial intermediaries to offer their services.

Overview of Public Financial institutions in Paraguay

(Millions of Guaranies)

Public Financial Institutions	Total Assets	%	Total Deposits	%	Net Credit Portfolio	%
1st Tier Institutions						
1 Banco Nacional de Fomento (BNF)	1,156,391	59.8%	526,143	100%	592,008	53.5%
2 Credito Agricola de Habilitacion (CAH)	229,091	11.8%	0	0%	64,424	5.8%
3 Fondo Ganadero	181,749	9.4%	0	0%	163,784	14.8%
4 Fondo de Desarollo Campesino	94,442	4.9%	0	0%	51,335	4.6%
5 Banco Nacional de la Vivienda	129,485	6.7%	0	0%	109,760	9.9%
SUB-TOTAL	**1,791,158**		**526,143**		**981,311**	
2nd Tier Institutions						
1 UTEP *	58,945	3.0%	0	0%	41,508	3.8%
2 Fondo de Desarollo Industrial	83,171	4.3%	0	0%	83,171	7.5%
3 CONAVI	n.a.	n.a.	0	0%	n.a.	0%
SUB-TOTAL	**142,116**		**0**		**124,679**	
TOTAL PUBLIC BANKS	**1,933,274**	**100%**	**526,143**	**100%**	**1,105,990**	**100%**
TOTAL PRIVATE BANKS	**9,385,855**		**7,446,173**		**6,248,446**	
TOTAL FINANCIAL SYSTEM	**11,319,129**		**7,972,316**		**6,859,173**	

* All data as of mid-2001, UTEP figure for end-2000

In general, Paraguay's public financial institutions lack a clear delimitation of their respective roles and there are strong indications that crowding-out is taking place (e.g.: finance companies serve many of the same clients as BNF). This is especially the case for those entities operating as first-tier institutions. In many instances these entities are offering the same services to the same target group. In those cases, the various institutions are competing with each other almost exclusively in terms of pricing, or in other words, on the basis of which entity is offering the largest subsidies. Similarly, at least BNF, FG and FDC are servicing a clientele which has

[3] This figure excludes Finance Companies and other private non-bank financial intermediaries.

access to private sector institutions. Again in these cases, the competitive advantage of the 3 public entities is based only on the subsidies they offer. Obviously, this problem is most acute in the case of BNF, which operates as a full-fledged bank offering a broad array of services ranging from the typical lending and deposit-taking business to payments services and credit cards.

In addition, most public financial institutions are loss making primarily because of substantial operational inefficiencies and unsound lending policies. This constant drain on public finances was the primary motivation behind the current bank restructuring proposal of the Government of Paraguay. In the remainder of this chapter, a detailed assessment of the institutional set-up and the financial situation of each of these state-owned financial institutions is conducted. Thereafter, the insights of these institutional assessments are used to review the current restructuring plans prepared by the Ministry of Finance and the Banco Central of Paraguay, and elaborate a selected number of alternatives to support the decision-making process.

The key guiding principles of any reform of the public banking system should primarily be to ***(i) consolidate & minimize the size of public banking; (ii) provide credit access to the geographically remote agricultural sector and small business entrepreneurs; (iii) maintain a payments facility in the country's regional departments; and (iv) permit only business viable operations – all non viable operations should be directly subsidized with grants from the budgets of the relevant government Ministries.***

Analysis of Institutional & Financial Soundness By Entity

Banco Nacional de Fomento – *The Institution, Corporate Governance and Profitability*

The BNF was incorporated in 1961 by means of the Law-Decree 281/ 1961with the objective to promote various segments of the Paraguayan economy, in particular agriculture and selected trade and manufacturing activities. According to its organic law, the bank is divided into three business areas: an agricultural department, a commercial department and a development banking department. All three areas have their own capital endowment and maintain a separate accounting. However, they are supported by the same administrative system and operational infrastructure. Art. 1 of the organic law states that BNF's obligations are guaranteed by the Paraguayan State. In addition, Art. 12 prescribes that any losses from the agricultural department will be absorbed by the Government of Paraguay (GOP), through the Ministry of Finance (MoF).

After three decades of strong growth, BNF is today one of the largest banks in Paraguay. As of July 2001, BNF was the country's 4th largest bank by assets and the 6th largest by deposits. At this date, it had respectively 10.1% of the total assets in the sector and 5.7% of total deposits. Moreover, BNF has by far the largest branch network with 47 branch offices plus its headquarters in Asuncion. It employs 968 persons, which is about 33% of all employees in the domestic banking system. The bank is also the largest lender to the agricultural sector in terms of volume with a market share of about 31%, and the fourth largest to the manufacturing sector with about 14% of the market.

The institution's large size, however, should be taken more as a reflection of the magnitude of the problems posed by its existence than an indicator of market success. A first problem is the staffing structure. BNF's main business is lending, but loan officers account for a mere 6% of the total staff. Accordingly, BNF's ratio of personnel to loan portfolio is at least

twice as large as the banking sector's average. About 95% of the staff are civil servants. ***With the branches employing on average less than 8 persons per location, the overstaffing problem appears to be concentrated at the bank's Head-Office in Asuncion.*** Whereas it accounts for just 35% of the loan portfolio, ***the Head-office employs about 60% of the total staff.***[4] Besides this overstaffing problem, a second issue is the extremely poor quality of BNF assets, in particular the loan portfolio. The value of the assets is substantially inflated due to "creative accounting". After the required adjustments, it is shown that the institution is decapitalizing at a very fast pace, and thereby destroying value for the taxpayer. It is more alarming, therefore, to know that ***nearly a third of BNF's funds originates from deposits of the social security system.***

A substantial share of BNF's institutional problems can be attributed to serious shortcomings in its corporate governance. BNF is managed by a board consisting of a president and 7 appointed directors and 7 assistant-directors (Consejo de Administración), including respectively a representative of the ministry of finance, the ministry of agriculture and livestock, the ministry of industry and commerce, the central bank, the agricultural sector, the industrial sector and the livestock industry. The duration of board mandates coincides with the government's electoral cycle. No technical requirements or prudential limits on financial decisions are set for board members in BNF's charter. Hence, as a result of its composition, the board has traditionally been very accommodating for political purposes and pressure from specific group of borrowers, disregarding sound financial practices or technical considerations. A number of today's large non performing loan cases have apparently been granted only after BNF's directors overrode the previously negative assessments made by the appraising loan officers on the loan application. Similarly, the directors can and have often delayed recourse to legal action in case of non-performing loans. Given that the Ministry of Finance has not enforced prudential business practices at BNF, no significant actions have been taken by government officials or bank management to prevent and/or prosecute these unsound practices although the BNF has benefited from substantial technical assistance from the IBRD and the IDB during the last twenty years.

In terms of profitability none of the three business lines is currently sustainable, but the earnings deficit is smallest in the agricultural department. The profitability and cash-flow analysis for each of BNF's departments expressed as the lending operating margin as percentage of average loans outstanding, is -22% for commercial loans, -29% for development loans and -10% for agricultural loans. The data was extracted from monthly official statements and data from January to July, 2001 provided by the Financial Manager. The analysis shows clearly that BNF is decapitalizing with every incremental amount it lends. The earnings gap is estimated to be about 29% for the development finance area, 22% for the commercial area and 9.9% in the agricultural department respectively. ***This lack of profitability is primarily due to a very high cost structure, the low interest rates charged on loans, and the very poor quality of the loan portfolio.*** In this context, it is interesting to notice that the agriculture sector receives the least subsidies and therefore has the highest interest rates. Similarly, the cash-flow analysis shows clearly that the level of activity in the commercial and development finance areas is currently being supported at the expense of the agricultural department.

Overall, the quality of the loan portfolio is very poor with of 48.2% of the portfolio in arrears (over 60 days) as of June 2001. Over 70% of these non-performing loans have been in arrears for more than 360 days. Surprisingly, legal proceedings are underway for only less than half of these cases. ***The analysis of BNF's arrears statistics indicates that the bad loans are***

[4] Instead of the legally prescribed 3 departments, there are currently no less than 15 departments at BNF's headquarters and the organizational chart is extremely complex.

concentrated essentially in the loan portfolio at the headquarters, which currently shows an arrears rate of 66.6% (see table below). In terms of business lines, the development finance department is the most affected with about 69% of its loans in arrears, followed by the commercial department with 63%. The agriculture portfolio has the best quality, although it also shows an arrears rate of 22%[5]. ***Non performing loans at BNF are usually larger loans, some f which were granted in the past based on pressure from specific interest groups.*** The latest statistics available show that in December 1999, 51.2% of the non-performing loans corresponded to only 50 borrowers (0.3% of the client base). The commercial department, for instance, is currently at risk of losing almost US$ 30 million in loans granted to the urban transport companies under highly unsound investment criteria, just before the last presidential elections. The mandatory 40% in mortgage-backed collateral for these loans was not enforced. Less than 50% of these defaulted loans is provisioned, and although BNF's management has started taking legal action to recover debts, the results of these efforts are not yet fully apparent.

Distribution of arrears between HQ and Branches as 07/31/01

	Branches	Headquarters	Total
Total # of clients	7,889	8,717	16,606
Delinquent clients	2,371	2,903	5,274
%	30.1%	33.3%	31.8%
Total Portfolio ($)	75,754,350	83,699,494	159,453,843
Portfolio in arrears ($)	22,770,647	55,744,456	78,515,103
%	30.1%	66.6%	49.2%
Av. Loan ($)	9,603	9,602	19,204
Av. Loan in arrears ($)	9,604	19,202	28,806

Source: Banco Nacional de Fomento

***The lower delinquency rate in agricultural lending is partly a result of the recent portfolio clean-up following the authorities' decision to pardon G$ 134 bn. (approx. US$ 40 m.) off the debt owed by small farmers and cooperatives to BNF and reschedule another 109 bn. G$ (about 24 mn. US$)***[6]. This debt cancellation / rescheduling decision, which also benefited borrowers at CAH and FDC - was motivated by pressure from interest groups and embedded in the laws 1418 and 1470 of April and September 1999 respectively. The corresponding loan principal and interest receivables were offset by a 10 year bond issued by the MoF, with an annual payable interest equivalent to inflation. However, the MoF took 18 months to issue the bond, causing a disputed interest receivable in the amount of approx. US$ 4 m., which BNF accounted as income in its P&L.[7] The payment by the MoF is still pending. It should also be mentioned that this generous debt relief initiative of the government impacted negatively the operations of all three institutions involved as it turned out to be detrimental to payment morale among the clientele.

After minimum adjustments to raise accounting standards according to international practices, BNF was found to have a provisioning deficit for bad debts of 205 bn. Guaranies (about 46 mn. US$). Three types of adjustments were undertaken. First, provisions were made for the loans rescheduled under the government's recent debt reduction initiative for small farmers.

[5] It should be clarified that this is net of the government debt forgiveness programs. Prior to this, the agriculture portfolio arrears would have been estimated to be 48%.

[6] Reflects total for the whole sector .

[7] A similar income/receivable from the ministry of Finance of approx. US$ 11 m. (G$ 45,000 m.) exists in BNF's accounts, and represents the amount needed to offset the accumulated losses of the agriculture department as required by the organic Law.

The rationale behind this is that the quality of these loans has not changed, just the accounting treatment. The provisions were calculated assuming the same ageing structure as the whole portfolio in 1999.[8] Second, an adjustment was done for the value of the collateral backing the outstanding loan portfolio. Comparing BNF's valuation approach to that of selected domestic private banks, it was decided to reduce the book values reported in BNF's accounts by 50% so as to reflect the present value of realizing collateral via the judicial system. As a consequence, the value of the non-covered portion of the portfolio in arrears rises, and hence the need for provisions. The third and last adjustments consisted in simply correcting the provisioning deficit identified by BNF itself. The results of all these corrections are presented in Appendix 2.

FINANCIAL SOUNDNESS OF BNF

In contrast to published reports, BNF is deeply insolvent with an estimated capital gap of approximately US$ 47 million.[a/] BNF's operational losses have been historically absorbed by the government by removing from BNF's balance sheet, foreign loans received to fund BNF's operations (effectively capitalizing such liabilities). Hence, BNF was able to comply with the solvency requirements of the banking superintendency. But with an accumulating burden on the MoF and the recent deteriorated public finances, the institution seems to have increasingly turned to unsound accounting practices to hide its losses. To see BNF's real equity position presently, four different types of adjustments were conducted on the most recent profit and loss account. First, the deficit for bad debts provisions was corrected. Second, BNF was found to have artificially increased its earnings since 1999 by adding the accrued but previously not accounted interest on those bad loans which were reactivated or cancelled according to the laws 1418/99 and 1470/99. As BNF proceeded with the debt restructuring, it also dissolved existing provisions for those loans and accounted it as extraordinary income. The third adjustment consisted in reverting this procedure. The fourth and last adjustment was done for unpaid amounts due from the ministry of finance to cover losses accumulated in recent years. The details of these adjustments are presented in Appendix 2.

The assessment of BNF's liquidity position clearly portrays the precariousness of its financial situation. Its cash, short term investments and reserve deposits at the Central Bank could eventually cover only its current accounts and a small fraction (4%) of savings accounts and other deposits. The loan portfolio is shrinking as the consequence of the insufficient cash-flow generation given the ever increasing delinquency rates and the enormous operational costs. Receivables from the MoF are not likely to be paid in cash or negotiable instruments. Foreign loans and credit lines outstanding are subject to foreign exchange adjustments. At the current devaluation rate above 20%, foreign exchange adjustments to multilateral and bilateral loans could further erode significantly the institution's liquidity reserves and its equity base. Unless there is another intervention from the ministry of finance, rising debt service payments will necessarily lead to a sustained shrinking of productive assets in the near future. For now, the availability of fresh resources seems to be a very remote possibility. At the same time, ***the deposit base has been shrinking by over 20% since December 1999***. The decline was particularly pronounced for private deposits, whereas public sector entities, including the pension fund (IPS), recently offset part of the volume decrease in their accounts in spite of the institution's fledging health.

a/ World Bank estimates based on application of international accounting standards and Basle guidelines.

[8] The real ageing structure is most likely to be worse.

Distribution of BNF's Deposit Liabilities

	at 12/31/1999		at 12/31/2000		at 08/31/2001		
	millions G/	%	millions G/	%	milloins G/	millions US$	%
Private Deposits	**254,744.0**	**38.5%**	**233,477.0**	**45.0%**	**200,711.0**	**46.4**	**38.5%**
Public Sector Deposits o/w:	**407,130.0**	**61.5%**	**285,761.0**	**55.0%**	**320,756.0**	**74.1**	**61.5%**
IPS	204,103.0	30.8%	163,380.0	31.5%	174,010.0	40.2	27.0%
OTRAS INSTITUCIONES PUBLICAS	117,552.0	17.8%	61,344.0	11.8%	69,254.0	16.0	10.7%
ANDE	26,392.0	4.0%	29,012.0	5.6%	41,698.0	9.6	6.5%
CONATEL	35,703.0	5.4%	12,812.0	2.5%	16,449.0	3.8	2.5%
PETROPAR	2,101.0	0.3%	6,632.0	1.3%	777.0	0.2	0.1%
FONDO DESARROLLO CAMPESINO	0.0	0.0%	3,704.0	0.7%	2,581.0	0.6	0.4%
ANTELCO	13,766.0	2.1%	3,258.0	0.6%	8,428.0	1.9	1.3%
CORPOSANA	6,062.0	0.9%	1,664.0	0.3%	6,023.0	1.4	0.9%
SENACSA	198.0	0.0%	1,385.0	0.3%	361.0	0.1	0.1%
INC	1,155.0	0.2%	1,374.0	0.3%	1,053.0	0.2	0 2%
ADM.PUERTOS	98.0	0.0%	1,196.0	0.2%	122.0	0.0	0.0%
TOTAL DEPOSITS	**661,874.0**	**100.0%**	**519,238.0**	**100.0%**	**521,467.0**	**120.4**	**100.0%**

Source : BNF and Superintendency of Banks, Central Bank

LIQUIDATION VALUE

BNF's current liquidation value is estimated to be negative, amounting to US$ -74 million. Besides making corrections for non-standard accounting practices, three assumptions were made to derive this liquidation value. First, the realization value of the net loan portfolio is estimated by using a present value concept with a discount rate of 36%, and applying a 20% ad-hoc market discount on the results to account for the current unfavorable macroeconomic situation in Paraguay and BNF's creative accounting. Second, BNF's financial investments which represent in fact the (non-negotiable) bond issued by the MoF with 10 years maturity and a face value of G$ 166,306 m. (US$ 38 m.) is notionally swapped against a new negotiable bond whose present value was calculated using a discount rate equal to the US 10 year Treasury Bill rate plus the current spread requested for Paraguayan sovereign debt. Third, all fixed assets were valued at 50% of their current book value to reflect potential difficulties to sell them given the unfavorable macro-economic environment. In addition to these calculations, an estimated value of the severance payments to be made to BNF's employees was added to the liabilities in the case of liquidation. BNF currently does not have any provisions for these contingent liabilities, but its financial manager estimates a total value of approx. US$ 15 million.

Crédito Agrícola de Habilitación (CAH)

The Crédito Agrícola de Habilitación (CAH) is not a bank, but a state-owned development finance institution with independent legal status which is dedicated to the promotion of low-income producers and small to micro-enterprises in rural areas. The institution was set-up in 1943 and is governed by the Law no. 551/75. CAH does not take deposits from the public. Its activities are financed mostly by international donors, in particular Japan and Taiwan, and the Ministries of Finance and Agriculture.

CAH has currently over 4 times as many clients as BNF with a much lighter organizational structure. The institution is presently the largest agricultural lender in Paraguay in terms of number of clients. As of December 2000, CAH had 69,946 active borrowers as shown in the table below. As the average loan size of about US$ 222 indicates, the institution is

indeed working primarily with very small farmers and rural micro-entrepreneurs. However, the number of clients has declined in comparison to 1998. This is mostly a consequence of the government's recent debt relief initiative (Law 1418/99 and 1470/99) which apparently had a negative impact on payment morale of the whole clientele. Consequently, CAH has been excluding a number of clients from access to its services. In terms of organizational structure, CAH currently has 72 offices in 16 of the 18 departments in Paraguay. The total number of staff is 643, which is about 30% lower that that of BNF. About 38% of the personnel is employed by the head-office, and 21% is on contractual terms. Analysis of CAH's financial condition is elaborated further in Appendix 2.

CAH – Loan Size and Clientele

Recent Disbursement Trends	*1998*	*1999*	*2000*
# of loans	95,001	58,646	69,946
Amount (in US$)	$22,939,437	$11,182,202	$15,521,818
Average loan (in US$)	241	191	222

Source: Crédito Agrícola de Habilitación

Fondo Ganadero

Like CAH, the Fondo Ganadero (FG) is not a bank, but a state-owned development finance institution with independent legal status, dedicated to the promotion of the livestock sector in Paraguay through subsidized credit and know-how transfer to increase productivity.

The activities of the FG are profitable in spite of its below-market interest rates, however the margin is very sensitive to fluctuations in the exchange rate. The reason for the high sensitivity to exchange rate is that 59.3% of the institution's liabilities are in foreign currency. As a result of this exposure, the FG's funding costs increased from 4.8% of the average loan portfolio last year to 13.9%, following the depreciation of the Guaraní since beginning of 2001. This exchange rate exposure, however, does not imply that the institution's business is not sustainable. It just indicates that the current interest rate on loans is not sufficient for the institution to be able to build appropriate reserves against the risks incurred. Given the fact that most clients of the FG are apparently able to borrow from private sector institutions, there is no economic rationale for keeping the lending rates at their current below-market level.

The remaining first tier entities are the Fondo de Desarrollo Campesino (FDC) and the Banco Nacional de la Vivienda (BNV). Related to BNV is the Consejo Nacional de la Vivienda (CONAVI) which oversees BNV operations and also acts as a second tier lender for housing investmens. The government expects to unwind and liquidate these entities whose portfolios are effectively not performing and no new lending is taking place (see Appendix 2). The ***Fondo de Desarrollo Campesino*** does not take deposits from the public, but relies mostly on funds provided by the international donor community and channeled through the Ministry of Finance. The profitability analysis suggests that FDC is heavily subsidized and is involved in unsound accounting practices. A first adjustment to done should be on the level of provision for bad debt, which is far too low. Second, a closer look should be taken at the income figures which are much above the income to be expected given the size of the loan portfolio. Finally, adjustments should be done for the subsidies contained in the zero-cost funding that FDC currently enjoys. Taking the inflation rate as benchmark, these funding subsidies would amount to approx. US$ 750,000 in the year 2000 alone. FDC appears to be primarily working with larger clients: as of August 2001, its average loan outstanding amounted to about US$ 124,000 which is far higher than that of all other first-tier public institutions. Accordingly, most of FDC's clients are able to have or do have access to the private banks. Many of them have also a banking relationships with BNF.

Second Tier Institutions

Paraguay's two second tier institutions are non deposit taking funds financed by external international agencies. They are the ***Unidad Técnica Ejecutora de Programas*** which is currently housed in the central bank and which extends second tier loans to private finance companies for the micro enterprise and agro sector, and the ***Fondo de Desarrollo Industrial*** which has a similar funding structure focused on small and medium industry.

Unidad Técnica Ejecutora de Programas (UTEP)

UTEP is a special unit of the Banco Central de Paraguay set to implement the IDB's Global Program to Finance Microenterprises in Paraguay. The unit was set-up in 1994 and its activities consist in refinancing up to 90% of loans provided to micro-entrepreneurs by participating financial institutions, which in turn receive training on best practice methodologies for micro-enterprise finance, in particular risk analysis of projects. The participating intermediaries are selected according to a CAMEL type of system and financial information provided by the Superintendency of Banks. Since UTEP is funded at "market rate" by the IDB, loans from UTEP to the intermediaries as well as the loans to the microentreprises have be to granted on a for-profit basis.[9]. In spite of UTEP's remarkable performance, its income is not sufficient to cover losses from exchange rate fluctuations give its sole reliance on foreign exchange resources (see Appendix 2).

Fondo de Desarrollo Industrial (FDI)

FDI is a second-tier lending fund housed within the Paraguayan Ministry of Finance, which was established to channel international donor resources towards the small and medium industry in Paraguay. The fund was created in 1993 with, among others, resources provided by the World Bank. FDI has a total staff of 10 including a director. In its operations, the FDI works in a way similar to that of UTEP, but (i) grants about half of its loans, and (ii) has less stringent selection criteria for participating financial intermediaries. Actually, UTEP used to be part of FDI before it was decided to transfer it to the central bank. Still, a significant link remained between the two institutions, as illustrated by the fact that UTEP is responsible for managing FDI's accounts. Unlike UTEP, the performance of the FDI has so far been very disappointing. The institution did not manage to attract financially sound institutions such as foreign banks to participate to the project. Due to these factors, the volume of FDI's loan portfolio has been falling since 1995 with a drop of more than 50% in the last two years alone (see Appendix 2).

FDI – Recent Evolution of Outstanding Loan Portfolio

	# of Loans	Amount	
		in 000 G.	in US$
1999	60	16,078,137	*5,911,080*
2000	24	7,753,077	*2,221,512*
Total	84	23,831,214	*8,132,592*

Source: Fondo de Desarrollo Industrial

[9] UTEP adjusts its rates on a quarterly basis according to movements in the 180 days - certifcate of deposits' rates.

THE SECTOR RESTRUCTURING PROJECT OF THE GOVERNMENT

The discussions initiated by Paraguayan authorities on how to restructure the State's activities in the financial sector are at an advanced stage. Discussions have been going on for a few years now, and the proposal presented to the multilateral institutions consists of a draft law reflecting a vision of the future form of state participation in the financial sector. At this stage, this vision is centered around three building blocs: **(i) the streamlining of the number of state-owned institutions, (ii) the improvement of external and internal corporate governance, and (iii) the quest for financial self-sustainability for operating entities.** The approach selected by the Government is to first reach a consensus on these draft legislation, get them approved by parliament and then, deal with the implementation issues. The restructuring proposal under discussion currently, is presented below, followed by the World Bank team's assessment.

THE CURRENT RESTRUCTURING PLAN

Through mergers and liquidations, it is planned to reshuffle the current institutional landscape and reduce the number of state-owned financial intermediaries to two: A first-tier rural agricultural bank, and a second tier institution, structured as a fund to channel bilateral and multilateral resources. The first tier bank will be formed primarily from the merger of the sound portions of BNF and CAH, which will be extracted according to a "good bank - bad bank" liquidation procedure. The "bad bank" portions, which will include all non performing loans, will be aggregated into a bad assets *residual fund* whose liquidation will be managed by private contractors under the oversight of the Ministry of Finance. Any 'performing' assets not included in the new bank will be placed in a 'good asset' residual fund to be wound down or sold to the private sector. The 2nd tier fund will be created primarily out the merger of the two existing second-tier institutions, UTEP and FDI. Whereas the first tier bank would be created with an option as a future joint-stock company, the status of the 2nd tier fund would be that of an autonomous public entity with independent legal status.

The new 1st tier bank would operate as a credit and payment institution dedicated to the broad-based development of the Paraguayan economy through the provision of financial services to creditworthy small and medium enterprises primarily in the agricultural sector, lacking access to private financial institutions. All loans outstanding provided by the institution would be subject to a maximum of US$ 15,000 per borrower, and US$ 60,000 per borrower for investment loans of four or more years' maturity funded from the second tier institution. Public sector entities are excluded as recipients of services. For both institutions, the interest rates on loans must be able to cover the administrative costs plus the costs of funding. The 1st tier bank would remain in State hands and be able to take deposits from the private sector, but would be restricted in the size of public sector deposits it could hold including deposits from any single entity.

The 2nd tier fund would have the mandate to rediscount medium and long term investment loans to banks and finance companies selected competitively. Lending would be deemed to promote the development of various areas of the Paraguayan economy by providing loan funds to financial institutions willing to lend directly to targeted areas and sectors, for the promotion of financing of investment and development projects by domestic enterprises, agricultural investments, export-related activities or any other activities deemed fit to its institutional objectives. The institution would not collect any deposits from the public and would be funded from multilateral, bilateral and government credit lines. The minimum term of its loans should be two years. Accordingly, the institution would not be authorized to accept any liabilities with a maturity of less than 1 year. For both institutions (1st and 2nd tier), the interest rates on loans must be equal to the administrative costs plus the costs of deposit-taking (in the case of 1st tier) and cost of borrowed funds.

The 1st tier bank and the 2nd tier fund would be subject to a more stringent corporate governance than the public financial institutions operating today. Directors at both institutions would be required to have extensive previous business experience in banking and finance. It is also envisaged that both the new 1st and 2nd tier institutions will operate under the umbrella of the existing financial sector/banking legislation; they would have no state guarantees nor favorable tax treatment.

ASSESSMENT:

The reform initiative of Paraguayan authorities appears to be guided by sound principles, but the proposal does not sufficiently reflect the consciousness about the "crowding-out" problem caused by state interference, nor about the need to define a sustainable business model for public financial institutions. So far, the approach to restructuring has focused on defining an adequate legal framework to merge the current set of institutions. The proposal includes good suggestions particularly on how to strengthen corporate governance, or how to set prices to reach financial sustainability. Additional attention, however, needs to be given with respect to correcting potential market distortions caused by the state's activities in the financial sector. The current proposal suggests that the institutions will divided into two sets and each will be put under one "roof". In terms of activities undertaken, additional definition will be required. This is particularly necessary to define the role of private sector institutions in these sectors, and to allow them business opportunities. A potential weakness of the proposal is that it does not directly address issues of market definition and business organization identified as key factors in the poor performance of the state-owned financial institutions. There is no elaborated plan on how the new institutions will overcome the loan quality problems faced by their predecessors, or how the cost structure of the new institutions will be, how many subsidies may be required in the start-up years, etc. As the work on these issues will progress, a number of pertinent legal issues will almost certainly arise and could be difficult to address, once the new legal framework is "frozen".

The institutional set-up suggested for the 2nd tier institution raises some concerns about the potential outcome of this part of the restructuring process. In many regards, the proposal, if not well structured, may be vulnerable to "political manipulation". In particular, the proposal exposes differing visions with regard to the nature of the future operations of the 2nd tier institution. The proposed framework prescribes that the institution will be a second-tier lender. However, the institution should avoid being used as a repository for large 1st tier loans of FDC, FG, and BNF. This would clearly contradict the idea of a second-tier lending institution, since FDC, BNF and FG are purely first-tier lenders. Similarly, the 2nd tier institution will be able to finance housing, export and import activities, investment projects in the manufacturing and service sector, as well as any other activities that authorities deem compatible with its institutional objectives. This means that the scope of activities envisaged in the law is potentially open-ended and will depend on any given moment on the specific priorities of the government. To mitigate these factors, the selection process for second tier lending to first tier banks should be strictly competitive, and based on pre-defined bidding rules.

Besides these issues and moral hazard considerations, it should be ensured that the operations of the FG and the FDC should be wound up, except for commitments with multilateral institutions which would be managed elsewhere. Both institutions are working with a clientele most of which have access to private financial institutions. Their lending business is fundamentally sustainable and does not appear to require price subsidies. Therefore, the restructuring project should explore ways to sell their loan portfolio to private intermediaries and liquidate the rest of the operations.[10]

A more fundamental question is whether the restructuring proposal needs to include the creation of a formal second-tier "financial intermediary", especially if such an entity does

[10] Actually, the staff of the FG itself is working on a privatization proposal, which, if not perfect, clearly indicates the fundamental profitability of the institution's business.

currently not exist in Paraguay. None of the existing second-tier lenders, namely UTEP and FDI, are currently financial intermediaries. ***Instead, both entities are just mere conduits for channeling public funds, mostly availed by the international donor community, to specific sectors or groups of beneficiaries***. As one can see in the case of UTEP, the current institutional structure is not necessarily a constraint for good operational performance. There is absolutely no indication that an independent legal status with full board of directors and management is needed for these funds to perform their activities in a satisfactory manner. However, there may be good functional reasons for the central bank to distance itself from development finance programs such as UTEP. It may also make sense to merge the two second tier lenders into one entity along the UTEP model to rationalize administration costs. However, none of this provides a justification of a bank-like institutions with a full-blown administrative apparatus.

The proposal on BNH is not elaborated enough to assess the chances of success; everything will depend on how the sound parts of CAH and BNF will be merged. A potential risk is that the planned merger degenerates into a simple take-over of CAH by BNF's administrative system. A fact which is important to keep in mind is that, out of the two institutions, BNF is the one with the most serious institutional weaknesses. In case of a take-over, however, the burden of restructuring may be borne mostly by CAH and the structural problems at BNF would still be transferred to the new institution. Similarly, an often overlooked fact is that the lending business at CAH is more than 4 times larger than that of BNF in operational/client terms. Therefore, it would be easier to integrate BNF's lending portfolio into CAH's operations rather than vice-versa, for example, via the initial "sale" of BNF's rural deposit base and good loans to CAH. The profile of CAH's borrowers is closer to the goals of the new first tier lender than that of BNF. This is an additional reason, for at least treating the two institutions as equal partners in the merger.

Suggested Alternative Restructuring Options

The insights of the analysis of public financial institutions in Paraguay suggest that the restructuring project should focus on three key objectives: ***(i) the elimination of crowding-out effects, (ii) the streamlining of the state presence in financial markets and reduction of the associated fiscal burden, and (iii) the maintenance of a sustainable level of service in rural areas.*** Given a series of concurrent constraints (e.g, fiscal, political, etc.), no optimal solution can be found. Instead, there are a number of second-best solutions from which to chose. Given the earlier comments made, however, the current government proposal can be considered as one of these second-best solutions. Therefore, an attempt will be made in this section to present three options, considered to be the most promising.

It is important to note that all three restructuring options to be presented share the same policy recommendation with respect to FG, FDC and the two second-tier lenders. In line with earlier comments, all three options prescribe the sale, merger and/or dissolution of the Fondo Ganadero and the Fondo de Desarrollo Campesino, taking into account the need to maintain as viable, the loan portfolios funded from multilateral and bilateral sources. As well, all three options prescribe the merger of UTEP and FDI combined with a restructuring of both institutions' management structure. The only variable in the strategy is the approach to the restructuring of CAH & BNF. The three options are summarized in the table below and discussed in detail.

Restructuring Options for the Public Banks

	Selected Restructuring Options	BNF	CAH	FG/FDC	FDI/UTEP
(1)	***Liquidation***	Liquidation	Liquidation	Sale, Merger and/or Dissolution	Merger & Management Restructuring
(2)	***Small specialized First-tier Public Bank***	Downsizing & Merger with CAH	Transformation to Bank & Private Management Contract	Sale, Merger and/or Dissolution	Merger & Management Restructuring
(3)	***Non-Bank Solution***	Transformation to genuine Payment Services Provider	Restructuring & Private Management Contract	Sale, Merger and/or & Dissolution	Merger & Management Restructuring

However, prior to implementing any of the following restructuring options, the immediate short term steps needed to prevent further losses of BNF, while new restructuring modalities are being put in place, should include: ***(a) Appointment of well experienced professional and politically independent bankers to the Board of Directors and revision of corporate governance policies, (b) Provisioning fully all the non performing loan assets and closure of unprofitable branches, (c) Elimination of any lending rate subsidies which do not generate cost recovery; and the setting of rates to fully cover all administrative and financial costs, (d) Halting all new lending to the commercial and development sectors as well as to borrowers with over US$15,000 equivalent in outstanding debt to the bank, (e) Sharp reductions in administration and advisory staff and increase in staff assigned to loan/credit review, and (f) Updating the registry of loan collateral and determination of the liquidation value of such.***

These immediate steps are crucial as first phase actions to be followed by the implementation of the selected restructuring option for the long term.

OPTION I: THE LIQUIDATION SOLUTION

Concept: The solution suggested under this first option is the outright liquidation of BNF and CAH. As a result, the role of the Paraguayan state in the financial market will be confined to second-tier lending through UTEP and FDI. The liquidation of CAH and BNF could be conducted on a "good bank-bad bank procedure" with the extracted "good bank" being subsequently sold in parts or as whole entity to the private sector.

Advantages of the suggested solution: A liquidation of all first-tier institutions will provide the cleanest solution to the "crowding-out" problem and the financial burden posed by state-owned financial institutions to public finances.

Potential Issues of Concern: A non-negligible problem with the liquidation solution is that it will probably be by far the most expensive option for the Paraguayan government, at least in the short-term. The expected equity gap to be filled by the government could be substantial (US$ 74 m. in the case of BNF alone), and it is questionable whether the government has the resources needed to carry out such a plan presently. Moreover, given the current state of the economy as well as the number of institutions to be liquidated at the same time, the resolution process may be lengthy and very challenging from an operational point of view. Further, a substantial downside of the option is that it will imply that at least ten thousand poor clients with proven good payment record (i.e., about 15% of CAH portfolio) will all experience a significant

reduction in their access to credit. This combined with the lay-offs and branch closures may be difficult to implement given the current political climate.

OPTION II: THE SMALL SPECIALIZED FIRST-TIER BANK

Concept: This solution consists of: (i) extracting the existing banking infrastructure of BNF, and (ii) using it to upgrade CAH into an efficient and sustainable small rural financial intermediary. The new institution will be subject to a strict lending cap per borrower, which should be low enough to maintain it target group orientation. Its initial loan portfolio will be formed by merging those agricultural loans of BNF which are not affected by arrears and comply with the lending limits, and the sound portions of CAH's loan portfolio. The liabilities side will include some private deposits from BNF, the existing donor funds availed to CAH, as well as the latter's net equity funds which is to be determined. Deposits of the social security system, should not be allowed in the new bank. The two tables below give an illustrative view of the probable structure of the new institution's balance sheet, as well as that of the remaining good bank to be sold and the residual parts of the BNF & CAH merger which would be liquidated. To this end, it is recommended to use a "good bank – bad bank" procedure.

Illustrative Balance Sheet for new first-tier Bank (in US$)

ASSETS		LIABILITIES	
Cash	10,086,591	BNF's Public Enterprise Deposits	25,216,364
		Pvt. Deposits - Field/Branch Offices	11,404,034
Loan Portfolio	37,456,364	Other Liabilites	7,165,455
of which:			
Loan Portfolio from CAH	13,857,273	TOTAL LIABILITIES	43,785,853
Agricultural Portfolio BNF	23,599,091		
Other current Assets	4,545,455	EQUITY	17,393,467
Fixed Assets (Net)	9,090,910		
TOTAL ASSETS	**61,179,319**	**TOTAL LIABILITIES & EQUITY**	**61,179,319**

Note. Private deposits remaining for field operations reflect 25% of all private deposits currently.

Illustrative Balance Sheet for BNF and CAH Residual "good bank"(in US$)

ASSETS		Market Value Est.	LIABILITIES		Market Value Est.
Cash	44,099,560	44,099,560	Social Security deposits	39,547,727	39,547,727
			Head Office Pvt. Deposits	34,212,102	34,212,102
Loan Portfolio a/					
of which:					
Commercial Loans BNF	9,933,864	7,947,091	Sub-total	73,759,829	73,759,829
Dev. Finance Loans BNF	5,903,523	4,722,818			
Large Agric. Loans BNF	11,799,545	9,439,636			
Other Assets BNF	23,671,591	23,671,591			
TOTAL ASSETS	95,408,082	89,880,696	**NET EQUITY / PROCEEDS**	21,648,253	**16,120,867**

a/ Loan categories 1 & 2 (valued at 80% of book). Private deposits reflect 75% of such deposits, currently at HQ office.

The disposal of non performing assets would use the same mechanisms as those described in the latter part of the chapter on Bank Resolution Procedures in this report.

Illustrative Balance Sheet for BNF and CAH Residual "bad bank"(in US$)

ASSETS		Estimated Liquidation Value	LIABILITIES		Estimated Liquidation Value
Non performing Loans BNF	73,364,545	36,682,273			
Non performing Loans CAH	4,424,773	442,477	Borrowings and Multilateral Loans	110,132,955	110,132,955
Multilateral Funded Loans	27,636,932	22,109,545			
Net Fixed Assets a/	9,090,909	9,090,909			
TOTAL	114,517,159	68,325,205	TOTAL	110,132,955	110,132,955
			NET EQUITY GAP		**(41,807,750)**

Note: Liquidation value of non performing BNF loans assumed at 50% of face value. For CAH loans, 10% of face value assumed.
a/ Of the fixed assets from the various old institutions, 25% are placed under the 1st tier bank, 50% under the residual good bank, and 25% under the residual bad bank.

Advantages of the suggested solution: A first advantage of this second option is that it is the cheapest option. In the illustrative example, the combined net equity gap to be filled by the Paraguayan government will "only" be about US$ 26 m. for BNF and CAH (netting the good bank and bad bank proceeds), in contrast to U$ 74 m. for the liquidation of BNF alone. A second advantage is that the level of financial services provided to rural populations will be maintained. It is assumed that second tier operations would remain a is, or having the two second tier institutions merged. Finally, this scenario is likely to require lesser lay-offs than the other two options .

Potential Issues of Concern: A key issue with this rural bank option is how to ensure that will not experience the same problems such as those which have plagued BNF and CAH, in particular in the area of corporate governance and loan portfolio quality. A possible way to address this concern would be to require that the organizational design and set-up of the new bank is done by reputable international consultants, which should also form the management of the bank in its first years of operation. In this context, ***it is crucial that the approval of the restructuring plan is subjected to the availability of a sound business plan*** including the suggested business model for the new bank, its personnel structure, its income and cost structure, earnings projections, etc. Beside this issue, another potential risk is that the future institution expands mostly in urban areas at the cost of rural producers. A possibility to mitigate this risk could be to forbid any lending activity in the greater Asunción area. Finally, it is essential to ensure that the new bank is funded at "market cost", and that the interest rate it charges from its clients reflect its true operational costs with no subsidies. This is important to avoid any possible "crowding out" of private sector institutions, although this specific risk seems to be substantially lower in rural financial markets in Paraguay. Since the new bank would fall under the purview of the Banking Law, the government as shareholder would be responsible to maintain adequate capital levels at the bank to ensure its solvency, as determined by the Superintendency. If any specific low income "target" sectors are considered to be non-market viable thus requiring a continued state subsidy, this should be budgeted under the Ministry of Agriculture as an annual

grant program with the State explicitly allocating budget resources periodically to cover the planned deficit for servicing such sectors. ***However, in no event should lending be allowed to proceed in such sectors on a subsidized unfunded basis within the new bank since this would immediately start generating irreversible financial losses.***

OPTION III: THE NON-BANK SOLUTION

Concept: Under this scenario, there is no merger between parts of BNF and CAH. CAH will be taken "as is" and undergo a substantial restructuring under a private management contract. The objectives of this restructuring should be: (i) to increase operational efficiency, (ii) reduce costs, (iii) improve the lending technology to substantially reduce loan delinquency, (v) eliminate all forms of price subsidies, and (iv) reach financial sustainability. As for BNF, it is suggested to spin-off and liquidate the totality of its lending portfolio and its term deposits. The reminder of the institution, including the branch network, should be rationalized, and transformed into a genuine provider of payment services with a strong presence across the country. As with the new CAH, the pricing of the services delivered must be revised to reflect the "true" level of operational costs and ensure sustainability.

Advantages of the suggested solution: While not at as cost-effective as Option II, this third option is definitely cheaper than the liquidation solution. Similarly, it also has the advantages of (i) maintaining the level of financial services provided to rural population, and (ii) minimizing lay-offs and related social costs, although reductions would have to be made at the head office.

Potential Issues of Concern: The main difficulty with this solution could be the need to ensure financial sustainability which may require a substantial streamlining of BNF's current branch network. As BNF recently tried to close four of its worst performing offices it faced violent oppositions from local groups blocking roads and protesting aggressively. Fearing the effects of social unrest, the bank decided on a gradual transfer of services and operations from the small rural offices to bigger (regional) branches in the near future. Given that experience, a similar gradual approach to restructuring may be unavoidable for political reasons, which however may imply the need to subsidize the restructured institution in its "initial" years. It is again essential, prior to deciding on this option, to have a realistic and sound business plan with a clear business model for the new institution, its personnel structure, the structure of its branch network, earnings projections etc. Given the innovative character of the solution, it is also advisable that the transformation process for BNF be managed by a seasoned team of consultants with international experience in the area of payment services. A second potential problem with this third option is that it leaves CAH reliant on donor funding at below-market rates. The risk is that this may lessen the institution's incentives to strive for full-sustainability.

IV. BANKING REGULATION & SUPERVISION INSTITUTIONAL ASSESSMENT

Organization of Official Supervision

The supervision of financial activities in Paraguay is distributed among several official agencies. The Central Bank and the Superintendency of Banks are responsible for supervising those institutions regulated by the banking law (banks, finance companies, and exchange and receipt warehouses). The conduct of their banks and finance companies falls entirely under the supervision of the Central Bank of Paraguay (BCP) and the legal provisions of its Organic Law 489/995 and the Banking Law 861/69[11]. Savings and Loan Associations are supervised by the Superintendency of Societies (part of BANAVI[12]) and regulated by Law 325/71, while Credit Union Cooperatives are subject to oversight by the INCOOP (Ministry of Agriculture) under the terms of Law 438/94. Supervision of deposit taker intermediaries is, therefore, fragmented among three institutions and lacks the necessary compatibility.

In addition, the financial sector includes insurance companies, brokerage houses and investment funds. Insurance activities are carried under the provisions of Law 897/96, and their supervision is the responsibility of the Superintendency of Insurance, under the aegis of the Central Bank (BCP). Brokerage and capital market activities, albeit very reduced, fall under the control of CNV (Comision Nacional de Valores) and are carried under the precepts of the Securities Law, while investment management activities and services are regulated by the Law 921/96 on Trusts, presumably under the supervision of the BCP.

Main Issues

The major challenge facing the Paraguayan supervisory authorities is to be prepared in the short term to stabilize those institutions in the system that might be prone to experience crises. Identifying them and devising contingency plans to avoid or resolve their potential failure should constitute a first concern in the following months. To that purpose, the authorities, in concurrence with the Executive and the private sector, would need to accelerate the legal reforms required to establish better mechanisms to mitigate the adverse effect of potential failures.

Recommended Plan of Action to Promote Systemic Financial Soundness

1. Resolve institutional issues to hold the Board of BCP accountable for Supervision;
2. Grant autonomy to the SB to supervise on behalf of BCP within a revised policy framework;
3. Amend the Banking and Central Bank Laws to support better prudential standards for banking;
4. Reinforce asset valuation and capital adequacy rules to better visualize solvency;
5. Enforce standards for governance and risk management for bankers to act prudently;
6. Develop SB institutional capacity to assess and rate varying degrees of risk profiles;
7. Address detected weaknesses when eliciting bank directors to take remedial actions.

[11] "Ley 861/69 de Bancos, Compañías Financieras y Otras Instituciones de Crédito"..
[12] BANAVI is the "Banco Nacional de Ahorro y Prestamo para la Vivienda" a publicy owned housing bank.

Institutional Issues

The Central Bank of Paraguay (BCP) is the sole banking regulator and supervisor in the country. According to its Organic Law 489/995 (OL), it has all the basic powers (licensing, regulatory, enforcement and exit authority) required to promote the stability and soundness of operations of banks and finance companies. The Superintendency is closely affiliated with the Central Bank through a common Board of Directors, but by law it operates as a separate department with very little autonomy in practice, since all powers are vested in the Board of BCP. The Superintendent of Banks directs the operations of the SB but does not have much administrative authority within SB which is exerted by the General Manager of BCP.

Independence of the Board of BCP

While the Organic Law (OL) stipulates a reasonable process for the appointment, release and duration of President and Directors serving in the Board of BCP, there has been a very frequent turnover in the composition of the Board. The turnover has also affected the position of Superintendent itself, with more than six individuals having served as Superintendents during the latest ten years.

The Organic Law of the BCP does not state a specific term for the service term of the Superintendent, and it stipulates only five years for the members of its Board. As a by-product of the instability that has characterized the Paraguayan political environment in the last few years, the excessive turnover resulted from frequent requests by the Government to incumbents for early resignation before their mandates actually conclude. In addition, the appointments may not have always brought to service the most suitable professional expertise both to the Board and Superintendency. This is of particular importance, since the Organic Law establishes few specific professional requirements in that respect and its provisions have not been developed further to provide for better standards[13].

Autonomy and Authority of the Superintendency

The SB has no powers itself regarding licensing and enforcement, and few resolution and regulatory competencies. The role of SB in these matters is limited to advise the Board of BCP, that retains the core competencies and decision making authority. The "banking supervisor" in Paraguay is de facto, the Board of the BCP itself, and not the Superintendency, as a reading of the Organic Law would appear to indicate. The lack of delegation by the Board of some of its powers on behalf of SB, and a relative scarce formalization in writing of core supervisory policies --communicated both internally and to bank directors and management-- have also contributed towards limiting the autonomy of SB and the efficiency of Supervision.

In addition, given that the Superintendent of Banks does not form part of the Board of BCP, and that budgetary administrative authority upon SB is exerted by the General Manager of BCP, the stature and prominence of the Superintendent within BCP is also very limited. The Superintendent lacks authority to arrange and administer the budget necessary for the operations of SB, which is recognized to be at least 25% short of what is needed. That budget does not allow to attract, form and retain, the necessary expertise at SB. Further, this lack of supervisory capacity has been compounded by the fact that interventions and liquidations fall under the control of SB which, along the banking crises of 1995 and 1997, has absorbed many bank

[13] The four current Board members (excluding the chairman/BCP President) have economics, business or accounting degrees. Two of them are career professionals at BCP, one has had academic professorship experience and one was vice minister in the Finance Ministry.

examiners from the SB and decimated the resources available for problem and normal bank supervisory activities.

Exit Policy and Resolution Mechanisms

As discussed in this report and documented elsewhere in previous assessments, there is a clear lack of a suitable legal framework, mechanism and ordered financial arrangements, to deal with banking crises in the Paraguayan context. This factor compounds the other limitations listed above, since suitable funds and mechanisms to absorb losses and proceed to residual asset recovery are not available, which has curtailed the Board's determination to ensure final decisions on exit and closure activities.

Legal Liabilities

There is a general lack of provisions in both the Organic and Banking Laws providing -- both to members of the Board and the Superintendency-- the necessary protection against legal actions brought against officials while acting according to their legal duties. The lack of such protection has exposed officials to frequent civil action brought by bank shareholders, directors and other interested parties, who have actually challenged in court and sued against individuals, both enforcement and intervention, and closure decisions. As a result, both senior officials and examiners tend to behave too cautiously without exceeding the strict letter of the law, resulting in an excessive attention being paid to formality in detriment of the substance of the facts evaluated.

Supervisory Approach

Finally, and in part as a by-product of the previous limitations discussed above, the Supervisory Approach followed in the past has focused more on determining compliance with the letter of laws and regulations rather than focusing into assessing the risk profile of activities and the quality of the management processes followed. Absent of a set of communicated standards on good governance and risk management --and short of the capacity to evaluate risk and risk management practices -- supervision has evolved from a compliance approach to one of a solvency diagnostic type. As BCP and SB have not developed policies for addressing varying degrees of risky practices, they have not been capable of preventing and early remedying excessive accumulation of risks and poor risk management, governance and control processes associated with banking failures and crises. State banks with their own statutory mandates and which do not fall under the same provisions as the commercial banking law, also represent an area of needed reform and increased oversight, something the government is already considering in its reform efforts.

An alternative to resolve many of these limitations could be to institute an agency fully separated from the Central Bank (Superintendency of Financial Institutions) in charge of supervision for all financial activities conducted in Paraguay. Albeit, ***given the relative size of the country and its associated governance issues, probably the best alternative is to maintain financial supervision within the Central Bank, at least until political stability consolidates further and official institutions become more independent and efficient.*** In the meantime, the following actions could be considered in order to afford Supervision –within BCP—additional independence and capacity of action: ***(a) Increase the term of service for the Board of BCP for the President and Directors; (b) Obtain budgetary autonomy for the BCP vis-á-vis the executive;(c) Institute the same term for the Superintendent; (d) Nominate the Superintendent as a de-facto member of the Board of the BCP;(e) Empower the Board of BCP to delegate powers to the Superintendent of SB; (f) Supplement existing enforcement powers enabling a***

wider range of orders; (g) Develop practices to define supervisory orders as civil contracts (MoU agreements);(h) Implement heavy sanctions for lack of compliance with such orders; and (i) Separate SB from failure resolution and problem bank intervention activities.

Regulatory Issues

Prudential quantitative standards (capital ratios, risk weights, and risk limits) are explicitly established in the Banking Law 861/69 with a degree of detail that makes regulatory development and adaptation to changing circumstances too rigid. Major risk limits and prudential ratios are established in the Law including risk weights and detailed definitions. In many countries these would be established by secondary regulations that develop the principles of the Law, facilitating continuous development and adaptation.

The result is that even a small amendment to capital adequacy or regulations on risk limits, requires in Paraguay an amendment to the Banking Law approved by Congress. This prevents adapting prudential regulations to international evolving standards without reforming the Banking Law. Albeit, it is of particular importance for establishing the sufficiency of capital, since risk weights assigned in the Banking Law differ markedly from international standards, resulting in a overstatement of risk weighted solvency of the system and individual banks (see paragraphs dealing with capital adequacy). The Board should consider obtaining legal delegation to establish by regulation the more important prudential parameters.

Another feature of the evolving regulatory framework in Paraguay is its marked quantitative style, with few standards having been promulgated regarding governance, control structures and risk management. In turn, as in many other countries, the formalism of prudential quantitative regulations may have precluded the development of a risk based Supervisory Approach that focuses on identifying varying degrees of risk, summarizing the risk profile of institutions, and acting preemptively to address weaknesses detected in risk management and controls.

The following paragraphs deal with crucial issues where further reforms are needed to establish a robust framework of both quantitative and qualitative standards that support sound practices by bankers, and efficient supervision.

Regulatory Accounting Standards

As part of its regulatory powers, SB has established the basic framework[14] that regulates bank accounting, reporting and disclosure requirements by means of the following core Resolutions adopted by BCP:

13/1994	Compulsory Chart of accounts;
08/1996	Loan Classification and Provisioning rules; and
01/2000	Minimum Disclosure Requirements.

Resolution 8 regulates loan classification and provisioning. Its adoption in 1996, an further changes in 1998, reversed the rigor of previous Resolution 2/1992, contributing to distortion of information regarding the true quality of loan portfolios and provisioning needs. This has resulted in an overstatement of capital adequacy ratios (compounding the distortion introduced by the risk weights established in the Banking Law).

[14] The review and assessment has been limited to Resolution 8 for loan classification. As part of the necessary due diligence for project preparation, it would be appropriate to carry a complete evaluation of accounting, reporting and disclosure regulations to establish and carry on the reforms that are necessary.

The changes contributed also to obscuring the true dimension of losses accumulated by banks that entered into crisis in 1997 facilitating banking practices that distorted transparency and delayed official action. A summary of all aspects that should be amended, include but are not limited to: ***(a) Reintroduce interest reversal as required by previous Resolution 2/1992; (b) Preclude directly or indirectly new lending to improve loan classification; (c) Minimize recourse to collateral as a substitute for loan provisioning; (d) Establish a register for authorized professional independent appraisers; (e) Adopt strict rules for collateral appraisal; (f) Increase minimum provisioning for class 2 assets from 1% to 5%-to-10%;and (g)Establish a generic provision (1,5%) for class 1 assets currently at 0%.***

Solvency/Capital Adequacy Rules

The basic provisions established by the Banking Law for minimum "entry" capital[15] and the minimum capital adequacy ratio (currently 10%, within a band of 8% to 12%) probably do not capture the inherent risk profile of the Paraguayan operating environment. There are several aspect to be considered that may need to be reformed for restoring capital to its value as a supervisory tool.

First, the minimum entry capital requirement has not kept in line with the depreciation of the Guaraní via-á-vis de US$. When the minimum entry capital was introduced by the Banking Law in 1996 (G$ 10.000.- millions), the equivalent amount in US$ was five million. Minimum entry capital is revalued according to the changes in the official price index, although due to accelerated depreciation of the Guaraní, today the revalued minimum entry capital (see above) is worth only US$ 3.5 million. In addition, there is a clear distortion between the minimum "entry" capital of banks versus finance companies that appears unjustified from a regulatory point of view.

Second, the banking system reports currently an average risk weighted capital of 17.20% well in excess of the minimum capital adequacy ratio (CAR) required of 12%. The discrepancy renders fully ineffective the prevailing capital adequacy as a supervisory tool. Solvency ratios are overstated due both to lower than international risk weights for loans supported with collateral, and to the understatement of provisioning needs that are reduced based on existing collateral[16]. It has been estimated that using international risk weights will reduce CAR at least to 12.6%. In addition, a further reduction of reported capital adequacy to 10% takes place if revaluation reserves are limited to 50% (current regulations accept them as full capital). After adjusting for provisioning shortfalls, reported capital adequacy may reach around 4.6% for the banking system.

Third, the prevailing Paraguayan regulations only consider credit risk as the sole major factor requiring capital. Other direct financial risks such as foreign exchange and market risk, and those less prone to capital charges such as liquidity and interest risks, are not part of the current regulatory framework, albeit, the Banking Law allows for including them in the capital adequacy rule. In addition, core qualitative factors leading to establishing an institution's risk profile –such as the profile of ownership and governance, the quality of risk management and control structures, or the depth of audit programs—are not considered yet (by practice or regulation) to determine the assess the sufficiency of capital adequacy above the minimum 10% required by regulation.

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[15] For banks: Gs. 14,172 million --equivalent to us$ 3.5 million. For finance companies: Gs 7,086 million -- equivalent to us$ 1.7 million.

[16] Over reliance in collateral takes place in an environment where appraisers are not registered and appraising norms have not been adopted.

Finally, while on a reduced scale, there might be groups of financial institutions operating in Paraguay that being controlled by the same individuals or corporations, these are not yet regulated nor supervised, in a consolidated manner. Capital adequacy is calculated and required only at the primary institutional level, with only a single tier of capital being considered.

Based on previous considerations, the most important differences with international standards that would need to be considered for reform, include: ***(a) Minimizing the use of collateral to reduce risk weights and augment risk limits; (b) Require capital adequacy not only on a solo, but also on a consolidated basis; (c) Exclude from tier two of capital 50% of revaluation reserves after validation; (d) Exclude from tier two of capital 50% of current years profits before distribution; and (e) For rating loan asset risks, permit 50% risk weighting only if asset is guaranteed by a residential mortgage, but 100% risk if backed only by commercial mortgage.***

In addition, it would be appropriate to consider the use of CAR regulations to foster further consolidation in the financial system and advances in risk management and governance practices. For this purpose, authorities may wish to consider adopting a strategy that leads small and weak institutions to merge before residual franchises become of little value. Moreover, for banks whose governance, controls, and risk management, are rated poorly, capital ratios should be targeted at a premium above CAR.

Ensuring Governance and Control Standards with Supervisory Capacity

The Banking Law (Arts. 34 to 39, and 108) establishes basic provisions regarding governance and control structures within banks. Also, the Organic Law of the BCP (Art. 34) empowers the Superintendent to establish internal control and management information rules. Besides regulations for external auditing, the BCP has adopted only two Resolutions to develop these provisions (Resolution 1/1998 for management standards, and Resolution 455/1999 for internal auditing). Both Resolutions are positive but lack the necessary depth and detail to be considered as enforceable, since the standards enunciated are minimal to provide a summary of sound and prudent practices.

The following aspects should be developed further to support an environment where bank directors and senior management have better incentives to perform their roles in an accountable manner:

a) Augment the spectrum and definitions of duties of Directors;
b) Improve rules for functioning of Boards, committees and management oversight;
c) Adopt minimum standards for audit programs and quality assurance by Boards;
d) Require separate risk management units or assign this to internal audit.

As it pertains to Risk Management Standards, the SB should ensure that it develops and then ***publicizes minimum elements for policies, procedures, measurement and controls.***

Onsite Examination: Approach, Means and Effectiveness

In examinations, asset quality adjustments are static, since income reversal is not compulsory, nor required by examiners as per adopted procedures. Adjustments to the profit and loss account are not common, and a fair view of operational cash flow margins is seldom brought into the reports since the identification of the full volume of non-performing loans still needs to improve. There is an excessive reliance on collateral as source of loan repayment, and examiners do not seem to criticize, as much as they should, collateral effectiveness as a substitute for provisioning. Furthermore, reports do not criticize the lack of systems, controls, and adherence to

quality in board approved policies and procedures, an the quality of risk management in general is not rated.

Performing examinations is assigned to two separate Intendencies. The number of on-site examiners (#30 staff located in the "Intendencia de Inspecciones") appears relatively scarce for the number of institutions (#47) and the scope of activities under supervision. Further, examiners (#60 staff located in the "Intendencia de Supervisiones Especiales") are dedicated to supervising liquidations (#30), and examining tax matters (#15) and fringe institutions such as exchange and receipt warehouses (#15).

If better deployed and organized, the number of staff should be sufficient to operate both examinations and problem bank supervision. This would require transferring out of SB the responsibility for supervising fringe institutions as well as liquidations. If as planned, Savings and Loan Associations and major Credit Cooperatives are brought within the scope of the supervision of BCP, SB should carry on a thorough re-estimation of its needs of skills and staff, delineating a plan to obtain the necessary additional capacity.

Offsite Surveillance: Means and Effectiveness

Information management and analysis is carried by the "Intendencia de Analisis y Normas", in charge also of developing regulations. A major product of the off-site monitoring is a composite rating system which is made public as per provisions of the Banking Law. Under the name of CADEF, the rating was reintroduced recently, two years after having been suspended under the former administration of BCP.

Moreover, among the recommendations to reform the Banking Law it would be advisable to eliminate amend the obligation of BCP and SB to make public a classification of banks as currently required. Forcing SB to rate banks and public ratings crates undue pressure on SB, brings information of little value to the general public, that can destabilize the system and, under stress, forces SB to collude against transparency.

As its precursor CAULA-G, CADEF is a composite index of financial ratios prepared with information reported by banks and finance companies. Accordingly, its value as a predictor of problems, or as a tool to classify institutions, is dependent on the quality of the data reported by banks and finance companies. Due to distortions already commented --in regulations, accounting and reporting practices-- there are serious doubts about the current transparency of that information and the final value of CADEF.

The limitations related to this off-site monitoring tool, include: a) lack of feedback adjustments based on examination work; b) lack of qualitative measures regarding risk management, governance and control structures; c) relative arbitrary cut-off points used as benchmarks to assign values to ratios; and d) validation and related calibration limitations. It appears that SB also prepares an internal rating whose specifications and procedures have not been assessed.

Enforcement and Remedial Actions

Since the enforcement authority belongs by law to the Board of BCP – likely not held accountable as supervisor -- alertness by the Board has been low, and communication of SB not fluent and transparent enough to attract the attention and reaction of the Board. This situation is complicated by the institutional issues discussed before, since policies for major supervisory

processes and functions have not been adopted and communicated with clear criteria on how to act in reaction to findings.

Accordingly, until present, the prevailing concept for remedial action has been enforcement by economic sanction due to lack of compliance with law and regulations. In other words, what is not penalized in the Law is not unsound or unsafe, even if it accumulates unwarranted risk. Neither BCP nor SB have used well the core regulations such as capital adequacy, or for instance the licensing powers of BCP, as incentives for bank directors and managers to comply with regulations and adhere to outstanding orders by SB to improve systems, controls, policies and procedures. Yet, endless litigation by bank directors and managers has made enforcement inefficient with sanctions imposed sometimes taking more that one year to be firmed up and confirmed.

Although, there are areas where the legal provisions for remedial action and enforcement could be improved further including -- as reported before -- it would be crucial to enable the delegation by the Board of BCP on behalf of SB of a substantial enforcement and sanctioning powers, as well as litigation authority and resources. At a minimum, the following suggestions could be considered to strengthen the reform of legal provisions in the Organic Law of BCP that support enforcement and prompt remedial action. SB would highly benefit if specifically empowered in the Law[17] to issue orders to banks and their directors and senior managers to:

a) Call meetings of board and general assembly to resolve SB's orders;
b) Change ownership and organizational structure of a bank/group if warranted;
c) Suspend or discontinue unprofitable activities/units/business lines;
d) Enter into memorandums and formal supervisory agreements with SB;
e) Enforce cease and desist actions on imprudent practices (against standards previously communicated);

In parallel, enforcement powers (pecuniary sanctions and ensuing limitations for lack of compliance with previously issued orders) could also be improved by means of:

a) Defining imprudent/unsound practices subject to prosecution and sanction;
b) Levy daily fines for each day an outstanding order is not complied with;
c) Update economic fines, increasing those imposed to directors and managers;
d) Incorporate civil responsibilities/penalties for lack of compliance with orders.

As reported before, weakness in governance, control structures and risk management are not clearly criticized, since the relevant minimum standards have not been adopted and communicated to bankers. Accordingly, weak management practices are not subject to criticism and prompt remedy, perpetuating deficiencies in policies, procedures and controls that are not systematically assessed.

Remedial Actions: Triggers, Implementation and Enforcement

Article 110 of the Banking Law mandates SB to introduce special supervision ("Vigilance") under conditions listed in the Law. In addition, the Law determines the duration and consequences of special supervision. As happens with the conditions required for intervention, they provide a workable legal framework for problem bank supervision. Albeit, one would recommend a set of less limited conditions, including the adoption of much more criteria

[17] Article 34 of the Organic Law of CBP allows the Superintendent to remark and require corrective measures under ample conditions and terms. But, the lack of details regarding the scope pf those requirements have precluded SB to actively develop a remedial action discipline and a battery of legally anchored instruments.

(in the law or as communicated policies), that broadens both the capacity and the willingness to act of the authorities.

Communication of a prompt corrective action matrix would serve several purposes, including but not limited to: i) providing understanding to regulated institutions and their directors and managers of the public criteria adopted; ii) mitigating any appearance of arbitrariness; and, iii) provide consistency and predictability to actions and to enforcement measures adopted by BCP and SB.

Based on the amendments introduced to the Banking Act, as suggested above, the **matrix for prompt action and enforcement** would need to specify:

a) Different categories of problem bank profiles based on financial and other factors;
b) Progressive levels of deterioration in financial condition (core factors);
c) Sanctions that will be adopted in case of no compliance with such limitations;
d) Format of legal documents under which supervisory actions will be anchored;

Rehabilitation Plans: Scope and Formalization, Effectiveness

In the case of liquidity crisis, and in order to grant financial support, Article 66 of the Organic Law of BCP requires its Board to approve rehabilitation and recapitalization programs. In addition, Article 114 of the Banking Law mandates SB to require a recovery plan to institutions under special supervision. Neither the Law, nor BCP by resolution, have established the details, conditions, and requirements of those programs.

It appears that SB has not officially approved any of the plans that might have been presented in the past for evaluating as non-viable those institutions that presented them. Accordingly, it would appear that the Board of BCP approved them to justify the financial support needed to prevent major runs of depositors. Although, in most cases the plans were not workable and all the institutions had to be later intervened and liquidated, increasing the costs of resolution due to accumulated delays.

Exit Policies and Procedures

Regardless of the locus and procedures followed for resolving failing banks, there are no currently written exit policies adopted by the Board of BCP, nor does the Banking Law specify when a bank has to be closed and liquidated. The provisions of the Banking Law that regulate the resolution of interventions (Art. 120) do not contain any applicable objective relevant criteria, leaving the final decision to the Board of BCP.

This situation may have resulted in sub-optimal resolutions and delays in transferring to private hands those parts of franchise of failing banks that would, otherwise, have been preserved while minimizing the costs associated with liquidations. In coordination with the policies suggested above to govern prompt actions and enforcement activities, it would be appropriate to establish the necessary criteria and procedures to be followed for the prompt resolution including closure, restructuring or liquidation of banks that are not viable.

Anti Money Laundering Initiatives

The events of September 11, 2001 generated an unprecedented cooperation among Paraguayan and U.S. authorities to identify potential financing sources related to such events, which might be sourced from Ciudad del Este in Paraguay. While anti money laundering laws

were already in place to help detect drug traffic flows in Paraguay's border area with Brazil and Argentina, the 9/11 events spurred the BCP to undertake more intense measures to monitor illicit funds and to require financial institutions to implement measures to do the same. The developments both past and present in Paraguay's anti money laundering activities and legislative initiatives are further detailed in the following box.

Recent Developments in Paraguay's Anti-Money Laundering Policies

Paraguay has a number of initiatives which reflects its evolution in the implementation of an anti-money laundering framework. This recently gained priority and increased importance following the September 11, 2001 terrorist attacks in the U.S. and the discovery of financing links in Paraguay's border towns:

The Central Bank (BCP) serves on the Boards of national agencies set up to detect and prosecute money laundering activities. These include the Secretariat for the Prevention of Money Laundering and the National Anti-Drug Secretariat. The framework Law No.1015/96 requires from financial institutions, the identification of clients, the setting up of a monitoring registry, and maintenance of such registries for at least 5 years. The law was updated in mid 1997 to explicitly define as illegal, the use of the financial and payments system for transacting illicit activities. Liability was defined to equally include the executors of specified transactions as well as the "moral" authors or planners of such. All financial (bank and non bank) institutions as well as funds and NGOs are included in terms of reporting requirements and monitoring responsibilities.

The Superintendency's (SB's) Regulation 245 of 1997 establishes and defines the specific means of communication and reporting formats between financial institutions and the SB for operations above US$10,000. Regulation 455 of 1999 reinforces this by requiring new internal control units to be set up in each institution, and specifies their responsibilities in preventing money laundering as well as the additional oversight functions of corporate audit committees. Regulations 245/97 and 536/97 elaborate on *external* auditor requirements and responsibilities in this area.

A separate Law No. 1095 of 1997 defines responsibilities for reporting to the designated government agencies once suspicious activities have been detected. Protections are included with respect to lawsuits against reporting banking officials no matter what the outcome of investigations might be (i.e., meaningful or not). Regulation 153 of 1998 requires entities which transfer funds abroad to inform the SB and the Department of Economic Crimes of the Central Bank, while providing specific amounts, destinations and origins of funds. Regulation 224 of 2000 provides additional guidelines and reporting requirements specifically tailored to exchange houses. A separate MERCOSUR agreement also exists to define guidelines for suppressing money laundering in the MERCOSUR countries and formalizing cooperation among those central banks.

Act 105 and Regulation 9 of October 2001 has set up within the BCP, a special purpose Unit for financial analysis on monetary and asset laundering. This Unit coordinates activities and information with the BCP's Department of Economic Crimes. Most recently, Act 123 and Regulation 1 of November 2001, implemented a "manual of conduct" requirement for banks to delineate the steps necessary for the identification and prevention of asset laundering, as related to Basel Core Principle 15 and codes of ethics. This regulation applies to all entities supervised by the SB. Essentially it emphasizes "know thy client" guidelines and requests reporting on connected businesses. Suspicious operations are reported to the National Secretariat for Prevention of Money Laundering.

V. SAFETY NET MECHANISMS & DEPOSIT INSURANCE

This chapter addresses Paraguay's safety net instruments including lender of last resort facilities and the deposit insurance scheme.

Lender of Last Resort Instruments

The Central Bank of Paraguay has recently instituted changes in its policies governing the use of safety net and other central bank credit mechanisms, particularly in light of the past six years' experience which resulted in substantial Central Bank Losses from failed banks which had previously made extensive use of BCP credit (see table below).

Accumulated cost to-date of Central Bank rescue measures (non-reimbursed credits, write-downs, deposit payments):

As of 8-31-02 in millions of Guaranies		Total Disbursed	%	Amounts Outstanding	%
Loans to credit institutions		87,493	4%	13,500	1%
Loans to banks		647,790	28%	580,094	37%
Safety net loans		183,667	8%	46,564	3%
Overdrafts		149,395	7%	4,225	0%
Rehabilitation plans		338,108	15%	45,438	3%
Short term loans		87,000	4%	62,201	4%
Subrogated payments		83,524	4%	51,242	3%
Receivables		50,271	2%	77,383	5%
Deposit guarantee payments		549,447	24%	569,797	36%
Accrued interest		92,769	4%	121,919	8%
Discount/rediscount facilities		28	0%	28	0%
BNA bonds		2,651	0%		0%
Contract loans		8,395	0%	8051	1%
Total		2,280,538		1,580,442	
$US Equivalent (millions)					
@ exchange rate 1997	2,178	1,047		726	
@ exchange rate (2000)	3,485	654		453	
Paraguay GDP - Guaranies (millions):		20,934,352		Year 1997	
in $US millions		9,612		Year 1997	
GDP - Guaranies (millions):		26,920,974		Year 2000	
in $US millions		7,725		Year 2000	
Historical amounts disbursed as % of historical 1997 GDP =				11%	
Amounts disbursed at 2000 dollar value, as % of 2000 GDP =				8%	
Amounts outstanding at historical value, as % of 1997 GDP =				8%	
Amounts outstanding at 2000 $ value, as % of 2000 GDP =				6%	

The above table shows that in approximate historical costs 11% of GDP was expended on various rescue packages. In terms of amounts expended, over $1 billion was used for such

operations, whose historical dollar value of still unrecuperated items would have been about $700 million[18]. However due to ongoing devaluations, the current outstanding balances of non-repaid BCP credit and/or other funds extended, as of August 2002, would now equal $260 million at current exchange rates, or equivalent to 23% of present banking system deposit liabilities. Some instruments which had previously been allowed but have been recently halted as a matter of policy, included the overdrafts on banks' clearing accounts, and the use of discretionary credits from the BCP to banks, most of which were used during the 1995-96 banking crisis.

The criteria and policy for the use of LOLR short term facilities as well as BCP credit under supervised rehabilitation plans, has become substantially stricter under more recent norms implemented, to avoid easy access by banks with high potential for insolvency. The current policies and facilities available are examined in detail in Appendix 4, but include in addition to the call money facility: (i) a short term facility for credits between 1-10 days in a 30 day period; (ii) a 'safety net' facility for credits up to 60 days within a 180 days period (but renewable for an additional 90 days in exceptional circumstance); and (iii) a longer term 'rehabilitation' facility for credits potentially up to a maximum of 5 years. The interest rate on these facilities is based on a 2% spread over an average of outstanding central bank bill rates or call money rates. Required collateral for the credits includes government or BCP paper, other liquid negotiable securities or IOUs. It is recommended, to avoid moral hazard, that the ***interest rate charged on these LOLR facilities be based on a spread above the market rate, and that IOUs be excluded as collateral guarantees which should be limited to very low risk negotiable securities.***

While the availability of a medium term facility constitutes an important ingredient in the package of LOLR mechanisms, there are three items which should be considered for modification in this context: ***(i) This facility should be removed from the BCP and funding should be provided only in exceptional circumstances by the Government Treasury given the potential amounts involved and the risks posed to the BCP's balance sheet and its monetary functions, (ii) The maturity terms should not exceed 2 years since more than that would indicate bank insolvency problems, and (iii) Indications of bank insolvency should immediately preclude any continued use of the facility whose rules should prevent regulatory forbearance*** – such could easily materialize once the facility is being used and the BCP has become "invested" in the success of the rehabilitation program, particularly while the funding continues to be sourced from the BCP balance sheet.

Market Based Liquidity Instruments and Constraints

The interbank market in Paraguay is limited and mostly relationship based. The size and frequency of interbank flows, however, can be good indication of how the market qualifies its member banks, since weak banks are generally cut off from access to this credit. However, the direction and size of flows in this market has not yet been used systematically to monitor and provide early warning indicators of potential bank illiquidity as well as insolvency. Nevertheless, liquidity transfer mechanisms are crucially needed in the Paraguayan financial system, particularly at this time.

Besides the limited interbank market, there are very few liquidity facilities available in the money market. The central bank's call money facility and the extremely limited repo market are some options, but the process of collateralizing such short term facilities still requires more

[18] This makes an approximating assumption that the bulk of the funds were disbursed during a period centered around 1997.

streamlining to make them effective and widespread instruments. The short term corporate paper market is practically non-existent, with the fixed income money market being predominantly driven by an active primary market in central bank bills (monetary regulation/open market instruments) for which there is a very limited secondary market. The current stock of government (BCP) bills outstanding is about $60 million which represents one third of total banking system usable liquidity (i.e., cash and liquid assets excluding reserve requirements).

Creating a liquid secondary market in BCP bills would promote a more liquid interbank market backed by such securities' collateral. Thus is might be worth considering in the short run, ***to establish an automated trading mechanism potentially managed by the BCP, to promote the efficient development of a liquid secondary market in government securities. Besides the benefits of generating additional liquidity in the system, this would also help to establish a more reliable benchmark yield for private short term instruments as well as for longer term fixed income securities. The latter would set the base for development of a more active capital market while providing the collateral instrument to increase money market liquidity.***

DEPOSIT INSURANCE

The Current System

Paraguay's current deposit insurance scheme is named a deposit "guarantee" scheme since it reflects a guarantee by the State which is not backed by any private premiums. The current scheme is not funded and depends on disbursements from the central bank when needed[19]. In this regard, the system already induces moral hazard since banks have no stake in funding the cost of the scheme. The level of covered deposits is approximately $9,000 per person (i.e., not per account) reflecting 50 minimum wages, which is about 5.5 times Paraguay's GDP per capita, a level slightly above the average but not excessive for deposit coverage purposes. To-date the government guarantee scheme has disbursed approximately $250 million equivalent since 1994, of which about $60 million has been recovered.

The Proposed New System

The Government has developed a draft law for the establishment of a deposit insurance fund which would be administered by the central bank and which would collect premiums from the banking system. The proposed scheme has a number of progressive elements including the role of said fund in restructuring and resolving troubled banks. The proposed target funding of the scheme would be to reach a level between 5%-10% of total deposits in the system. This level seems adequate and, under current banking conditions a 10% target would cover 60% of the deposits of domestic banks and some less robust foreign/regional banks in the system, as well as the national development bank (approx. 5 banks), all of which manifest varying degrees of risk in the present environment. A 6% deposit target would be needed to cover only the effectively insured portion of deposits of these banks, i.e., coverage up to the insurance limit. The proposed law, while having a number of very positive elements, however, has some potential weaknesses which are listed in Appendix 4.

[19] In this case, as with others, the central bank in Paraguay covers a number of funding costs which normally should be attributed to the Treasury. These include medium term funding facilities for systemic liquidity problems as discussed earlier. In 1999, however, this policy was temporarily modified when proceeds from a Taiwanese credit (issued as a bond of the Paraguayan government) were used in part, for the pay-out of depositors.

Options for Improving Incentives in the Use of a Deposit Insurance Fund

The basic issue pertains to the ***public versus private*** nature of the proposed insurance fund. While a public role will always be present in a deposit insurance fund, particularly for systemic crises, better incentives would be created if the fund itself was owned by the private sector. Along with a more pro-active bank resolution role for the fund, this would encourage banking sector participants to more quickly restructure, carve out or merge failing banks and absorb remaining good assets into the system, so as to avoid using up too many resources of the insurance fund to pay all depositors of a failed bank.

It is therefore recommended that a new deposit insurance fund be private sector owned and function as an autonomous corporate entity. However, special contractual arrangements in the event of a systemic crisis as well as rules of procedure can, and should be agreed with the government and the central bank. In order to avoid moral hazard, and set out the terms, conditions and corporate design of a deposit insurance fund, clear contractual obligations should be spelled out so that the government does not become a funding source for unexpected or unforeseen events.

Design of a Deposit Insurance Fund using Government as Reinsurer for Systemic Risks

Under the current proposed deposit insurance law, the annual premium level is specified at 0.3% of deposits. Based on the above information and the average 20% rate of return on deposits (which the insurance fund's reserves would also earn), this premium rate would reach the target level of funding in 12 years. However, if the premium rate was raised to 0.8% of deposits, then the target funding for the insurance fund would be reached within 7 years. ***It is therefore recommended that the premiums charged for deposit insurance be increased to a level commensurate with capitalization requirements of the fund within a reasonable time period (less than 7 years) as illustrated above.***

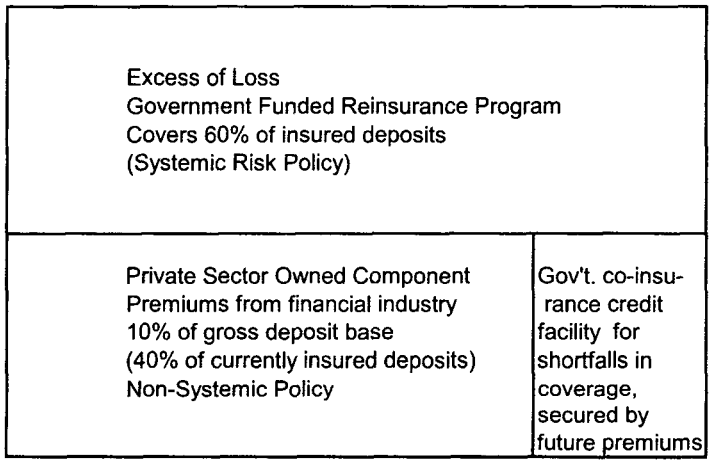
Systemic versus Non-Systemic Risks

The deposit insurance fund design should also recognize that even after achieving the 10% of deposit capitalization, the fund would not be able to fund a systemic deposit run on the banking system. While the fund should be able to cover insured deposits of failed banks which represent a fraction of the banking system and while the 10% target if applied to current conditions, would cover the deposits of all the weakest banks in the system, any systemic shock could not sustainably be covered by the deposit insurance fund which would be depleted under such a situation. Therefore, the government should recognize the fund as an instrument of limited liability with the government providing "reinsurance" above the 10% of deposits level of coverage. ***Any losses of the fund above the 10% target would be covered by a government "excess of loss" insurance, which would essentially commit fiscal funds to cover any excess above the insurance fund's statutory requirement.*** It would not makes sense to have the insurance fund cover any and all losses since on a long term basis this would be unsustainable, and systemic crises would "break" the fund with little chance of it being appropriately recapitalized.

Another issue arises in terms of the deposit insurance fund's ability to cover payments in its early years before it has reached the 10% capitalization level. ***During such a stage, the government should offer a "co-insurance" policy for levels below 10% of deposits, but any such co-insurance would be charged to the fund.*** However, the co-insurance (used to cover any

loss payments within the 10% target but where the deposit insurance fund did not yet have sufficient capital) need not charge for additional premiums up front since the proposed 0.8% premium might already be considered onerous by the banking industry. However the co-insurance could be structured by way of a contingent credit line extended by the government to the fund, and if such credit were utilized in whole or in part, it would need to be repaid out of future premium income from the fund or out of special premium assessments.

Financing Structure for Proposed Deposit Insurance Fund



Transitional Arrangements from Existing to New System

While the co-insurance option mentioned above provides another level of protection to ensure the solvency of the deposit insurance fund, this in itself along with the excess-of-loss reinsurance government coverage may still be insufficient to cover losses especially for "multiple events" during its early years of operation. For that reason, the phase in of the new deposit insurance fund should be gradual and be implemented in parallel with a phase down of the existing government funded deposit guarantee system. To accomplish this, ***the coverage of losses (i.e., payment of deposits) could be pro-rated among the old and new systems so that during the first years of operation, the new system would be responsible for a steadily increasing share of potential loss coverage while the old system would have the reverse, i.e., a steadily decreasing share of loss coverage.*** This sort of transitional co-insurance would assure that once the new system was responsible for full coverage up to 10% of all deposits, it would have had time to accumulate sufficient capital for that purpose without being 100% liable for deposit payments during the transitional period.

Transition Period Arrangements - First 6 Years of Operation

	Proportional Shares of Insured Deposit Coverage/Indemnification	
End of	Old Guarantee System	New System
Year 1	90%	10%
Year 2	75%	25%
Year 3	55%	45%
Year 4	35%	65%
Year 5	10%	90%
Year 6	0%	100%

Deposit Insurance Fund as a Private Sector Entity

The above limited liability fund implies a direct role for the ownership of the deposit insurance fund by the private banking industry. While the fund and the usage of its resources would be dictated by new provisions in the banking law and/or a new deposit insurance law enforced by the central bank, the resources in the fund would belong to the banks, i.e., banks would be the fund's majority shareholders. For this reason, the structure described above does not have any direct government capital contribution as this would send the wrong signals to the industry that the government is ready to bail out the sector as occurred in the past. With the fund being primarily owned and operated by the industry (under the oversight of the Superintendency and the Central Bank), this would provide incentives for the industry to self-regulate itself and to assist in bank restructurings so as to avoid excessive use of its own deposit insurance monies. The Board of Directors of the fund, however, would need to include the Superintendent of Banks and/or other key representatives/Board members of the Central Bank.

Risk Based Premiums

The above discussion referred to the need for the average premium level to be 0.8% of deposits in order for the fund to get capitalized within a reasonable amount of time. However, this 0.8% while necessary as the industry average may be higher or lower based on the risk rating of each bank. While risk based premiums are more complex to implement given that a reliable methodology for rating individual bank risk is needed (something which could be done on a confidential basis by the SB rather than using a public CADEF rating system which has its own distortions), they would provide more self regulatory incentives to the banking industry and send signals to weak and badly managed banks that their practices carry an additional cost. However, a flat premium could also be implemented during the first two years of the fund's operation while a reliable methodology was developed based on bank risk profiling. Even if the premium computation was preferred to be risk based from the outset, ***some modification to the current CADEF system would be required to incorporate a rating factor based on a qualitative assessment of bank management rather than the mechanical application of financial ratios as prime determinants. Once this is effected, the risk based premium could take the form of a flat premium charged at the start of the year followed by rebates to banks at the end of the period, based on ex-post maintenance of a low risk financial condition.***

Linkage of Fund with Bank Restructuring/Resolution Procedures

As discussed in the next section on bank resolution procedures, the eventual role of the deposit insurance fund would be for it to hold responsibility for the resolution of weak banks following the stage of intervention by the SB. Since the resources of the fund would be critical in establishing a viable restructuring/resolution/sale strategy for assets and liabilities of weak banks once intervened, it would be imperative for the fund to operate on the basis of least cost principles in terms of the usage of funds for deposit insurance as well as any fiscal resources used in conjunction with fund resources (e.g.: under excess of loss coverage or coinsurance).

The deposit insurance fund, once fully operational, would also develop contingency plans along with the SB to draw out strategies for potential restructuring/sale options before weak banks actually failed. Such strategies would similarly envision least cost options for deposit insurance and fiscal funds as well as increase its focus on market purchase options and intra industry consultation. However, once such options are agreed on for implementation, any sale of residual non performing asset portfolios of failed banks would need to be transferred or

subcontracted to professional liquidators. In other words, ***the restructuring responsibilities of the deposit insurance fund would be to take over the operations of banks following their intervention by the SB, resolve the banks through the sale of their acceptable assets and matching deposits and liablities, use the deposit insurance funds to pay residual insured deposits, and provide any other bridge financing borrowed from the Treasury as needed to maximize the matching of assets and liabilities for transfer to purchasing banks. Any residual non performing assets would be transferred for liquidation to specialized firms.***

VI. BANK RESOLUTION PROCEDURES

Paraguay's banking law is clear on the steps and triggers for intervention and monitoring of weak banks, and provides clear indications of shareholders'responsibilities in restoring capital. In terms of flexible options for the resolution and restructuring of bank balance sheets to avoid full liquidation, a Law (No. 1420) had been adopted in early 1999 with Bank assistance[20] in which the modalities of splitting weak banks into good and bad banks for the purpose of transferring viable assets and deposits to other purchasing institutions was included (Articles 22, 24, 25: "Depuración"). This law, however, only lasted one year since the government saw it as a crisis resolution measure which did not have political support for being extended indefinitely. That law while including the menu of modalities for resolving failed banks, had lacked some prioritization in the sequencing of steps to be followed as well as the clarification of least cost criteria in the use of deposit guarantee and/or fiscal funds to restructure and sell banks prior to considering the liquidation option. The law, however, was never applied.

Paraguay's current banking resolution procedures are governed by Title IX, Chapter II, and Title X of the Banking Law (No. 861) which had existed prior to Law 1420. While Articles 122-123 of Title X of Law 861 permit the sale of a bank by shareholders, once intervened, this is the only modality which alludes to market based mechanisms for "saving" bad banks. Once such mechanisms are exhausted, the remaining option is liquidation, either judicial or extra-judicial which normally entails a higher cost to the State in terms of immediate payments for all insured depositors. The extra-judicial route is normally preferred since it maintains the full control of the process in the SB, whereas, under judicial liquidation, the courts are involved and there are constraints in execution due to judicial system delays as well as problems inherent in the bankruptcy law (see "Ley de Quiebras" below).

However, before pinpointing the areas where reforms would facilitate the management of failed banks, it is useful to examine the sequence of procedures used by the SB, leading up to the intervention of a bank or licensed financial institution. One can classify the formal stages of supervision as:

a. Supervision (including on-site, off-site and intensive supervision)
b. Vigilance regime.
c. Intervention
d. Liquidation

The current Law No. 861 does not have a formal stage of "Resolution" which limits the authorities' flexibility. ***Conceptually therefore, and to institutionalize market friendly methods for resolving failed banks, a reform to Law 861 should include a formal stage of Resolution/Restructuring Regime following intervention and prior to Liquidation. This could be incorporated by expanding the scope of mechanisms addressed under Article 120 of the Law.***

[20] A Bank mission visited Paraguay in late 1998 for the purpose of identifying changes to the existing banking law as part of potential conditionality for a financial sector operation. Shortly after the mission, the Vice President of Paraguay was assassinated causing political upheavals and thus obviating the possibility of continuing with the financial sector program.

On-going Supervision – Corrective Action Regime

The SB's ability to identify serious banking solvency or liquidity problems appears adequate during its normal course of on-site inspections. However, and as discussed earlier under the regulatory/supervisory framework, the enforcement of sanctions applied for non compliance suffer from delays both within the central bank and due to lack of response from the supervised institutions. While "corrective action" is not a formally specified stage under the banking law, it is important to identify deficiencies in its application and how this may impact the overall bank resolution framework. Corrective action directives and sanctions are established by the issuance of regulations ("resoluciones") by the central bank, which follow from the provisions in the Law covering exceedance of specified limits, etc.

Constraints in the Application of Corrective Actions and Recommended Policies

Some of the constraints in effectively applying prompt corrective actions orders and enforcing them, involve the following:

a. Lack of timely response from banks to recommendations/orders communicated by the SB to improve their internal management processes;
b. Existent application of fines for exceeding regulated financial limits but not for judgments regarding faulty management;
c. The recently implemented formality of preparing legal documents prior to officially implementing sanctions; and
d. The lack of delegation by BCP's Board to the SB, to apply sanctions for ongoing non compliance issues.

In terms of enhancing the corrective actions regime, a number of reforms should be implemented. These include:

i. Development of a set of indicators of faulty bank management practices and associating each indicator with a set of sanctions and fines. Since weak, faulty or purposeful deficient management generally is an accurate early indicator of potential bank problems, the regulation and establishment of a schedule of corrective actions associated with specific fines in this area, would help to reverse negative trends at an early stage, while insuring compliance due to the associated monetary penalties.[21]

ii. The recent requirement of the BCP's legal department to prepare legal documents before invoking compliance from the industry, while intended to provide more 'force and legality' to the application of sanctions for inducing corrective action, has resulted in excessive and costly delays since the legal processes take time to be finalized and documented, and months can elapse before formal sanctions are communicated. Since the banking law itself does not require this step and allows the BCP to directly mandate action under threat of sanction, it is recommended that this paperwork stage be phased out to expedite the quick reversal of identified problems. The application of sanctions under most cases during the SB's ongoing supervision work as well as during its supervision under the Vigilance regime, should be delegated directly to the SB by the BCP's Board of Directors.

Within the broader framework, a key aspect of effective application of sanctions pertains to the overall independence of the BCP and the SB. In Paraguay, the current practice of politically motivated annulment of the statutory terms of appointment of the Superintendent, the BCP President and BCP Directors is highly disruptive.[22] For this reason as a starting point, it is recommended that terms limits for the Superintendent, the BCP President, and BCP Board

[21] It should be noted that fines already exist for exceedance of lending and other limits, but such fines are limited to quantifiable financial indicators but not to qualitative assessments of deficient management.
[22] In practice, the terms are not "broken", but BCP officials are 'requested' to submit their resignations therefore no law is technically broken. However, such 'requests' would be less prevalent with additional avenues for challenge.

members be extended beyond five years (i.e., greater than the electoral term) or that all appointments be made in the middle rather than at the start of the electoral cycle. This would provide more guarantees of independence for the BCP and the SB. In addition, any breaking of the terms of such officials even if conducted via the 'voluntary' resignation mechanism, should be subject to review and approval by the Supreme Court, with removal of officials only based on deficiencies in technical performance, as exists in other countries constituting best practice in this area.

As mentioned earlier, the technical immunity of BCP and SB officials is also an impediment towards the quick application of sanctions, given that lawsuits permit third parties to sue officials as natural persons. ***Such judicial actions should be limited to suits against the institution (e.g.: the BCP) but not be permitted against staff conducting their duties in an official capacity.***

One remaining distortion impeding the prompt application of corrective action sanctions, is the current practice as required in the banking law, for the SB to publish ratings of banks, currently done via the CADEF (modified CAMEL) system. As described in previous sections, this mechanism weights different financial ratios taken from information supplied by the subject institutions, resulting in a ranking of each bank and licensed financial institution. However, the quality of the rating is dependent on the information inputted into the formula, and since the methodology excludes a qualitative ratings based on management performance, the resulting ranks can both underestimate the solvency of good banks and overestimate it for weak banks. ***Thus, as discussed above, it would be more advantageous if the CADEF rating system was not published and that it incorporate ratings on management risks. Any public information should only include individual financial ratios which the market itself could interpret in terms of overall soundness of banks.***

Appendix 4 lists the indicators which would trigger the subsequent stages of Vigilance and Intervention. It is noted, however, that the stronger application of corrective actions including the application of sanctions for deficient management, would, if successful, avoid having lack of compliance with corrective actions becoming a source of triggering the vigilance and/or intervention regimes.

Establishment of a Formal and Structured Bank Resolution Mechanism

While the SB has the ability to identify potential solvency problems early on, the combination of lack of autonomy, delays in application of sanctions, mixed signals from the CADEF rating system, and liquidation as the common option to be used following intervention, results in a substantial loss of value of weak banks, which, if addressed earlier through modernized resolution measures, could greatly help to maintain some value and minimize losses. The delays in implementing early corrective actions results in the earlier triggering of intervention indicators once solvency and liquidity problems become critical. Therefore, the strategic planning and implementation of structured resolution measures including the carrying out of contingency plans to avoid systemic contagion should be prioritized.

It is recommended, therefore, along with the measures listed above to improve the regime for assuring prompt corrective action by banks, that Article 120 of the law, under the chapter on Intervention, be expanded to include the following modalities and criteria for resolution of weak intervened banks:

Recommended Additions to Article 120 of the Banking Law

a. Prioritization and specificity in the use of "good bank" asset carve-outs and restructurings to transfer viable loans and other assets with matching deposits and other liabilities to market buyers while maintaining intervened banks as going concerns.

b. Utilization of pre-specified bank restructuring contingency plans (see section further below) developed prior to official intervention, so as to minimize the time in which a bank remains closed prior to reopening under new ownership.

c. Following the preference in the use of the "good bank" modality and definition of qualifying assets, the subsequent structuring of the residual "bad bank" assets for transfer to collection/liquidation agents. Under the terms of recovery of such assets, these should include agreements for the sharing in losses and gains among assuming agents/banks and the government, when such losses/gains fall outside of projected ranges of recoveries contractually agreed.

d. Under the above modalities, the primary criteria in selecting from the available options (including the liquidation option) specified as the *minimization* in the use of deposit insurance and fiscal resources to accomplish the restructuring, sale, or liquidation, in line with the "least cost" principle.

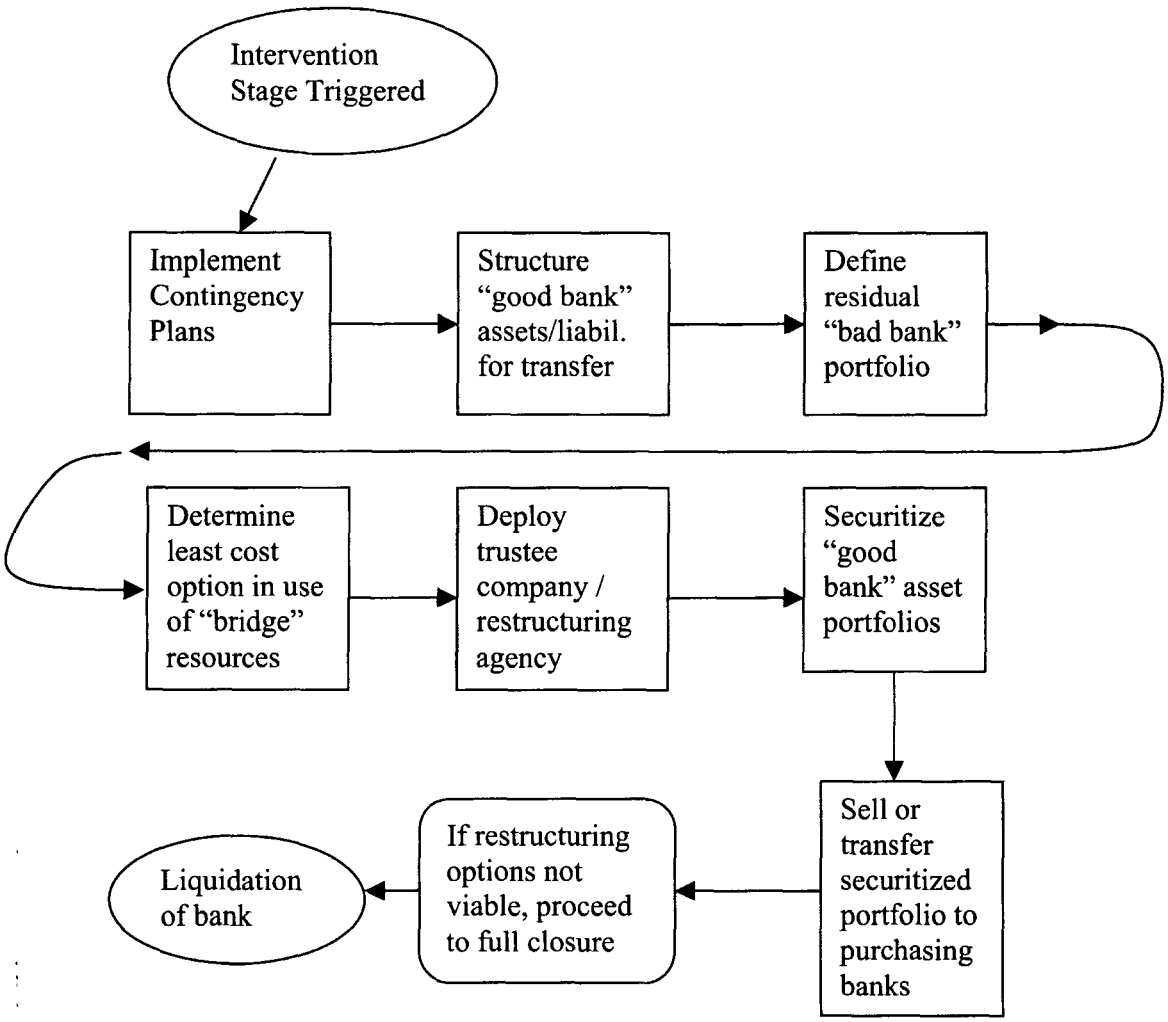
e. Provision of legal options for setting up trust accounts and trustees to administer "good bank" asset portfolios and securitize such portfolios through the collateralized issuance of special purpose bonds backed by such assets. The asset backing (collateralization) of such securitized bonds should be over-collateralized by a multiple of bond face value, according to the overall risk established for the subject portfolio(s), in order to assure that the bonds minimize their default probabilities and thus are marketable. Purchasing banks/institutions/investors of these bonds, while receiving their bond coupon payments from the trust, would simultaneously agree to take on the collection function for the underlying loan portfolios. Collection fees for such work would be pre-agreed, or alternatively, they would be included as part of the spread in the overall coupon rate for the bond representing a particular loan portfolio.

f. The trustee, who would act as the restructuring administrator and portfolio securitization agency, would be set up as a private legal entity[23] with operational working capital contributed by the banking industry and the government, in order to execute the above functions and pay all operational costs.

The resolution stage following bank intervention, is thus summarized graphically in the illustration below:

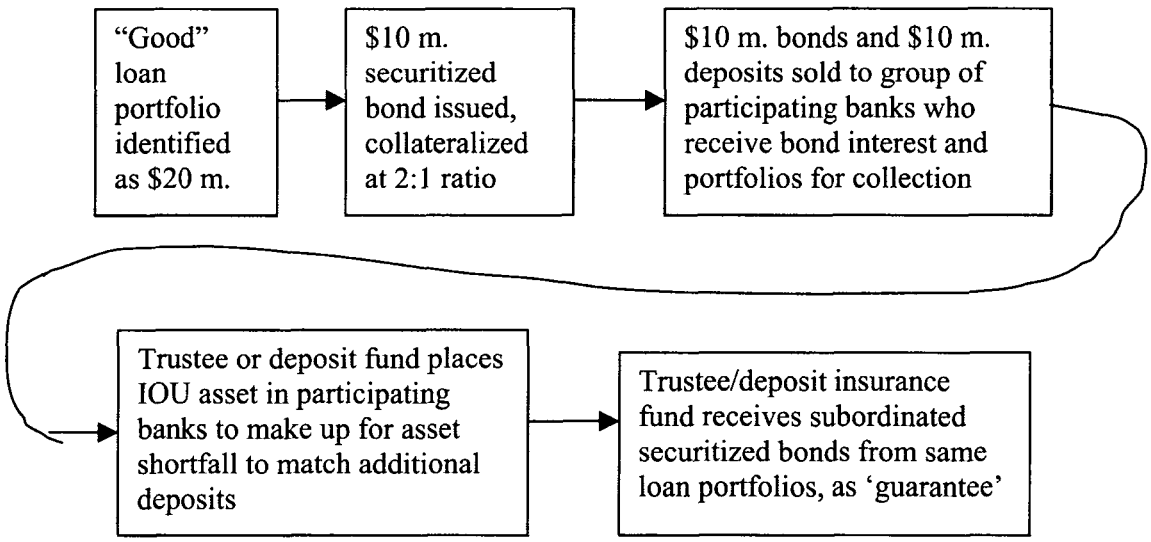
[23] The legal entity would represent an interim step to implement this in the short run. However, in the medium term, it would be the Deposit Insurance Fund which would take on these precise functions.

Summary of Bank Resolution Regime



As a transitional mechanism, and to remove these functions from the SB, which properly, should not be managing and restructuring banks, an industry managed/contracted restructuring agency overseen by the SB, should be set up to take on these functions once the SB has declared a bank intervention. The operating structure of such an agency would eventually be modified to include the function of custodian of deposit insurance premiums, and to modify its charter so that access to deposit insurance funds as part of the restructuring/resolution process would be added to its mandate. In the meantime, the agency would be empowered with trustee functions to allow it to securitize loan portfolios for quicker sale to market players. The overcollateralization of such securities would help sell the portfolios to the market and overcome some of the delays in auditing the underlying loans to determine their eventual repayment capacity. The scheme is illustrated below:

Structure of the Loan Portfolio Securitization Scheme and Participation of Restructuring Agency / Deposit Insurance Fund



Write-off and Sale of Non Performing Assets and Liquidation of Residual "Bad Bank"

A key differentiation must be made between the functions of the trustee/restructuring/deposit insurance agency and the collection of non performing loans and/or liquidation of underlying assets. The latter function, i.e, the management of the residual "bad bank" is *not* a function of the restructuring/resolution agency and should not be mixed with that function. This is because the resolution agency works on short term restructuring arrangements while the 'collection/liquidation' function is longer term and drawn out.

In Paraguay, the experience since the banking crises of 1994-97 has been to contract individual liquidation experts to collect and/or dispose of loan portfolios of closed banks. The strategy of the government initially was to hire individual liquidation experts and compensate them based on a percentage of proceeds collected. However, this practice did not work well for two reasons: (i) in some cases, the collection of bad loans and the disposal of assets was done using creative 'financial engineering' methods which technically liquidated assets with non cash instruments (e.g.: bonds to maturity) but did not actually recover the promised amounts in present value terms, and (ii) by assigning liquidators to individual banks some of which were in worse shape than others, the variable % commissions were not profitable in some cases and resulted in a non-viable recovery effort. Subsequently the SB modified the contractual terms of liquidators so that their compensation was based on fixed sums or fixed monthly payments. Unfortunately, this system, while attracting more professional liquidators, reduced their incentives to recover and collect funds quickly and thus liquidations became protracted, sometimes spanning over 3 years and in many cases continuing.

Currently banks which are continuing under extra judicial liquidation include Union, Bipsa, Itabank, Oriental, SSB, Finamerica and Desarrollo, while finance companies under liquidation are Alfa, Empresarial, Integral, Upafisa, Plata, Paraguaya, and Paratodo. Many of these banks were intervened during 1995-97. The following summarizes the situation of these entities as at mid-2001:

Financial Data of Banks under Liquidation
($ million)

	Assets	Liabilities	Equity
Banks	186	296	(110)
Finance Co's.	5	26	(21)

Recoveries from liquidation proceeds are estimated to be in the range of 10% - 25% of assets since these banks were intervened. Therefore, both the stock of assets yet to dispose of, remains substantial as well as the portion of unsecured liabilities (including non insured deposits) that will result once these institutions are finally wound up.

In order to reform the procedure and effectiveness of liquidations, a number of changes should be made to the institutional and contractual organization of this phase. Such modifications can be referenced to chapters III and IV under Title X of the Banking Law which address the mode and procedure for liquidation. Among the recommended changes, are the following:

Recommendations for the 'Bad Bank' Liquidation Process

a. ***Reinstituting compensation to liquidators based on a variable (percentage) commission on proceeds recovered at cash value.*** Such a modality provides the best incentives to assure performance in this task. In order for the SB to maintain increased control against creative financial engineering and accounting arrangements to demonstrate asset recovery, the SB by regulation should approve final transactions to liquidate collateral for example, when such transactions utilize securities with unclear market values. In this context, the "property assessment" service industry in Paraguay needs a significant upgrading of standards to ensure consistent and fair valuation of underlying collateral assets used to price non cash recoveries.

b. ***The bidding system to obtain offers from liquidators should be limited to bids from private firms for overseeing an entire portfolio of assets from many banks under liquidation, rather than the current system of utilizing individual liquidators for individual banks.*** This would , besides generating business efficiencies and better diversification of portfolio risks for non performing assets, would permit a more viable implementation of the variable (percent-based) commission as the primary compensation mechanism linked to recoveries.

c. The asset recovery process should provide flexibility to the liquidating firm to sell portions of the loan asset portfolio for a fee, to interested banks, when such assets are considered to be viable in terms of producing some minimum earnings returns. Such a modality of 'recovery' should supplement the traditional collection mechanism based on the liquidation of the underlying loan collateral (e.g.: real estate, other).

d. The liquidation contract should include basic performance indicators such as recovery ratios measured against the asset stock, as well as contractual time limits and expiration dates which would allow the BCP and the SB to replace firms which do not perform or have not met minimum targets within a specified period (e.g.: one year).

e. In order to ensure a fair and transparent process, as well as to protect the BCP against lawsuits by creditors of the failed banks (who would wish to maximize the value of recoveries and wait until a buyer 'shows up'), a triple consecutive auction system should be implemented under liquidator contracts. This would help so that the value of collateral goods/assets which are difficult to sell on the market, are offered/auctioned in three consecutive stages (each time lowering the auction 'reserve' price) to ensure that the final purchase offer received fully reflects existing market demand.

Judicial Process, Bankruptcy Law and Collateral Registry

Even under extra judicial (non-bankruptcy) proceedings or normal foreclosure transactions, the legal process for collecting loan collateral or for liquidating remaining non-financial assets, is lengthy and time consuming, sometimes taking years, particularly given the suits and counter lawsuits raised by creditors who have an interest in assets being liquidated at above 'fire sale'

prices. Since such expectations generate delays which produce further loss of values of such assets, the judicial process in effect subverts the ability of liquidators to recover values and act efficiently. In terms of medium term reforms in this area, and to assure that the requisite judicial expertise is coupled with the technical market expertise needed to rule on such ambiguous matters, ***it is recommended that a Debt Court be established in Paraguay to solely handle issues relating to the fair disposition of assets under liquidation proceedings.*** The quickening of judicial rulings in this area is an essential ingredient in the effectiveness of the banking safety net and resolution procedures since it not only allows for the efficient winding up of failed entities, but also permits new entrepreneurs to take on assets for productive usage and potential economic reactivation.

Collateral Registry and Property Titling: A key ingredient for an effective debt court is the establishment of a centralized registry of collateral assets. An effective registry should be supported by a comprehensive property titling effort to ensure that all available usable collateral is documented as a mechanism to help promote credit access. A central collateral/guarantee registry for the financial sector, along with the upgrading of property assessment/valuation standards would constitute a primary institutional tool to improve the efficiency and criteria for settling debt, bankruptcy and liquidation issues. As a medium term issue related to the use of real collateral, the government should engage in a program to register and provide formal title to property owners in Paraguay so as to increase access to credit via the provision of guarantees such as collateral backing. In the short term, just as a credit risk central bureau was established, ***a centralized registry to record the valuation of collateral underlying banking assets, should be developed so as to set standards for collateral quality and valuation, and to assist in streamlining processes of bank resolution or liquidation.***

In terms of formal bankruptcy which is a modality less used by the SB in Paraguay since judicial delays become compounded, this report will limit itself to commenting on some aspects of the Paraguayan bankruptcy law which are inconsistent with the objectives sought. In particular, this refers to the clause under the bankruptcy law which permits debt forgiveness of up to 70% of face value, for businesses which have been in existence for over 25 years. In addition, the bankruptcy law is not clear, and has been used to the disadvantage of the taxpayer, on the matter of ownership and equity definition. This has been manifested in cases where judges have ruled in favor of bank owners/shareholders who resisted the liquidation of their banks, even though from a financial/economic point of view it was clear that no positive equity existed in such banks. Nevertheless, the laws of Paraguay including the bankruptcy law define ownership as somewhat of an abstract right which is independent of the economic criteria (e.g.: capital or solvency) defining ownership value.

It is therefore, recommended, also as a medium term but very necessary reform, that the bankruptcy law remove the debt forgiveness clause for enterprises with 25+ years of existence since such a clause is not legally consistent in a level economic playing field, and simply perpetuates the continuing operation of inefficient entrepreneurs. The law should also incorporate a clear definition of property ownership rights as linked to the balance sheet value of equity rather than as a right which permits holding on to any assets even if the firm itself has liabilities surpassing the value of such assets.

Structure of a Contingency Plan for Bank Resolution

Given the previous analysis in section II of this report and the vulnerability of a small group of banks in the Paraguayan system (including the BNF), particularly in light of the recent exchange rate changes which will further impact credit risks in the banking system, it would be

imperative to develop a well structured contingency plan to expeditiously address potential bank failures and to avoid a contagion effect which could reach systemic proportions if depositors decided on mass withdrawal. While a full blown systemic crisis in Paraguay is less likely due to the prevalence of banks with foreign capital, a contagion effect on a few weak banks could nevertheless precipitate bank failures in a number of other healthy yet small foreign owned banks in Paraguay, particular those which are regionally owned versus full international banks.

This section, therefore provides recommendations for the design and execution of a contingency plan which depends highly on the implementation of the new bank resolution legal mechanisms discussed above. A viable contingency plan would necessitate such mechanisms both to conduct ex-ante actions under such a plan (e.g.: consideration of merger, purchase & acquisition outcomes) as well as ex-post measures meaning the implementation of a well thought out strategy once individual bank insolvency indicators are triggered. The operational elements of the contingency plan in the Paraguayan context, would thus need to include the following measures:

Elements of a Pre-Crisis Contingency Plan

A. ***Identification of Target Banks:*** Banking entities subject to Vigilance or Intervention regimes due to triggering of legally prescribed indicators, need to be identified a priori. The triggering of such phases can be based on the stricter application of accounting norms for valuing capital and asset risks as discussed in section III of this report. The amount of the insured as well as the non-insured stock of deposits in these institutions should be quantified a priori in order to visualize restructuring plans which consider the funding of insured deposits.

B. ***Solvency vs. Liquidity Issues:*** Once the weak banks are identified, an immediate diagnosis should be made as to whether the bank problems constitute liquidity or solvency constraints. For those banks that appear solvent but have liquidity problems, a liquidity plan including the conversion of illiquid to liquid assets as well as a business plan generating sufficient cash flow should be put in place. Liquidity assistance can be considered by the BCP for the maximum time limits allowed and at a higher than market interest rate, but no other longer term restructuring loans should be provided once the liquidity assistance expires. Any additional liquidity beyond that stage should trigger potential insolvency alarms. For those banks diagnosed as insolvent, a bank resolution strategy would be mapped out.

C. ***Consolidation Strategy:*** The BCP and SB should a priori approve a banking consolidation strategy and develop 2-3 alternatives for promoting the merger of weak banks (or selected assets therefrom) with other banks in the market.

D. ***Asset/Liability Matching:*** Based on the existing financial information provided to the SB, a set of simulated models estimating the good bank portions of the insolvent banks, should be drawn up, in order to determine the level of deposits that can be matched against these before invoking any deposit guarantee funds. The residual portion of the bad bank should similarly be identified to quantify the portfolio earmarked for liquidation.

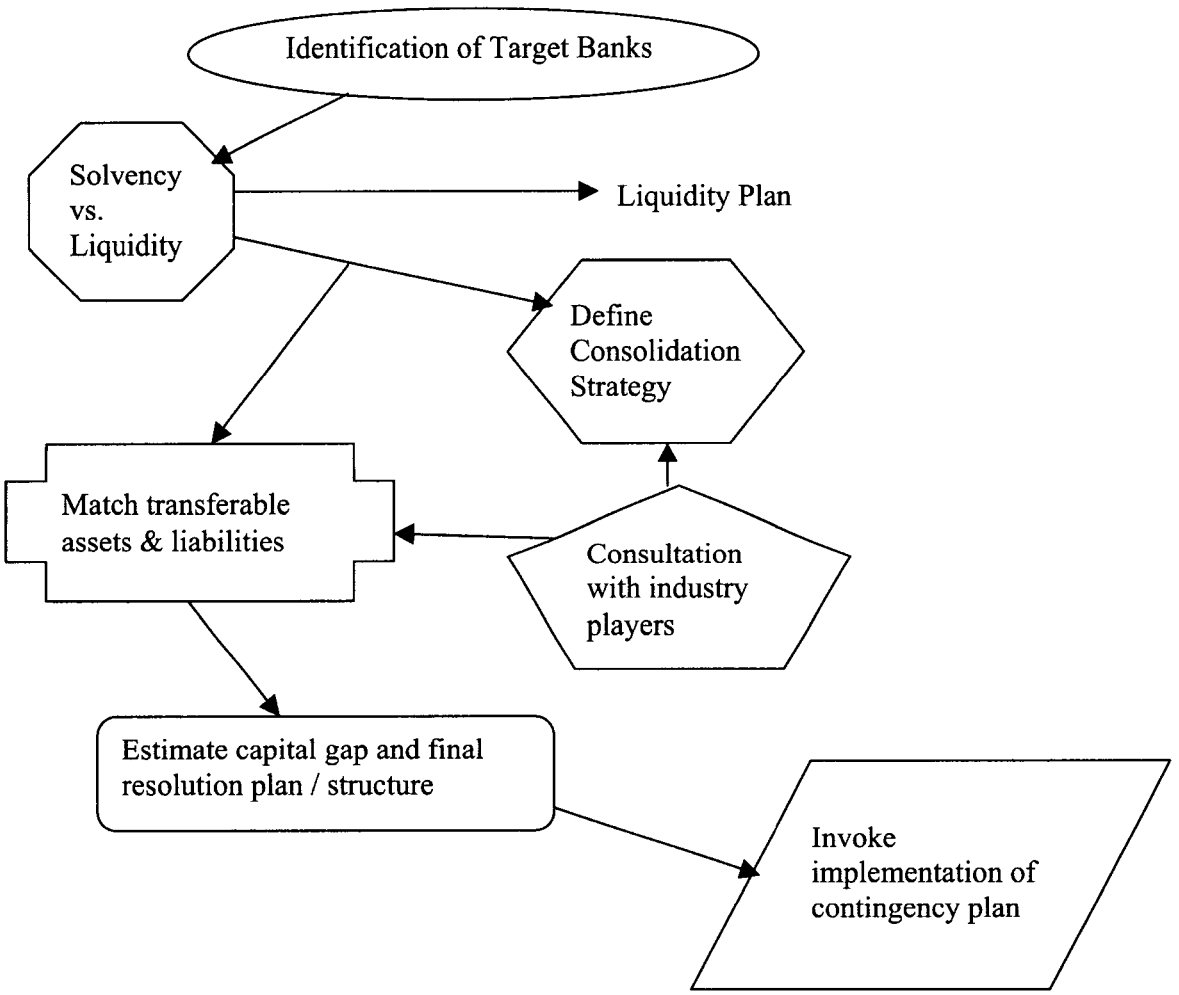
E. ***Capital Gap Estimation & Resolution Plan:*** Based on the above analysis, the solvency/capital gap will be estimated along with the disposition of insured deposits. The "gap" portion pertaining to the need for additional assets to make 'good banks' viable for transfer to other banks, should define sources from which it will be funded. This will include putting in place, a priori, a line of credit from the Treasury or contracting an external contingent loan (e.g.: with an international commercial bank) to assure bridge financing for restructuring operations, placement of temporary bond assets, and payment of restructuring fees to private agents in charge of carrying out the resolution processes.

F. ***Industry Consultation Process:*** The above exercises will require ongoing consultation with the banking industry to (i) determine potential buyers of the remaining viable portfolio assets from the weak banks, (ii) consider alternative market based arrangements for handling the weak banks, and (iii) design mechanisms to minimize the risk of purchasing loan portfolios via trust mechanisms which can offer securitized bonds which are over-collateralized with underlying category 1-3 loans so as to increase market receptivity to restructuring transactions.

G. ***Authorities, not Events to Trigger the Contingency Plan:*** The process of banking consolidation should be ready to go, once potential buyers have been established and SB bank examiners have reconfirmed insolvency status following prudent adjustments to reported accounts of the target banks. The consolidation process should preferably be triggered by the authorities once these factors are lined up, rather than awaiting an insolvency or liquidity shock from the market to trigger an unexpected move toward intervention with the ensuing risks of depositor runs and additional contagion.

The contingency plan steps and their interrelationships and sequencing are illustrated below:

Contingency Plan for Resolution of Weak Banks



VII. PENSION SYSTEM REFORM

Reform of the pension system in Paraguay is crucial at this juncture for three primary reasons:

i. The current pay-as-you-go social security public pension system is not fiscally sustainable from an actuarial and benefits payment perspective;

ii. The investments of the current system are at risk due to their being deposited in the BNF – this fact can also have an effect on the stability of the banking system if expectations exist that the social security funds will eventually will be transferred since such a withdrawal may have a contagion effect and a tightening of liquidity in the rest of the system.

iii. The current system, even at its best delivers very low returns on pension investment funds, thus compromising the potential benefits which workers could receive. A more effectively structured private system would generate higher returns and thus provide incentives for affiliates to migrate away from the public system, something the government would encourage to reduce its contingent fiscal liabilities.

With the expected unwinding or downsizing of the BNF, the treatment of social security deposit funds becomes more urgent, particularly as they are required not only to fund future benefits in a reformed system, but also for potential transfer to a privately funded pension system.

The Proposed Pension Reform Law

The proposed new law is progressive and takes account of many factors and experiences of other Latin American countries to ensure that major reform errors are avoided and to adapt the best practices to the Paraguayan conditions. The new law essentially undertakes a substantial reform in the existing public pension system as well as establishing a new private sector pension pillar. One key observation regarding these two pillars, however, is that the current law as is stands may still not provide sufficient incentives for affiliates to transfer out of the public system into the private one. A description of the key features of the law is listed, followed by proposed recommendations to ensure its effectiveness upon implementation. Details of the proposed law are described in Appendix 5.

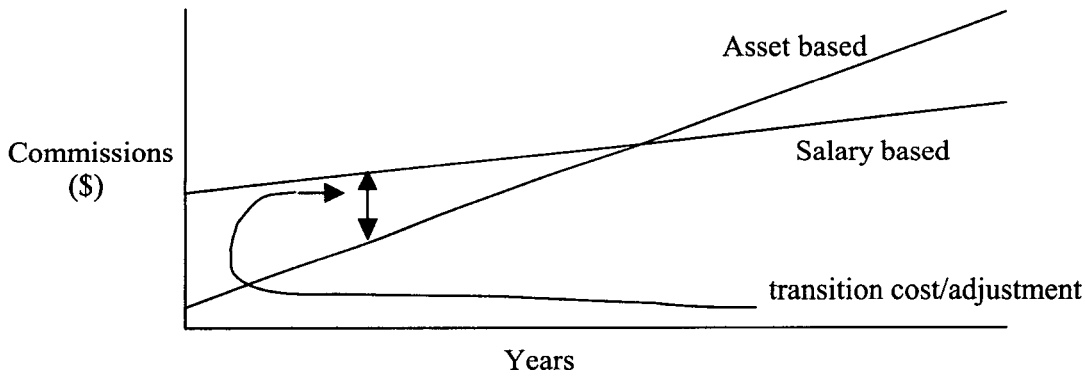
Recommendations

The new law improves substantially on previous Regional pension reform schemes, and avoids some of the pitfalls such as the moral hazard of maintaining the public system open indefinitely for affiliates to come back to. Nevertheless, there are still some implementation details which could backfire on some of the suggested reforms if these are not charted out precisely. Recommendations for additional fine tuning are therefore elaborated below:

(i) *Commission Structure:* While the law permits the new private pension funds to charge commissions based on either a percentage of salary or a percentage of assets managed, the set up would bias the use of % of salary commission give that all other charges are based on monthly salary. In previous pension reforms in Latin America, this resulted in pension fund returns to affiliates being negative during the first 6-10 years since the commissions as a proportion of

funds managed started very high and then declined. In addition, the commissions based on salary provide no incentives for performance of fund managers since such commissions are not linked to investment performance. The benefit to fund managers is that it provides them with proportionately more initial working capital in the early years which means they need to contribute less of their own capital up front. However, in order to avoid the negative perception of the new system if initial asset returns are low for this reason, it is recommended that the commission structure from the start, be based on a percentage of assets managed including a portion linked directly to fund performance in terms of positive returns, versus leaving open the possibility of commissions as a percentage of salaries which penalize the investment accruals of affiliates in the early years. Once a salary based commission system is adopted, it becomes very difficult also, to switch back to an asset/performance based structure since it requires a major adjustment and reduction in the capital and cost structure of the pension fund managers.

Illustration of Effect of Transitioning from Salary to Asset based Commissions



The above demonstrates that in currency terms, while salary based commissions are flatter than asset based commissions which increase as the investment assets rise, it becomes practically impossible for a fund manager to switch to an asset based structure once the salary based one has begun. This is because, at least during the a number of years at the outset, the salary based income to the fund manager would be much greater than the asset based income and therefore any switch to an asset based commission would imply a significant reduction in annual cash flow. If an asset based structure is selected from the outset this means that the fund manager has to contribute more of its own capital for working cash flow, which also ensures that operations are conducted on a more cost efficient basis.

(ii) *Investments in Foreign Securities*: This issue always arises in pension reform proposals and normally the foreign investment limit is kept low to maintain the pension saving funds in the country. However, in order to protect against the misuse or abuse of pension funds and along with the Paraguayan floating currency factor, the loss of pension value to affiliates could be substantial, and therefore, it is recommended that the foreign investment limit be allowed to start near the upper range proposed at 30%. It is noted that in the public system, no foreign securities are permitted, something which should also be modified to hedge against devaluation effects and to help maintain fiscal solvency for that system.

(iii) *Recognition Bonds:* Recognition bonds are essential instruments for permitting convertibility of accrued benefits for transfer into a private pension system. However, all too often under past pension reform schemes, the quantification of accrued benefits and the

documentation of years of accrual becomes a lengthy process which prevents the fungibility of funds between both systems. It is therefore recommended, that as precursor work for the implementation of the new reformed system, that the government together with employers that have affiliates in the public system, quantify the accrued benefits they have accumulated to date in order to start the new system with fungible and convertible recognition bonds which can become transferable from the start. This would also generate much higher incentives for affiliates to transfer to the private system without bureaucratic and legal delays.

(iv) *Number of Investment Funds:* The proposed law permits the new fund managers only one type of fund per pension manager, presumably to reduce the complexity and costs of the system. However, the existence of only one fund would bias the transfer of affiliates near retirement into the private system, since their income stream under the public system would be more stable. In order to resolve this, private fund managers should be permitted at least two options for funds, one of which would be weighted more towards a fixed income fund to provide steady returns for near-retirees. This would encourage more transfers to the privately funded system.

(v) *Minimum Required Return:* The methodology for determining the minimum required real return as described above, based on an industry average and use in many countries in the region, would not make much sense given the existence of only two fund managers initially. This could also lead to collusion between the funds and excessive "herd" behavior. Due to this, it is recommended that a minimum return requirement, if considered at all necessary, be based on a market portfolio benchmark of low risk securities, so as to measure the new industry's performance more objectively.

(vi) *Reserve Fund for Minimum Pension:* The new law requires a 0.5% contribution of all salaries to fund a minimum pension presumably for lower income affiliates. However, the modalities of investment of these resources and the potential additional government contribution needed, should these funds be insufficient, is not clear. Therefore, for fiscal stabilization purposes, the government should establish a modest stabilization fund in which reserves can be deposited and invested to assure that any fiscal requirements to meet minimum pension guarantees can be prefunded in order to avoid any fiscal disruptions due to these obligations.

(vii) *Intra-Private Transfers:* The restriction of once a year for transferring from one fund manager to another is positive and will avoid the large build up of marketing costs and associated commissions. However, the 1% charge to affiliates for transferring seems excessive and generates distortions in the system. In addition, the new Superintendency should be aware that even with transfers limited to once a year, the fund managers can engage in substantial marketing to pull affiliates their way. While affiliates should be allowed to choose freely, and while commissions should not be regulated, the Superintendency should establish operating norms to ensure that the annual expenditures of fund managers are not dominated by marketing expenses which would increase the system's costs in a zero sum game manner, given the limited market of affiliates in Paraguay.

(viii) *Inflation Indexing:* The retroactive inflation indexing for benefits being paid under the public system appears politically motivated and would increase the fiscal costs of the reform. This should not be included and only applied on a future basis.

(ix) *Inter-System Transfers:* For new work entrants, the law permits within the first 3 years of the reform, for them to choose between the public and the private system, allowing them to move within 3 years to the private system with no reversal possible. While this clause seems to be

included to ensure political support, it may actually backfire on the purpose of the reform to encourage most workers to join the new private system. As mentioned earlier, in the initial years, the private system may generate lower than expected returns, therefore the 3 year clause will leave more workers in the public system. However, if the 3 year window is kept as a fixed absolute limit, the effect may be small and only apply to new entrants within that window period.

(x) *Government New Fund:* The allowance after three years for a government fund to enter the private pension fund market seems undesirable. Whatever the rationale, any government fund will unlikely compete on the same terms as privately owned funds and thus will generate distortions in the system. If the government is confident that the new system can be made to work with appropriate regulatory and supervisory safeguards, there is no reason to permit a government owned fund to participate in such a market.

(xi) *Annuity Fund Competition:* The law provides for pension fund managers to maintain separate funds for annuitizing pension benefits. While this is a good initiative and will stabilize cash flows for the industry, the annuities industry should be competitive and not captive as a subsidiary/related company of a fund manager. In other words, during the start of retirement, affiliates should be allowed to choose competitively, which insurance or other financial intermediary can provide the best annuity instrument, rather than have this limited to the company used by the pension fund manager.

(xii) *Law and Regulations:* As a general comment, many of the detailed quantitative limits are specified in the law itself. Given that these are frequently subject to changes over time, it is advisable that all such limits and numerical parameters be delegated to regulations to be issued under the law (e.g.: investment limits, contributions, commissions, accrued benefits, retirement age, etc.).

APPENDIX 1

Quantitative Analysis of Banking System Financial Condition

The quantitative analysis is based on quarterly data from end-1996 to mid-2001, for 21 banks classified into five different groups (8 *branches* of foreign banks; 8 direct foreign banks; 3 domestic banks; 1 public sector bank; and 1 intervened bank) as well as the aggregates for all the finance companies. The adjustments includes two basic components. First there are *adjustments to the financial statements* presented to the Superintendency of Banks by the institutions in an attempt to reflect more accurately the real financial situation of the system (i.e.: 1. and 2. above). This component includes an adjustment to the calculation of basic capital, and four adjustments (adjustments 1 to 4); the sum of them labeled the "global adjustment". Second, a *stress test* of portfolio impact over selected macroeconomic variables is conducted (stress test 1 for exchange rate devaluation, and stress test 2 for real economic growth). The impact of the macroeconomic variables on non performing loans is calculated by means of multiple regressions in two scenarios (elasticities calculated for the entire banking system and by bank categories). Regarding the adjustment to financial statements a fully accurate analysis would still require a review on an institution by institution basis, which should be conducted by the Superintendency of Banks utilizing these results to prioritize its supervisory activity.

Adjustment to Risk Weighted Capital

The initial financial statement adjustment corresponds to the calculation of risk weighted capital, i.e. the capital adequacy ratio (CAR). The levels of reported CAR for Paraguayan entities are among the highest in the Region but this is caused in part caused by a less strict and in some cases, incomplete regulation of particular accounting norms. For example, some risks are not considered, such as market risks, exchange rate risk, etc., and the regulation is based mainly on credit risk parameters. The CAR adjustment, therefore, is the starting point to make comparisons for the latter adjustments 1 to 4, and for the exogenous factors (stress tests 1 and 2). The CAR adjustment to reported equity (the numerator in the risk weighted capital calculation) consists of including revaluation reserves at only 50% of reported value, particularly given the economic situation in Paraguay where any past revaluations of fixed assets such as real estate may not be adjusted to current market conditions of low demand for such assets. Another adjustment within the CAR ratio numerator is for earnings before distributions. In Paraguay, earnings are reported at 100% for the purposes of calculation of capital but this adjustment places them at only 50% since typically a large share of earnings are distributed to stockholders rather than allocated to capital reserves.

On the denominator side of the CAR ratio, the adjustment to Risk Weighted Assets (RWA the denominator) entails valuing loan assets collateralized by real estate/mortgage properties at 100% risk versus 50%, thus increasing the riskiness of the asset and reducing the CAR. This adjustment is based on international standards which dictate that only residential mortgage assets have a lower risk of 50% but all other mortgages have full 100% risk for weighting purposes. The adjustment is also based on the reality of the difficulty of collecting and liquidating collateral in Paraguay. The adjustment could be considered strict, and perhaps could understate capital, however, it is balanced by the fact that no calculation was carried out to estimate capital requirements for risks other than credit risks. The result is that there is an important decrease from the reported CAR ratio. ***For banks in aggregate, this changes the reported risk weighted***

CAR from 17.2 to 12.6[24]. This effect is different across different groups of banks with the most significant decrease affecting the public bank, BNF, whose ratio changes from 23.8 to 13.2 with this adjustment alone. For the domestic banks the CAR changes from 14.6 to 8.9 and the intervened from 12.9 to 8.5. In terms of individual banks, five of them fall below the required CAR of 10%.

Loan Portfolio Adjustments

The following analysis compares *additional* adjustments using the CAR reflected above which declined for the banking system as a whole, from 17.2 to 12.6. The next adjustments compare the additional capital reduction from the 12.6 figure, i.e., the incremental reduction above and beyond this initial adjusted CAR/RWA factor.

Adjustment 1: Value of Collateral in Lieu of Provisions: This adjustment relates to the common practice of using collateral as a substitute for loan provisions. The assumption is that the collateral is liquid and can be executed promptly. However, since collateral (usually real estate) particularly in Paraguay due to both economic and judicial factors, is effectively not liquid, this adjustment increases loan loss provision requirements based on appropriate downward adjustments to collateral reported. Financial statement data is used to obtain the shares of collateral types such as mortgages, monetary collateral and other types. These shares are applied to each portfolio risk category (1 to 5) as reported by the entities. The use of collateral instead of provisions is considered based on the following criteria: 100% allowed for monetary collateral; 50% for mortgage collateral; and 0% for others (e.g.: automobiles, equipment, etc.). The rationale for considering 50% for mortgage collateral is based on estimates of 3 years (based on Paraguayan experience) for executing and collecting the value of mortgage collateral. By utilizing as a discount rate the nominal interest rate in domestic currency of 25% (which approximates the weighted domestic interest rate for credits over one year in maturity and adds administrative costs) the present value of the collateral declines to under 50%. This adjustment thus modifies the capital asset ratio (CAR) from 12.6 to 10.0 for the banking system, and significantly affects BNF, with a CAR declining from 13.2 to 6.1.

Adjustment 2: Provisioning for Refinanced Loans: This adjustment addresses provisioning increases for renewed, refinanced and restructured loans. As most of these loans are classified in category 1 ('Pass') but are likely refinanced and restructured from previous non performing loans or loans having paid the minimum to avoid 'non performance', the adjustment conservatively places them into category 3 (substandard) which would require 20% in provisions. The same collateral adjustments as above are made. In addition, since prior interest accrual reversals and provisioning for principal may have not been effected after the loans were refinanced, it is estimated that there exists a 30% level of underprovisioning underlying these loans based on those which they refinanced. These two adjustments add a requirement of 50% in provisions for the refinanced portfolio . The result is very significant for all groups of banks. The adjusted CAR declines from 12.6 to 8.8 for the entire banking system, and from 13.2 to 3.6 for BNF, the public bank.

Adjustment 3: Inclusion of Generic Provisions: This adjustment adds a generic provision of 1.5% to category 1 loans, and increases provisions for loans in category 2 from 1% to 10%. This adjustment is based on international practices. The result is not very significant and from this effect alone, the banking system aggregate CAR would decline from 12.6 to 11.6. The effect

[24] In Paraguay the current minimum legal CAR requirement is 10, although the law permits setting it in a range between 8 and 12.

might be slightly less since Basle standards allow up to 1.25% of generic provisions (category 1) to be counted as second tier capital, therefore, such an amount would not reduce the banks' available capital.

Adjustment 4: Repossessed properties and Deferred charges. Repossessed properties are included at a 50% value following a similar rationale used for mortgage collateral. Some deferred charges are reversed at 100% given that they reflect incurred losses which are being amortized. Except for the intervened bank, however, the adjustments are not very significant and the adjusted CAR for the banking system changes from 12.6 to 11.9 only.

Aggregate effect – Sum of initial Risk Weighted Capital Adjustments plus effects of Adjustments 1 through 4: This takes into account all the reported provisions and the deficit over the estimated minimum requirements based on the above methodology. In sum, the effect of all the adjustments is very significant for all groups. For adjustmens 1-4 together, the capital asset ratio for the banking system is reduced from 12.5 to 4.7. The decline is actually greater since the initial CAR/RWA adjustment had already brought down the ratio to 12.5 from the original 17.2 reported by the banking system as a whole. The most significant effects of the sum of these adjustment are for BNF and the intervened bank where capital becomes negative, as well as for the domestic banks where the CAR declines to 2.9 from an originally reported level of 14.6 (the latter which would have significantly exceeded the legal requirement of a CAR of 10.0).

Exogenous Factor Stress Test Adjustment

A multiple regression was run in order to identify the main economic factors influencing the soundness of the banking system. Quarterly data since December 1996 until July 2001 was used. The equation for the regressions[25], which alternately used one-quarter and three-quarter lags, predicted the growth of non performing loans as the dependent variable, as explained by nominal exchange rate changes, the domestic and foreign currency interest rates, and real economic growth.

In order to decide which equation fits more adequately, the two sets of regressions (1 lag versus 3 lags) were compared, and the one with the better fit was selected, taking into account three statistics: the regression coefficient (R^2), the Durbin-Watson, (D-W), and the F-statistic. In addition, two scenarios were considered. The first one calculated the elasticities for the entire system. The second calculated statistics for each group of banks, that is, branches of foreign banks, foreign banks, domestic banks, the public bank and finance companies.

The result of the regression shows significant influence on the share of the non performing loan portfolio from variations in the nominal exchange rate and the real economic activity index, but not from interest rates. The rationale for this could be that the interest rate effect might already be included in the other components as well as the fact that exchange devaluations in Paraguay have in the last four years not resulted in higher levels of domestic interest rates. Capital flight has not been a major problem due to the prevalence of foreign banks in the financial system.

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[25] 1 Lag: Ln DI = K + A*RIRDC + B*RIRFC + C*Ln NER + D*Ln REAI + E*Ln DI (-1)
3 Lags: Ln DI = K + A*RIRDC + B*RIRFC + C*Ln NER + D*Ln REAI + E*Ln DI(-1) + F*Ln DI(-2)+G*Ln DI(-3)

DI= Default index
K= independent constant
A= elasticity of DI to RIRDC
B= elasticity of DI to RIRFC
C= elasticity of DI to NER
DI(-1), DI(-2), DI(-3)= dep. variable lags
D= elasticity of DI to REAI
RIRDC= real interest rate on domestic currency
RIRFC= real interest rate on foreign currency
NER= nominal exchange rate
REAI= real economic activity index
E, F, G= coefficients for the dependent variable lags

APPENDIX 2

Analysis and Financial Condition of the Public Banks

BNF - BUSINESS ORGANIZATION & QUALITY OF LOAN PORTFOLIO

As prescribed by law, BNF is organized in three business lines: the commercial department, the development finance department and the agricultural department. The commercial department is the largest business area within BNF. It is responsible for overdrafts and short-term advances to the clientele, savings products, import/export finance services, as well as general banking services such as money transfer, payments to government retirees and public servants, ATM's and credit and debit cards. In terms of earnings, however, these non-lending services contribute on average to only 15% of the total income in this department. The development finance department is BNF's second largest. Its services are dedicated to the mid- to long-term funding of local manufacturing companies, in particular those involved in agro-industrial and export-related activities, and small and medium enterprises. The agricultural department focuses on providing short to medium-term finance to small farmers. Although, this area was conceived to be BNF's core business, it is currently the smallest business line. Moreover, the volume of lending in the department has been falling by almost 20% in recent years. Certainly, activities have declined in BNF's other two departments, but that decline was much less pronounced. The structure and evolution of BNF's loan portfolio by departments is shown below.

Evolution of BNF's Loan Portfolio(in Millions of Guaranies)

	Total Portfolio					
	Dec-99		*Dec-00*		*Jun-01*	
Commercial Department	252,721	*33.9%*	245,257	*33%*	239,152	35.7%
Development Department	179,387	*24.1%*	164,874	*22%*	164,992	24.6%
Agricultural Department	312,868	*42.0%*	331,416	*45%*	265,701	39.7%
TOTAL	**744,976**	-	**741,547**	-	**669,845**	-
	Current Loans					
	Dec-99		*Dec-00*		*Jun-01*	
Commercial Department	87,417	*22.6%*	84,326	*20%*	87,418	25.2%
Development Department	65,084	*16.8%*	63,102	*15%*	51,951	15.0%
Agricultural Department	233,898	*60.5%*	264,120	*64%*	207,672	59.8%
TOTAL	**386,398**	-	**411,548**	-	**347,041**	-
	Loans in Arrears					
	Dec-99		*Dec-00*		*Jun-01*	
Commercial Department	165,304	*46.1%*	160,932	*49%*	151,734	47.0%
Development Department	114,303	*31.9%*	101,772	*31%*	113,041	35.0%
Agricultural Department	78,971	*22.0%*	67,296	*20%*	58,029	18.0%
TOTAL	**358,578**	-	**329,999**	-	**322,804**	-

Source: Banco Nacional de Fomento

BNF: Adjustments for provisions on bad debt.

G/ '000	30-Jun-01						
Type of Debtor	Total	1	2	3	4	5	3-5
COMMERCIAL	654,511,773	288,294,386	15,109,410	16,261,916	29,875,384	304,970,677	351,107,977
Larger Risks	*355,110,198*	*98,800,888*	*10,070,819*	*7,306,309*	*20,952,199*	*217,979,983*	*246,238,491*
Connected	40,623,688	1,912,862	-	-	857,769	37,853,057	38,710,826
Not Connected	314,486,510	96,888,026	10,070,819	7,306,309	20,094,430	180,126,926	207,527,665
Smaller Risks	*300,606,576*	*190,696,499*	*5,038,591*	*8,956,607*	*8,923,185*	*86,991,694*	*104,871,486*
PERSONAL LINES	92,873,180	82,185,508	458,068	519,692	858,936	8,850,976	10,229,604
Adjustment for Refinanced	***109,141,864***	-	***7,282,527***	-	-	***101,859,337***	***101,859,337***
TOTAL	**856,526,817**	**370,479,894**	**22,850,005**	**16,781,608**	**30,734,320**	**415,680,990**	**463,196,918**
In US$ '000	203,934,956	88,209,499	5,440,477	3,995,621	7,317,695	98,971,664	110,284,980
%	**100.0%**	**43.3%**	2.7%	2.0%	3.6%	48.5%	54.1%
Collateral guarantees	580,942,819	333,421,905	14,346,801	15,692,049	28,109,712	189,372,352	233,174,113
Adjustment for Collateral	***290,471,410***	***166,710,953***	***7,173,401***	***7,846,025***	***14,054,856***	***94,686,176***	***116,587,057***
% Guarantee / Total Exposure	**33.9%**	**45.0%**	**31.4%**	**46.8%**	**45.7%**	**22.8%**	**25.2%**
Uncovered Risk	566,055,408	203,768,942	15,676,605	8,935,584	16,679,464	320,994,814	346,609,861
% Uncovered Risk in Total	**100.0%**	36.0%	2.8%	1.6%	2.9%	**56.7%**	61.2%
Required Provision	331,278,428	-	156,766	1,787,117	8,339,732	320,994,814	331,121,662
Existing Provision	125,991,724						-
Req. Prov./ Uncovered Risk	58.5%	0.0%	1.0%	20.0%	50.0%	100.0%	95.5%
Required Prov. / Total Risk	38.7%	0.0%	0.7%	10.6%	27.1%	77.2%	71.5%
Adjustments for Provisioning Deficit	*(5,849,749)*						
Deficit in Provisions	**(205,286,704)**						

Source: World Bank and BNF

Assessment of BNF's Equity Position

(GUARANIES MILLIONS)

1. Capital Social	209,747	Reported Profit/Loss	(6,793)
Capital Integrado	209,747		
Capital Secundario	0	Adjustment for Provisions on Bad Debt	(205,287)
Aportes Irrevocables	0		
2. Reservas	48,448	Adjustment for Income from Ley 1418/1470	(26,799)
(a) Reserva Legal	2,964	- Debt Cancelation -	
(b) Reserva de Revalúo	37,093		
(c) Reservas Facultativas	0	Adjustment for Income from Ley 1499/99	(28,242)
(d) Rvas. Genericas p/ Cart. y Conting.	4,087	- Debt Rescheduling -	
		Adjustment for Prov. Desafectadas	(50,870)
		- Debt Cancelation & Rescheduling -	
(e) Otras Reservas	4,304		
3. Bonos Subordinados	0	Adjustment for Other Receivables from MOF	(45,000)
4. Resultados Acumulados	-97,727	- Coverage of Accumulated Losses -	
5. Resultado del Ejercicio	-362,991		
6. Menos:	0	Adjusted Profit/Loss	(362,991)
Particip. en Entidades Filiales	0		*US$ m. (84 42)*
Acciones en Bcos. del Exterior	0		
Déficit de Previsiones	0		
7. **EFFECTIVE CAPITAL**	**-202,523**	*-47*	

Source: World Bank and BNF

Calculation of BNF's Liquidation value

ASSETS		Adjusted	LIABILITIES & EQUITY		Adjusted
Cash and short-term deposits	115,905	115,905	**Current accts. and savings**	**506,866**	**506,866**
Reserve Deposits & other BCP	78,033	78,033			
Private banks –clearing	100	100			
Total Cash & short term Deposits	**194,038**	**194,038**	**Foreign loans and obligations**	**353,816**	**353,816**
Bond Investments (MF- 10 yr.)	**166,306**	**123,240**			
			Accrued interests payable	28,377	28,377
Performing Loans	365,965	281,826	Various creditors	8,510	8,510
Non- performing loans	339,970	66,806	Payments in transit to public servants	31,316	31,316
Provisions	-120,262	0	Leasing payments due	22,000	22,000
Net Loan Portfolio	**585,674**	**348,632**	Judicial deposits	7,000	7,000
			Seeds payable to Min. Agriculture	5,000	5,000
Int. & commissions receivable	**31,355**	**0**	Accrued interests on Savings Deposits	6,000	6,000
			Other provisions	3,660	3,660
Bepsa stocks	**1,444**	**1,444**	Other	18,906	18,906
			Severance payments to employees		66,000
Net Operating Assets	**68,498**	**34,249**	**Other current liabilities**	**130,769**	**196,769**
Real estate received	48,975	16,325			
Other assets received	14,884	4,961	**Deferred earnings**	**26,364**	**0**
Accum. Losses receivable from MF	45,000	0			
Receivables on sold assets	15,316	7,658	**TOTAL LIABILITIES**	**1,017,815**	**1,057,451**
Other assets – net	**124,175**	**28,944**			
TOTAL ASSETS	**1,171,491**	**730,547**	**NET EQUITY VALUE**	**153,676**	**-326,904**
				In US$ m.	**-74**

Source: World Bank and BNF

Crédito Agrícola de Habilitación (CAH)

As of June 2001, the arrears rate (over 60 days) in the CAH' loans portfolio stood at 24.2%. No detailed statistics were available on the structure of the loan portfolio in arrears, in particular the ageing structure. With about 25,000 clients currently in arrears, the non-performing cases seem to be evenly distributed across the portfolio in terms of loan size. The recovery of most of these loans was managed by CAH staff directly. Only 54 of the cases were in a judicial recovery process. The table below also suggests that the arrears are relatively low and concentrated in the short-term loan portfolio. However, this result is probably meaningless. It may reflect nothing more than the outcome of the debt relief exercise mandated by the government in 1999. The financial impact of this initiative on CAH amounted to 106,556 m. Guaranies (approx. 31 m. US$ [26]) and 89,193 accounts or 70% of the then active borrowers affected. This considerable impact of the government's debt relief on the institution, in contrast, can be taken as strong evidence that the quality of CAH's loan portfolio is far worse that the current figures indicate.[27]

CAH - Cash-Flow and Profitability Analysis

In terms of sustainability, the income generated by CAH's lending business covers just half of its expenses. Only 22% of CAH assets are currently invested in the loan portfolio. The

[26] There is a slight inconsistency with the balance sheet data, which is to be clarified.

[27] As of December 31st 1998, the institution's balance sheets showed non-performing loans amounting to about 44.8% of its gross loan portfolio.

remainder is primarily held as cash in banks (approx. 20%); in public bonds from the debt relief exercise earning a rate equal to the inflation rate (40%+) and fixed assets (7%). In addition, the institution is offering its services at interest rates that are almost a third of those charged by competitors such as the finance company "El Comercio", which is a privately owned entity actively involved in microfinance. Whereas its competitors, mainly finance companies, have succeeded to establish a very sustainable business[28], CAH is decapitalizing at a very fast pace as also shown by the cash flow analysis in Appendix 2. The net cash flow as a percentage of the average loan portfolio has been during 1999, 2000 and 2001; -2.1%, -11.7% and -3.8% respectively.

The strong equity position displayed by CAH in its financial statements is most probably only the result of the regular transfers made by the government and "creative accounting". In the financial year, the government's direct financial assistance amounted to about US$ 770,000, which corresponded to 28% of the interest income. At the same time, the profit and loss accounts shows US$ 8.8 m. as extraordinary income, which is about 3 times the level of the interest income on the loan portfolio. Like BNF, this income represents essentially the accrued but previously not accounted interest on bad loans which were reactivated or cancelled according to the laws 1418/99 and 1470/99. Combining this artificial income with the direct subsidies of the state, CAH was able to offset the operational loss of US$ 5.8 m. and show an operational profit. In fact, the real loss made by the institution may even be larger, because CAH is very likely to be under-provisioned with respect to the level of risk in its loan portfolio. Unfortunately, the data available is insufficient to make the necessary adjustments.

Breakdown of outstanding loan portfolio as of 06/30/01

		# of Clients	Outstanding Loans (in MM G$)		
			Short-term	Med. to Long-term	Total
Current		70,704	33,688	27,284	60,972
	%	*74.5%*	*63.4%*	*100.0%*	*75.8%*
In arrears		24,255	19,469	-	19,469
	%	*25.5%*	*36.6%*	*0.0%*	*24.2%*
TOTAL		**94,959**	53,157	27,284	**80,441**

Source: CAH

Cash Flow and Profitability Analysis

	1999	2000	2001
Interest Income / Average Loan Portfolio (Net)	16.6%	19.8%	27.6%
Interest Income / Average Loan Portfolio (Gross)	13.4%	15.2%	17.8%
Interest Expenses / Average Loan Portfolio (Gross)	-0.3%	-2.6%	-0.6%
Operational Costs / Average Loan Porfolio (Gross)	-24.2%	-44.7%	-20.2%
Bad Debt Provisions / Average Loan Portfolio (Gross)	-12.0%	-30.4%	-45.0%
Operational Margin	**-23.0%**	**-62.5%**	**-48.0%**
in G/ m.			
Interest Income	13,808,683	12,239,882	12,977,000
Interest Expenses	(277,106)	(2,122,374)	(550,000)
Operational Costs	(15,739,000)	(19,546,000)	(16,000,000)
Net Cash-Flow	**(2,207,423)**	**(9,428,492)**	**(3,573,000)**
in % of Average Loan Portfolio (Gross)	*-2.1%*	*-11.7%*	*-3.8%*

Source: CAH and World Bank

[28] This was achieved mostly through their collaboration with UTEP with the technical assistance and funding of the Inter-American Development Bank.

Fondo Ganadero (FG)

The FG was set-up in 1969 by government decree No. 7383. The FG take no deposits from the public, but relies mostly on funds provided by the international donor community and channeled through the Ministry of Finance. The institution is managed by a coordinating committee consisting of a president, a government representative and a representative of the livestock industry. It currently 1has 26 employees, 73 of which are working from the headquarters. The remaining 53 employees are distributed among the FG's 5 regional offices.

The FG had as of August 2001 an outstanding loan portfolio of approx. US$ 37 m., whose quality was significantly better than that of other public financial institutions. The size of the loans range from US$ 5,000.- to over 500,000. However, about 70% of the 1,245 borrowers are medium to larger scale entrepreneurs with access to private financial institutions. Accordingly, the FG has a relatively high average loan size of almost US$ 23,000. In spite of a recent increase in non-performing loans, the overall portfolio of the FG can be considered as being of relatively good quality. The current arrears rate (over 60 days) of 26.2% is more in line with private sector institutions, than for instance the 49.2% at BNF. In addition, the loans granted by the FG have a reportedly good guarantee coverage (see table 14). A look at the ageing structure of the arrears suggest that the delinquency problems are primarily due to smaller sized loans. This is an interesting fact, as it seems to indicate that the FG does not have a particular comparative advantage in doing business with smaller entrepreneurs.

Fondo Ganadero - Selected Loan Portfolio Indicators

Portfolio Indicators	...As of August 31st, 2001		
Total Portfolio (in '000 G$)	**162,061,504**	10 largest loans (in '000 G$)	19,042,976
Portfolio in arrears (in '000 G$)	42,490,555	10 smallest loans (in '000 G$)	23,946
In %	*26.2%*	# of active borrowers	1,245
Average Interest rate on loans	23.2%	# of outstanding loans	1,872
Recent Disbursement Trends	***1998***	***1999***	***2000***
# of loans	415	484	294
Amount (in US$)	9,120,909	13,919,318	6,705,000
Average loan (in US$)	21,978	28,759	22,806

Source· Fondo Ganadero

Fondo Ganadero - Cash-Flow and Profitability Analysis

	1999	2000	2001
Average Interest Rate on Outstanding Portfolio	15.38%	15.82%	19.84%
Interest Income / Average Loan Portfolio (Net)	17.0%	18.5%	20.3%
Interest Income / Average Loan Portfolio (Gross)	16.9%	18.4%	20.2%
Interest Expenses / Average Loan Portfolio (Gross)	-4.2%	-4.8%	-13.9%
Operational Costs / Average Loan Portfolio (Gross)	-8.8%	-7.6%	-6.4%
Bad Debt Provisions / Average Loan Portfolio (Gross)	-0.40%	-0.10%	-0.21%
Operational Margin	**3.5%**	**5.9%**	**-0.3%**
Impact of Exchange Rate Fluctuations/Average Loan Portf.	-6.2%	-4.5%	-2.2%
Margin with Impact of Exchange Rate Fluctuations	**-2.7%**	**1.4%**	**-2.5%**
Cash-Flow Analysis			
in G/ m.			
Interest Income	22.7	28.6	31.7
Interest Expenses	6	8	22
Operational Costs	12	12	10
Net Cash-Flow	**40**	**48**	**64**
in % of Average Loan Portfolio (Gross)	*30.0%*	*31.0%*	*40.5%*

Source: Fondo Ganadero and World Bank

Fondo Ganadero – Structure of Liabilities

	As of 8/31/2001		
	'000 G/	US$	%
Liabilities in Foreign Currency	**75,680,923**	**17,200,210**	**59.3%**
Liabilities in Local Currency	**51,845,833**	**11,783,144**	**40.7%**
o/w: with Ministry of Finance	49,407,125	11,228,892	38.7%
Others	2,438,708	554,252	1.9%
Net Equity	**58,541,733**	**13,304,939**	**31.4%**
TOTAL Equity & Liabilities	**186,068,489**	**42,288,293**	**100.0%**

Source Fondo Ganadero

Fondo de Desarrollo Campesino (FDC)

The FDC is a state-owned public institution specialized on lending to the cooperative sector. It is the youngest of all state-owned institutions. It was created in 1993 with the goal of becoming a second-tier lending institution for the agricultural sector, but those plans were apparently never realized. 84 out of the 87 clients of the FDC are agricultural production cooperatives. Only three clients are currently financial institutions, all of them credit unions. The FDC does not take deposits from the public, but relies mostly on funds provided by the international donor community and channeled through the Ministry of Finance. It has currently 37 employees and no branch network. Its only office is located at the Central Bank. ***The profitability analysis suggests that FDC is heavily subsidized and is involved in 'generous' accounting.*** A first adjustment to done should be on the level of provision for bad debt, which seems to be far too low. Second, a closer look should be taken at the income figures which are way above the income to be expected given the size of the loan portfolio. Finally, adjustments should be done for the subsidies contained in the zero-cost funding that FDC currently enjoys. Taking the inflation rate as benchmark, these funding subsidies would amount to approx. US$ 750,000 in the financial year 2000 alone.

The FDC had as of August 2001 an outstanding loan portfolio of approx. US$ 11 million, but loan delinquency is estimated to be at least 45%. The table below summarizes the FDC's key portfolio data. A first observation is that FDC appears to be primarily working with larger clients. As of August 2001, its average loan outstanding amounted to about US$ 124,000.- which is far higher than that of all other first-tier public institutions. Accordingly, most of FDC's clients are able to have or do have access to the private banks. Many of them have also a banking relationships with BNF. The average term of FDC's loans is 4-5 years. In terms of quality of the loan portfolio, FDC appears to have a substantial level of non-performing loans in its portfolio. Although the published arrears rate is only 4.3%, the methodology applied to determine the amount of debt relief under the recent government's initiative suggests strongly a much higher delinquency rate. Indeed, the method shown in the table below suggests that the arrears rates published by FDC do take into account only the installment due and not the total portfolio at risk. Since the published arrears rates have returned to the levels prior to the debt relief, it seems appropriate to assume that non-performing loans amount to at least 45% of the portfolio.

Fondo de Desarollo Campesino - Selected Loan Portfolio Indicators

Portfolio Indicators	As of August 31st, 2001		
Total Portfolio (in '000 G$)	**47,526,000**	# of active borrowers	87
Portfolio in arrears (*as published by FDC*)	2,043,487	# of beneficiaries	1,450
in %	*4.3%*	Average Interest rate on loans	17%
"Best case" World Bank estimates	**45.0%**	Average loan outstanding	**US$124,154**

Source: FDC

Fondo de Desarrollo Campesino
Impact of the debt relief mandated by the law 1418/99 and 1470/99

Impacto de la ley de condonacion de deudas	
Prestamos aprobados por el FDC al 01-10-1998	80,743,584,649
Prestamos desembolsados por FDC al 01-10-1998	**77,521,855,749**
Prestamos recuperados al 01-10-98 por FDC	69,063,286,585
Saldo de Cartera al 01-10-1998	**11,680,298,064**
Saldo de Cartera Vencidas al 01-10-1998	557,353,499
Interes de Catera Vencidas al 01-10-98	219,503,493
Total Cartera Vencida al 01-10-1998	**776,856,992**
% de morosidad al 01-10-98 solo de capital	**5%**
% de morosidad al 01-10-98 incluy. intereses no cobrados	**7%**
Cartera condonada al 15-04-1998 (cap + int.)*	**4,436,311,793**
*Algunas IFIs han solicitado en forma posterior su solicitud de condonacion aditional	
Gs. 758388102 Coop. Caaguazu Poty	
Gs. 49549291 Coop. Tekoporave Rekavo	
Total G/.	**807,937,393**
Total Posible a condonar Gs	**5,244,249,186**
% de cartera a ser condonada con respecto a Saldo de cartera a esta fecha (01-10-98)	**45%**

Source: FDC and World Bank

Besides the adjustments required for provision, income and subsidies, it should be mentioned that FDC illustrates perfectly the problems with public institutions in Paraguay. Not only does the institution service a clientele, which it is not supposed to be directly lending to, but also it is using the subsidies it receives to undercut its public sector peer, BNF, as well as potential private sector lenders. Therefore, any reform initiative of the public bank sector in Paraguay must include the dissolution of FDC.

Fondo de Desarollo Campesino - Cash-Flow and Profitability Analysis

	1999	2000	2001
Average Interest Rate on Outstanding Portfolio NOMINAL	17.0%	17.0%	17.0%
Interest Income / Average Loan Portfolio (Net)	72.5%	40.2%	31.1%
Interest Income / Average Loan Portfolio (Gross)	67.0%	38.3%	30.2%
Interest Expenses / Average Loan Portfolio (Gross)	0.0%	0.0%	0.0%
Operational Costs / Average Loan Porfolio (Gross)	(12.8%)	(7.9%)	(4.6%)
Bad Debt Provisions / Average Loan Portfolio (Gross)	(9.7%)	(4.3%)	0.0%
Operational Margin	**44.5%**	**26.1%**	**25.6%**
Cash-Flow Analysis			
		Guaranies millions	
Interest Income	10,694,603.5	11,427,034.1	6,569,000.0
Interest Expenses	-	-	-
Operational Costs	(3,588,144.8)	(3,625,722.0)	(1,009,000.0)
Net Cash-Flow	**7,106,459**	**7,801,312**	**5,560,000**
In % of Average Loan Portfolio (Gross)	*44.5%*	*26.1%*	*12.8%*

Source: FDC and World Bank

The Second Tier Institutions

Unidad Técnica Ejecutora de Programas (UTEP)

UTEP is managed by a director, who in turn reports to a coordinating committee consisting of the Head of the department of Economic Studies at the BCP, the Operations manager and the Superintendent of Banks. It has a total staff of 5, including the director, 2 financial analysts, an IT specialist and a language assistant. The unit receives institutional support from the other areas of the BCP in particular on legal issues and on the access to financial information on its borrowers. UTEP does not take deposits from the public, and is funded exclusively with funds provided by the IDB and channeled through the Banco Central de Paraguay.

As of December 2000, UTEP had 8 financial institutions as clients with outstanding loans amounting to US$ 11.9 million[29] and 1.9% arrears rate. The current clientele consists of 2 commercial banks and six financieras. The largest borrower is Financiera Vision, which contributes to about 40% of the loan portfolio. The two commercial banks among the clientele, namely Multibanco and Banco Regional, represent each about 6% of the portfolio. In terms of impact, the funds and financial assistance provided by UTEP have motivated the participating financial intermediaries to expand their business to SMEs. As of December 2000, UTEP clients had a combined portfolio of about US$ 32.7 million, which is almost three times the funding provided by UTEP, with a total of 41,908 end-recipients/beneficiaries. The average loan size to the SME's amounted to about US$780. The quality of the loan portfolio is excellent with an average arrears rate for participating lenders of less than 7% (over 60 days) for their micro-enterprise loans. UTEP itself has virtually no arrears, among other because it collects the installments due directly from the central banks accounts of the participating intermediaries. The only loan currently in arrears was granted to Banco Nacional de Trabajadores, which is under liquidation. That specific loan contributes to 1.9% of the portfolio.

UTEP – Selected Portfolio Indicators

UTEP Portfolio Indicators	As of December 31st, 2000		
Total Portfolio	$11,913,330	# of active borrowers	8
Portfolio in Arrears	$225,946	Average Interest rate on loans	19.1%
in %	*1.9%*	Average loan term (in months)	12.6
Average Loan outstanding	$338,447		
Impact Data			
		Loan distribution by sectors	***Geographic distribution of loans***
Total outstanding Loans to SME at participating FI's (in MM)	**$32.7**	Commerce 69%	Greater Asuncion 60%
# of Beneficiaries	**41,908**	Production 21%	Rest 40%
Average Loan outstanding per SME	**$779**	Services 10%	
Average Assets of clients	4,509	**# of trained FI**	**525**
Recent Evolution of Loan Portfolio (in Guaranies)			
	1998	***1999***	***2000***
Outstanding Loan Portfolio	35,457,743,390	30,197,139,135	41,508,362,420

Source: UTEP

In spite of UTEP's remarkable performance, its income earned is not sufficient to cover losses from exchange rate fluctuations. Thanks to its extremely light institutional set-up, UTEP has very low levels of administrative overheads. As shown in the table below, these overheads are easily covered by the interest income. Since the funding provided by the IDB is in US$,

[29] This amount includes past-due loans with Banco Nacional de Trabajadores, which is currently under liquidation.

however, the cost of capital to the institutions is very sensitive to exchange rate fluctuations. Consequently, the institution has been decapitalizing at a fast pace in the last two years because of the strong depreciation of the Paraguayan Guarani. However, an increase of interest rate to compensate the exchange rate losses may not be a viable option for UTEP because the program may otherwise lose its attractiveness. The fact that it is already regarded an expensive source of funding, has been a key factor behind the relative stagnation of the portfolio in recent years, in contrast of the strong growth the portfolio lent by the participating intermediaries directly. It is therefore crucial for UTEP to diversify its sources of funding interms of "currency mix" if it wants to be sustainable as institution.

UTEP - Cash-Flow and Profitability Analysis

	1999	**2000**
Average Interest Rate on Outstanding Portfolio NOMINAL	24.06%	19.11%
Interest Income / Average Loan Portfolio (Gross)	16.8%	16.8%
Interest Expenses ex-FX / Average Loan Portfolio (Gross)	-6.5%	-10.2%
Operational Costs / Average Loan Porfolio (Gross)	-5.0%	-4.1%
Bad Debt Provisions / Average Loan Portfolio (Gross)	-0.6%	0.0%
Operational Margin	**4.7%**	**2.5%**
Interest Expenses due to FX/Fluctuations/Average Loan Portf.	-29.9%	-12.9%
Margin with Impact of Exchamge Rate Fluctuations	**-25.3%**	**-10.4%**
Cash-Flow Analysis		
	Guaranies millions	
Interest Income	5,501.0	6,040.2
Interest Expenses	(12,163.6)	(8,279.6)
Operational Costs	(1,483.6)	(1,638.5)
Net Cash-Flow	**(8,146)**	**(3,878)**
In % of Average Loan Portfolio (Gross)	*-24.8%*	*-10.8%*

Source: UTEP and World Bank

Fondo de Desarrollo Industrial

For the FDI, 65 of the 75 loans outstanding as of early 2001were due by four banks currently under liquidation. Most of the remaining arrears were due by BNF, whose portfolio with FDI displayed a rate of arrears of 60%. The mains reasons for this loan delinquency problems at FDI are the poor skills at financial analysis of participating intermediaries and political interference. An assessment of FDI's profitability could not be undertaken because the entity does not produce financial statements.

FDI – Recent Evolution of Outstanding Loan Portfolio

	# of Loans	Amount	
		in '000 G	*in US$*
1999	60	16,078,137	*5,911,080*
2000	24	7,753,077	*2,221 512*
Total	84	23,831,214	*8,132,592*

Source: FDI

FDI – Structure of Arrears on Loan Portfolio (intervened banks excluded)

BANCO	N° DE SUB-CREDITOS	CLASIFICACION 3 Y MAS (según informe de las IFIS)	TASA DE MOROSIDAD al 30/06/2001	TASA DE MOROSIDAD al 31/12/2000
CONTINENTAL	2	0	0.0%	0.0%
AMAMBAY	1	0	0.0%	0.0%
SUDAMERIS	3	0	0.0%	0.0%
BANCOPLUS	14	1	7.1%	4.9%
ALEMAN	13	0	0.0%	0.0%
MULTIBANCO	32	2	6.3%	3.8%
REGIONAL	9	0	0.0%	0.0%
FOMENTO	75	45	60.0%	40.1%
PYO-JAPONESA	2	0	0.0%	

Source: FDI

APPENDIX 3

Institutional Assessment of Banking Supervision

Recommendations on BCP/SB Powers and Independence

a) Increase the term of service for the Board of BCP for the President and Directors;
b) Obtain budgetary autonomy for the BCP vis-á-vis the executive;
c) Institute the same term for the Superintendent (currently without terms);
d) Augment professional criteria for President and Directors serving on BCP's Board;
e) Augment professional criteria for the Superintendent;
f) Nominate the Superintendent as a de-facto member of the Board of the BCP;
g) Empower the Board of BCP to delegate powers to the Superintendent of SB;
h) Proceed to delegate powers by Resolution of the Board of BCP, to the SB;
i) Empower SB to litigate against banks and bankers challenging SB decisions;
j) Separate from within BCP the budgetary process of SB to increase its autonomy;
k) Transfer full budgetary authority for SB to its Superintendent for the same purpose;
l) Empower SB to charge banks for examination work within an authorized limit;
m) Supplement existing enforcement powers enabling a wider range of orders;
n) Develop practices to define supervisory orders as civil contracts (MoU agreements);
o) Implement heavy sanctions for lack of compliance with such orders;
p) Migrate tax inspection responsibilities from SB to the Finance Ministry;
q) Set the necessary ex-post control mechanisms for delegations of power suggested above;
r) Transfer regulation and supervision of savings & associations and cooperatives to BCP;
s) Adopt a plan to segment cooperatives which are acting as full credit intermediaries;
t) Separate SB from failure resolution and problem bank intervention activities;
u) Transfer supervision of exchange and wharehouses out of SB; and,

Adopt a system to ensure the accountability of the Board of BCP as legal "Supervisor".

Areas for Regulatory Development in Banking Operations

As part of a review of the Banking Law and existing regulations, it has been identified that at least the following areas require further regulatory development:

a) Requirements and policy standards for licensing of new institutions;
b) Shareholders registration and transfer of existing participations (Art. 4);
c) Requirements and policy standards to conduct permissible activities (Art. 40 and 73);
d) Restrictions to maintaining participations in other companies (Art. 68);
e) Definition and policy standards for insiders and bank related parties;
f) Standard requirements for internal audit programs;
g) Reforming minimum capital adequacy rules and regulations;
h) Eliminating the 12% ceiling for minimum capital adequacy ;
i) Conditions and policy standards to increase minimum capital on an individual basis;
j) Inclusion of FX, market, and other risks into the risk weighted assets (Art. 56)
k) Limits for FX, market and interest risk, and liquidity risk (art. 56)
l) Criteria for augmenting risk limits (Art. 61 and 63);
m) Adopt enforceable risk managements standards (Art. 34 and Resolution 1/98);
n) Requirements for consolidated regulation and supervision (Art. 103); and
o) Criteria and policy standards for enforcing prudent banking practices.

Recommended Regulatory Reforms in Treatment and Assessment of Credit

a) Coordinate standard definitions of both Resolutions 13/1991 and 8/1996;
b) Reintroduce interest reversal as required by previous Resolution 2/1992;
c) Improve the definition of "effective interest and principal payment";
d) Preclude directly or indirectly new lending to improve loan classification;
e) Establish rules to classify overdrafts by arrears and other relevant criteria;
f) Repeal weighted classification and provisioning of borrowers;
g) Require stressed cash flow projections for large exposures and borrowers;
h) Strengthen conditions for restructuring and rescheduling problem debtors;
i) Regulate sales of problem loans to trust and related offshore vehicles;
j) Minimize recourse to collateral as a substitute for loan provisioning;
k) Establish a register for authorized professional independent appraisers:
l) Adopt strict rules for collateral appraisal;
m) Increase minimum provisioning for class 2 assets from 1% to 5%-to-10%;
n) Establish a generic provision (1,5%) for class 1 assets currently at 0%;
o) Suspend or provision currency revaluation for classified loans;
p) Consider requiring forward provisioning based on expected loss; and,
q) Augment generic provisioning based on credit risk management quality.

Reforms Relating to Capital Adequacy and Asset Quality

a) Minimize the use of collateral to reduce risk weights and augment risk limits;
b) Deduct from the capital base any excesses in risk concentrations;
c) Eliminate the 12% maximum threshold level for capital adequacy;
d) Provide BCP with powers requiring additional capital above the minimum;
e) Mandate consolidated accounting to support consolidated regulation;
f) Require capital adequacy not only on a solo, but also on a consolidated basis;
g) Include exchange and market risks in the risk weighted assets formula;
h) Tier capital into two levels according to the quality of its components;
i) Exclude from tier two of capital 50% of revaluation reserves after validation;
j) Exclude from tier two of capital 50% of current years profits before distribution;
k) Delegate power to SB within appropriate policy standards;
l) Consider existing liquidity and interest rate risk exposures;
m) For rating loan asset risks, permit 50% risk weighting only if asset is guaranteed by a residential mortgage, but 100% risk if backed only by commercial mortgage.
n) Factor in qualitative aspects according to each institution's risk profile; and,
o) Use new powers and standards, as incentives to strengthen the banking system.

Reforms for the Improvement of Off-Site Surveillance

The following suggestions should be considered to strengthen the off-site surveillance activities of SB in order to enhance its overall efficiency and capacity:

a) Have separate component for surveillance in SB's IDP, including training;
b) Adopt a surveillance policy aligned to a new proposed supervisory strategy;
c) Revise as necessary surveillance procedures (manual and work papers);
d) Perform book adjustments per examination before ratio analysis takes place;
e) Develop a methodology to combine quantitative and qualitative measures;

f) Standardize a uniform bank performance report and ratio analysis system;
g) Develop further warning systems (dynamic, stress, proxy early indicators);
h) Coordinate as a policy matter, the monitoring, examination, and enforcement activities;
i) Use a risk rating profile to anchor the coordination policy;
j) Develop processes to compile and compare qualitative management reviews;
k) Staff the surveillance function satisfactorily and train analysts to supervise;
l) Form a rating committee coordinating surveillance and examination functions;
m) Consolidate supervisory responsibility by nominating account managers.

Recommended Improvements in Institutional Capacity and Modus Operandi

In order to successfully implement the above standards, the following should be considered to strengthen operating policies and procedures of Supervision in order to enhance its overall efficiency and capacity:

a) Adopt a multiyear institutional development program (IDP) for SB;
b) Have a sub-IDP for each function: examination, surveillance, enforcement;
c) Adopt a supervisory strategy that discriminates risk profile among institutions;
d) Adopt core policies for each function (licensing, on-site, enforcement,etc.);
e) Discriminate (cycle, frequency, extension, tools) as per risk profiles;
f) Review and reform procedures of each function (licensing, off/on-site, etc.);
g) Link supervisory functions by means of a risk profile rating methodology;
h) Estimate supervision work load (monitoring, examination, visitation);
i) Staff major functions to adequate levels for dealing with work load;
j) Train staff in implementing new policies and procedures and rate risk profiles;
k) Provide resident advice along the duration of the multiyear IDP.

APPENDIX 4

Safety Net Facilities, Deposit Insurance and Bank Resolution Procedures

Lender of Last Resort Facilities

The Short Term Facility

The BCP's short term facility is intended for support to banks with very short term liquidity constraints. The facilities' terms of use are being modified via a draft Law which was first discussed in the legislature in June 2001. The main changes reflect a shortening of the available "maturities" for the facility so that it becomes better differentiated from the 'safety net' facility discussed below. Under the new terms, the short term facility would allow loans of up to 80% of a bank's reserve requirement up to a top limit not exceeding US$ 2.4 million equivalent (at current exchange rates).

The allowable maturity terms of the facility as is being modified, includes a minimum of one day and a maximum of 10 days within any 30 day period. The interest rate charged is defined as 2% above the current central bank bill rate (i.e., those instruments used for open market operations), and/or the central bank's call money rate, whichever is higher. Collateral required includes government paper, liquid low risk negotiable securities and bank IOUs.

As of end June 2001, outstanding use of the short term facility amounted to 0.6% of total banking system liabilities, or $15 million equivalent.

The Safety Net "Red de Seguridad" Facility

The "Red de Seguridad" facility is of slightly longer duration and its terms regarding amounts borrowed establish a maximum amount of 80% of the bank's net equity. The maturity allows for use of the facility for an aggregate of 60 days within a 180 day period, and the rate is 2% points above the 30 day average of either the BCP bill rate or the call money rate, whichever is higher. Collateral required includes Treasury, BCP and other low risk securities, letters of credit, highly rated loans in category "1" (where 75% of loan amount is considered) and loans in category "2" where 65% of each loan is valid as collateral.

This facility can be extended beyond the established limits for an additional 90 days, however, in such case, the bank would be subject to the supervisory "vigilance" regime and would need to set out a financial rehabilitation plan which would be monitored by the Superintendency under the vigilance phase.

The facility, however, has not been utilized since the last wave of bank failures in 1997, and BCP has established stricter access requirements and a more conservative stance towards its usage, given past experience.

While the restriction of LOLR facilities and the elimination of discretionary use of BCP credit and overdrafts on the cash reserve accounts reflects a much needed adjustment to BCP's LOLR policy, a remaining issue concerning the setting of the interest rate on LOLR credit should be examined, particularly since the current pricing base does not reflect an interest rate which is higher that than which could be obtained on the market. Thus, the BCP could again be subject to abusive use of this facility before a bank would consider accessing the market. BCP's LOLR

policies, however, are consistent with the criteria of limiting credit for short term liquidity problems, with the exception of the rehabilitation facility listed below. The short term LOLR facilities should also exclude IOUs as a guarantee of repayment and limit collateral to government and other low risk negotiable securities.

Rehabilitation Plan Facility

The Rehabilitation Facility follows from the Safety Net facility, in that it is activated under the 90 day extension period after the first phase of usage of the Safety Net facility. As mentioned above, this second stage requires implementation of a vigilance regime by the Superintendency as well as the formalization of a financial improvement plan. The collateral requirements are the same as those for the Safety Net facility.

The key aspect of this facility is that following the 90 day extension period, a third phase is permitted whereby the BCP can provide a credit of no more than a 5 year maturity to the subject bank (in an amount up to 20% of its asset value) under the continued vigilance regime and financial rehabilitation program. Failure of the bank to meet the conditions under the rehabilitation plan would trigger an intervention of the bank with the subsequent resolution and/or liquidation actions.

The pricing of this facility depends on a decision by the BCP Board and the specific situation of the bank in question.

DEPOSIT INSURANCE

Comments and Recommendations on the Proposed Deposit Insurance Law

a. The deposit insurance fund is established in the central bank. In the context of Paraguay this could generate moral hazard and the banking system could assume that any amounts not covered by the new scheme, would thus be automatically covered ('bailed out') by the central bank.

b. The scheme proposes the possibility of the central bank providing loans to the fund if needed. Any such loans should be approved by the Government and disbursed from the Treasury.

c. The funding target is roughly equivalent to the deposits of those banks estimated to be at risk in the system. However, since coverage is limited, it may be more appropriate to calculate the net sub-set of each deposit which would be actually insured rather than gross deposits. The same calculation could be used to appropriately establish a premium rate on actual amounts insured rather than gross deposits.

d. The law cites the requirement of the 'least cost criteria' for using the fund's resources. This criteria should also be applied to 'fiscal resources' which may need to be used prior to the fund reaching its target level.

e. In Article 18 I(d) of the law it states that insurance would not be applied to deposits of banks prior to intervention by the Superintendency in such banks. If this is meant to disqualify badly managed banks from receiving insurance, it should use more detailed criteria since it would be unfair to depositors unless they received sufficient advance notice.

f. In Article 21, II, the opening of a credit account for the resolution process is again attributed as a function of the central bank when it should properly be that of the Treasury. Any such credit should not be an open ended option, but rather be linked under a specific coinsurance contract with the fund, where such a credit is only used when the fund has insufficient resources, and the repayment terms are linked to future premium collections of the fund.

g. Under Article 23(a)(ii), it states that the guarantee (insurance coverage) will be increased above the specified limit (during a resolution process) so as to cover the full amount of the deposits. This is not consistent with the least cost criteria and should be changed so that the portion of a deposit which is not insured, should not automatically be funded (under a new bank) by the deposit insurance fund, but rather sent to the bad bank as a priority creditor in the collection of proceeds from liquidated assets.

h. During liquidation, following an auction, the law states that any remaining assets would be transferred to the central bank. This should be modified and another entity responsible for managing non performing assets and collateral should be the recipient.

i. The proposed premium rate of 0.3% of deposits is too low and would take over 11 years to capitalize the fund (assuming a 10% of deposit target), therefore, a higher rate of 0.8% would be more appropriate and rates could be modified around that level based on the risk rating of each bank.

Capitalization of the Deposit Insurance Fund

As of June 30, 2001, total deposits in the banking system amounted to G 8,620 billion, equivalent to US$ 2.05 billion. If one uses the 10% of deposits as the target level sought for the insurance fund, this would need to reach US$ 205 million equivalent at current exchange rates. However, this only reflects 10% of the present day level of deposits and the objective would be to reach 10% of ongoing and future levels of the deposit base. Based on recent historical trends, deposits in the banking system in Paraguay have grown by 15% annually on average. If one uses this figure to project the level of future deposits, say in ten years, one obtains the following:

Initial Deposit Base at 6/30/2001	$1,991 million equivalent
Deposits after 10 years at 15% annual growth:	$8,054 million equivalent
Average deposit level in 10 year period:	$5,023 million equivalent
10% of average deposit level: (used to project contributions required to reach target in 6-7 years)	$502.3 million equivalent

It should be noted that, although the target of 10% of deposits appears small, based on present data on "insured deposits up to $9,000 equivalent", it would in fact cover 40% of all such insured portions of deposits in the system as of mid-2001[30]. This means that if the fund was capitalized today at 10%, its resources would be sufficient to cover 40% of all insured deposits – any amounts above the insured limit for larger deposits, would not be covered as is the present

[30] Approximately 82% of individual total deposits would be fully covered by this level of coverage, currently.

policy under the deposit guarantee. Therefore, the "excess of loss policy" for any payments above the 10% limit, based on the current banking situation, would cover the remaining 60% of insured deposits. Since a scenario of 40% of insured deposits being at risk at any one time is almost equivalent to a systemic crisis, it is unlikely, once the fund is fully capitalized, that it would even need to finance such a level of loss unless a crisis was bankwide. At the current level of US $9,000 equivalent as the deposit guarantee, approximately 82% of individual total deposits would be fully covered.

The investment regime for deposit insurance funds should be extremely conservative and riskless. For conflict of interest purposes, the funds could not be invested in the financial sector. Therefore the only option left would be government securities. Since it would not be appropriate for the deposit insurance funds to be invested only in government securities, and in order to protect the value of such funds, it is strongly recommended that a majority of such funds be invested in offshore hard currency low risk securities such as US Treasury bills.

BANK RESOLUTION PROCEDURES

Vigilance and Intervention Regimes

The Banking Law invokes the Vigilance Regime (*'Vigilancia Localizada'*) which implies, the following actions (Article 113) affecting the target bank: (i) Permanent ongoing inspection of the financial entity, (ii) Reduction in the period during which the institution's minimum reserve requirement at the BCP is calculated, (iii) Prohibition against accepting management of Trusts, (iv) Non eligibility of the entity to participate as intermediary for promotional/directed credits, (v) Deposit of any surplus or repaid funds above what is needed to meet depositor payments, in a remunerated BCP account, and (vi) No distributions of net income, and no increase in personnel or salaries. During the vigilance regime, a rehabilitation program is required within 7 days of the start of the regime and the program delineates an action plan to reverse the tendencies which resulted in triggering vigilance by the SB.

The triggers for placing a bank under the Vigilance regime as specified in Article 110 of the banking law, are the following:

a. Non compliance with the reserve requirements for 30 consecutive days or for a total of 60 non consecutive days during a 12 month period.

b. Exceeding the limits established under articles 58 and 59 (investment, capital, connected lending) during two consecutive months, or four non consecutive months during a 12 month period.

c. A capital deficit below the minimum for more than 60 days.

d. An observed need to refinance obligations or use BCP liquidity credit for over 60 days during a 180 day period. This excludes extraordinary credit demands generated from seasonal requirements.

e. Non compliance with implementation of corrective actions.

f. Offering deposit rates at levels markedly higher than the market in terms of similar institutions.

Intervention

Under the Paraguayan banking framework, intervention of a bank by the SB is triggered by one or more of the following (Article 118):

a. Suspension of a bank's payment of obligations;
b. Having lost over 50% of its capital;
c. Not complying with a rehabilitation plan agreed during the Vigilance stage, or not presenting an adequate plan to the SB;
d. Having committed various continued infractions of the banking law and its statutory requirements as well as non compliance with regulations or resolutions issued by the BCP and SB;
e. Having supplied false information to the SB or the BCP; and
f. Not complying with the requisite shareholder meetings or parent company actions to ensure appropriate operational actions and meeting of legal requirements.

During intervention, the SB undertakes the following actions which are consequences of entering into such phase: (i) powers of management and the Board are suspended; (ii) the bank's administration is taken over by the SB through officials designated for such purpose, (iii) the intervened entity continues to operate under the administration of the interventor subject to the operating constraints put into force under Vigilance; (iv) the SB will determine loss provisioning requirements for assets according the proper accounting norms after approval by the BCP Board, and subsequent reduction of capital in order to determine the market value of the bank; and (v) the SB will order all shareholders to deposit their share securities at the BCP within 15 days of a request for such via the public media. Securities not deposited during that time period will be considered valueless subsequently.

As mentioned above, the subsequent stage after intervention either involves immediate capitalization of the bank by shareholders or other parties via purchase & assumption, or moving towards liquidation. Under the current law, the sale option named "forced sale" as described in Articles 122 and 123, is very briefly described with most of that chapter of the law dedicated to the modalities of liquidation including the contracting of third parties for this purpose.

APPENDIX 5

Main Features of the Proposed Pension Reform Law

a. The new law would set up two parallel systems: A reformed public pillar based on a defined benefit structure and a new private pillar based on a defined contribution structure.

b. The new law separates the pension fund from the heath insurance fund, something which is crucial given that in the current social security system, the accounts are mixed and the pension side is essentially subsidizing payments for the health policy.

c. Various 'professional funds' in the public sector are consolidated into a single fund.

d. The new public system increases the flexibility in its investment regime allowing a broad range of domestic securities, mostly of fixed income.

e. Under the private pillar, contributions are set a 9% of salaries plus additional insurance commission, plus a solidarity contribution of 0.5% to fund a minimum guaranteed pension. Employers pay 4% as an additional contribution. Pension fund commissions are added separately and can be based either as a % of salary or as a % of assets managed.

f. During the first ten years, only two pension fund companies will be permitted to operate given the limited size of the Paraguayan market. After the first three years, the government will be permitted to set up its own contribution defined pension fund in that market.

g. Each pension fund company will be allowed to only manage one fund.

h. Pension fund companies will be required to invest contributions of retirees in annuity instruments for the purpose of paying out pension annuities which would be the required mode for disbursement of benefits. Such funds would be accounted separately than those accruing contributions of active affiliates.

i. Recognition bonds will be issued to transfer accrued benefits of affiliates in the public system, for investment/affiliation in the private system.

j. Other financial sector entities will be permitted to manage pension funds as authorized by the new Superintendency of Pensions.

k. The minimum pension guarantee to be funded in part by the 0.5% solidarity contribution, would be 60% of the minimum salary.

l. In terms of transition arrangements, within the first three years, new affiliates will be allowed to choose between either system. If they opt for the public system, they can switch back into the private system within 3 years. If they opt for the private system, however, they cannot switch back into the public system.

m. During the first 10 years, the private system pension companies will be required to generate a minimum real rate of return on the pension funds which will be measured as either the average real return of the industry period minus 2%, or 50% the average real return of the industry over the last year; whichever is lesser.

APPENDIX 6. STATISTICAL ANNEX BANKING SYSTEM OF PARAGUAY

A. MAIN MACROECONOMIC INDICATORS

B. BANKING SYSTEM STRUCTURE AND PERFORMANCE

C. FINANCIAL STATEMENTS STRESS TEST

D. MACROECONOMIC VARIABLES SHOCK STRESS TEST

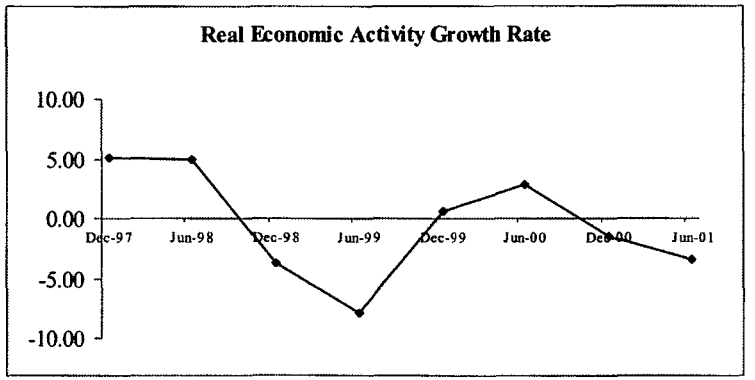
A. MAIN MACROECONOMIC INDICATORS

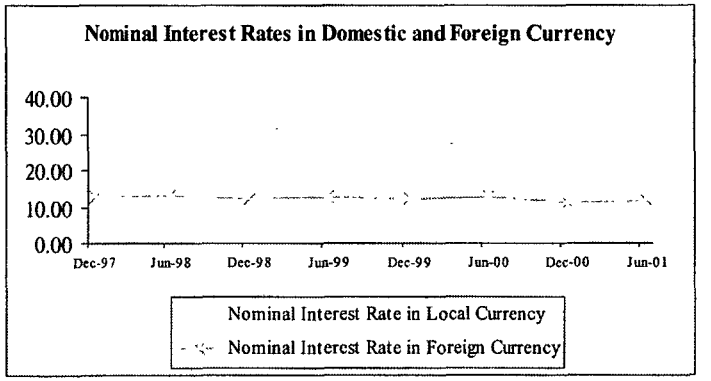
TABLE 1. MACROECONOMIC INDICATORS
(in percentage)

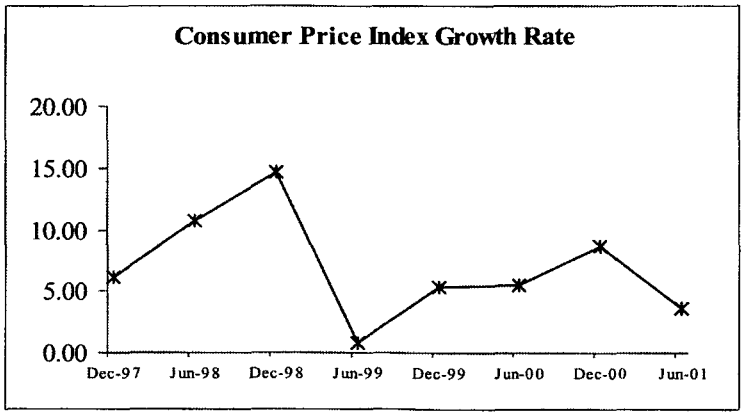
Macroeconomic indicators (1)	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Real Economic Activity Growth Rate	5.09	4.97	-3.66	-7.95	0.67	2.80	-1.52	-3.46
US Nominal Exchange Rate Index	59.30	63.75	63.87	69.39	72.84	74.56	74.09	79.99
Nominal Interest Rate in Local Currency	27.11	31.52	32.00	30.48	28.67	25.72	26.44	26.80
Nominal Interest Rate in Foreign Currency	12.61	13.27	12.12	12.46	12.31	12.84	11.45	11.50
Consumer Price Index Growth Rate	6.20	10.65	14.64	0.80	5.40	5.51	8.64	3.59

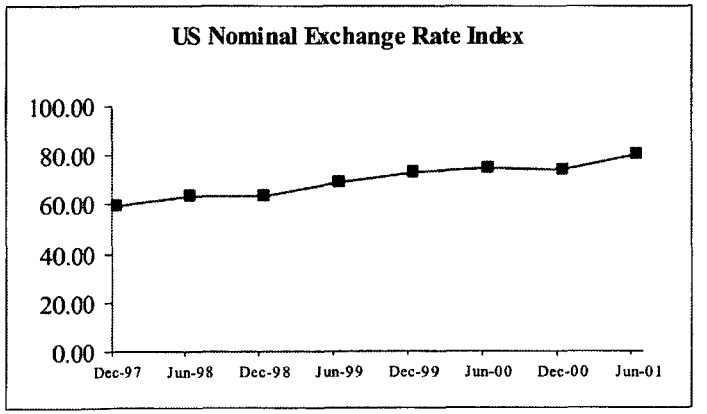
(1) Real Economic Activity Growth Rate calculated year-and-year from the IMAE index data. Cosumer Price Index Growth Rate calculated year-and-year.

Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)







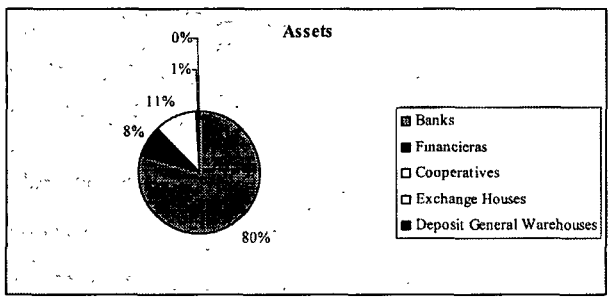


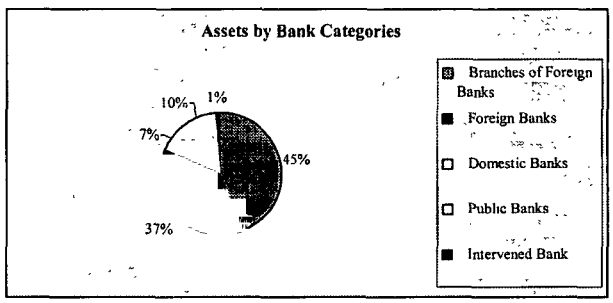
B. BANKING SYSTEM STRUCTURE AND PEFORMANCE

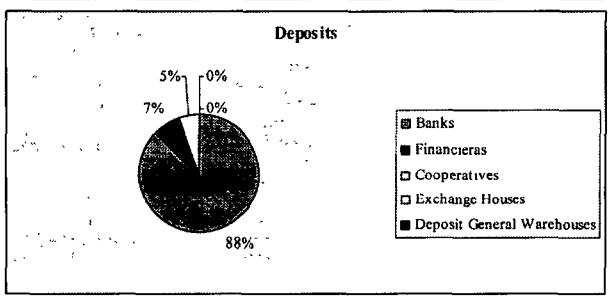
TABLE 2. STRUCTURE OF THE FINANCIAL SYSTEM AS OF JUNE 2001
(in million guaraníes)

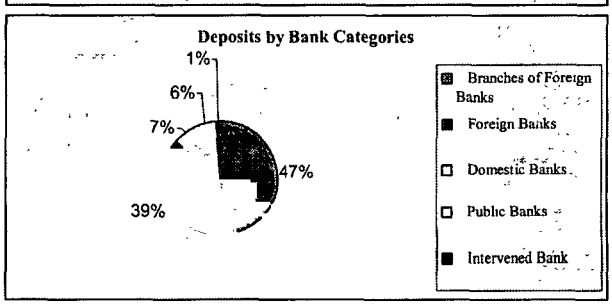
	Assets	Deposits	Loans	Equity
Banks	**11,308,627**	**8,712,883**	**7,179,041**	**4,124,563**
Branches of Foreign Banks	5,032,315	4,122,444	3,387,730	3,387,730
Foreign Banks	4,211,520	3,422,369	2,675,872	482,659
Domestic Banks	780,496	574,607	502,751	81,128
Public Banks	1,156,391	501,056	551,815	152,865
Intervened Bank	127,906	92,406	60,873	20,180
Finance Companies	**1,198,347**	**726,491**	**770,651**	**328,796**
Cooperatives	**1,601,145**	**546,975**	**845,325**	**596,700**
Exchange Houses	**76,163**	**0**	**0**	**49,519**
Deposit General Warehouses	**27,464**	**1,640 (3)**	**0**	**24,053**

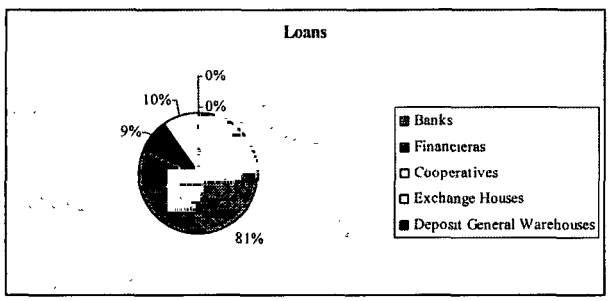
(1) Data at December 2000.
(2) Data at December 1999 due to last data available.
(3) Obligaciones.
Source: World Bank and Superintendency of Banks (Central Bank of Paraguay).

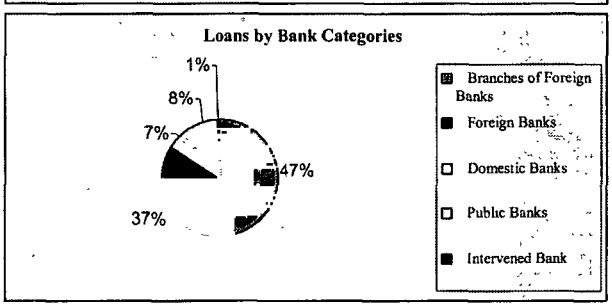


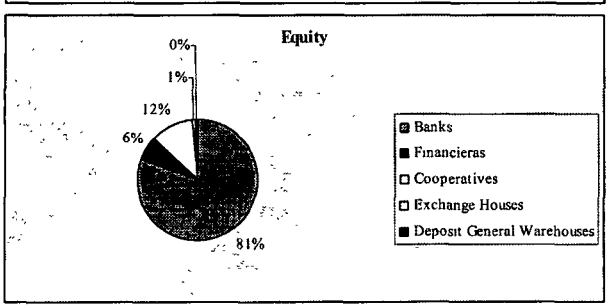












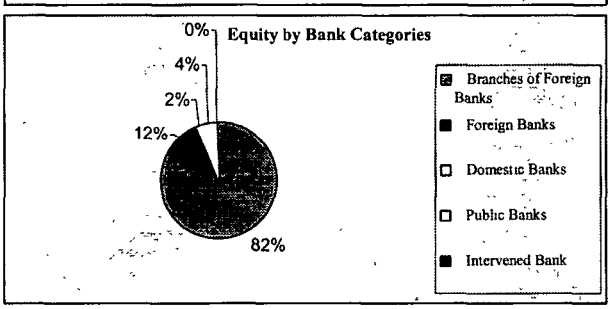


TABLE 3. ASSETS OF THE BANKING SYSTEM
(in million guaraníes)

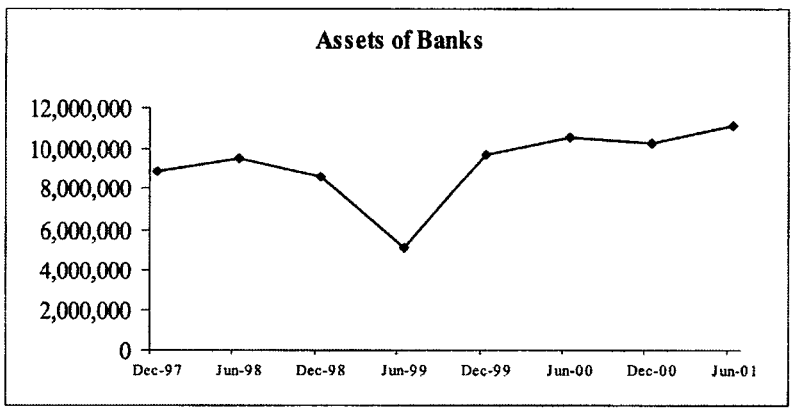
Assets	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**8,915,484**	**9,576,152**	**8,625,853**	**5,110,672**	**9,687,627**	**10,593,504**	**10,331,961**	**11,180,722**
Branches of Foreign Banks	3,155,700	3,560,230	4,017,003	476,845	4,682,863	5,050,175	4,834,828	5,032,315
Foreign Banks	2,427,277	2,719,141	2,777,451	2,574,662	2,896,052	3,574,611	3,532,446	4,211,520
of which:								
intervened banks (1)	380,842	423,794	363,408	0	0	0	0	0
rest of banks	2,046,435	2,295,347	2,414,043	2,574,662	2,896,052	3,574,611	3,532,446	4,211,520
Domestic Banks (2)	1,615,324	1,620,024	616,304	702,612	783,736	678,220	684,175	780,496
of which:								
intervened banks (1)	993,119	926,721	0	0	0	0	0	0
rest of banks	622,205	693,303	616,304	702,612	783,736	678,220	684,175	780,496
Public Banks	1,622,934	1,580,492	1,122,477	1,261,145	1,229,855	1,202,712	1,152,606	1,156,391
of which:								
intervened banks (1)	570,777	501,106	0	0	0	0	0	0
rest of banks	1,052,157	1,079,386	1,122,477	1,261,145	1,229,855	1,202,712	1,152,606	1,156,391
Intervened Bank (3)	94,249	96,265	92,618	95,408	95,121	87,786	127,906	0
Finance Companies	**553,684**	**648,042**	**696,392**	**767,447**	**827,065**	**965,447**	**1,093,491**	**1,198,347**

(1) These rows includes data from banks that were intervened at different periods of time in each category. One foreign bank was intervened in the second semester of 1998 and one in the first semester of 1999, five domestic banks in the second semester of 1998 and one public bank in the second semester of 1998.

(2) One bank changed category from domestic to foreign bank in the first semester of 2000. At the end of 1999 its total assets were 196,603 million guaranies.

(3) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened

Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)



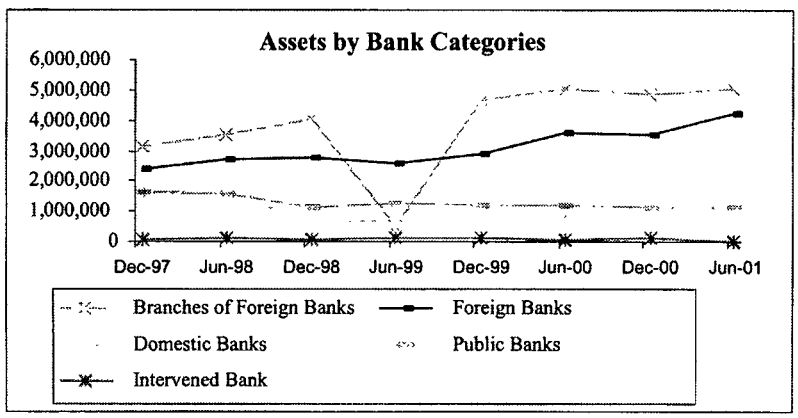


TABLE 4. DEPOSITS OF THE BANKING SYSTEM
(in million guaraníes)

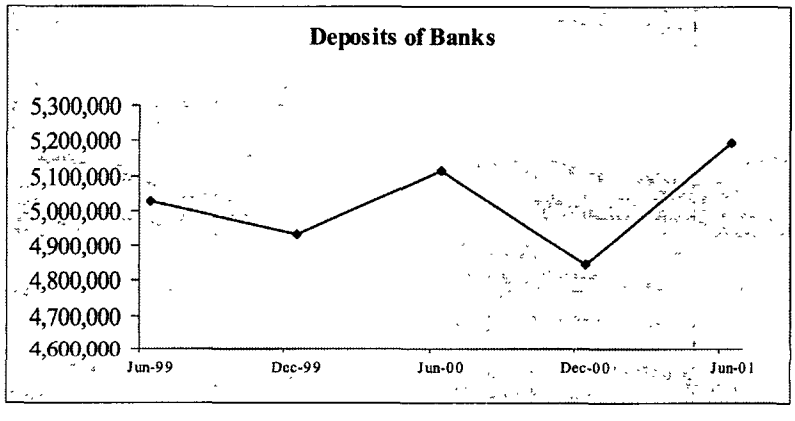
Deposits	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**4,386,974**	**4,719,675**	**4,213,267**	**5,026,273**	**4,935,034**	**5,111,880**	**4,848,100**	**5,198,107**
Branches of Foreign Banks	2,237,223	2,700,536	3,097,345	3,713,431	3,615,291	3,986,976	3,788,778	4,122,444
Foreign Banks	1,801,854	2,047,730	2,056,755	1,884,174	2,261,331	2,868,921	2,841,101	3,422,369
of which:								
intervened banks (1)	323,667	367,194	319,576	0	0	0	0	0
rest of banks	1,478,187	1,680,536	1,737,179	1,884,174	2,261,331	2,868,921	2,841,101	3,422,369
Domestic Banks (2)	1,155,335	1,112,232	440,253	508,371	553,994	458,457	440,480	574,607
of which:								
intervened banks (1)	563,096	585,090	0	0	0	0	0	0
rest of banks	592,239	527,142	440,253	508,371	553,994	458,457	440,480	574,607
Public Banks	924,919	836,699	613,223	739,435	694,938	601,848	526,436	501,056
of which:								
intervened banks (1)	292,503	273,497	0	0	0	0	0	0
rest of banks	632,416	563,202	613,223	739,435	694,938	601,848	526,436	501,056
Intervened Banks (3)	69,497	70,208	62,446	65,036	70,811	64,599	92,406	0
Finance Companies	**n.a**	**n.a**	**n.a**	**488,818**	**496,865**	**583,720**	**657,155**	**726,491**

(1) These rows includes data from banks that were intervened at different periods of time in each category One foreign bank was intervened in the second semester of 1998 and one in the first semester of 1999, five domestic banks in the second semester of 1998 and one public bank in the second semester of 1998

(2) One bank changed category from domestic to foreign bank in the first semester of 2000. At the end of 1999 its total assets were 196,603 million guaranies.

(3) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened.

Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)



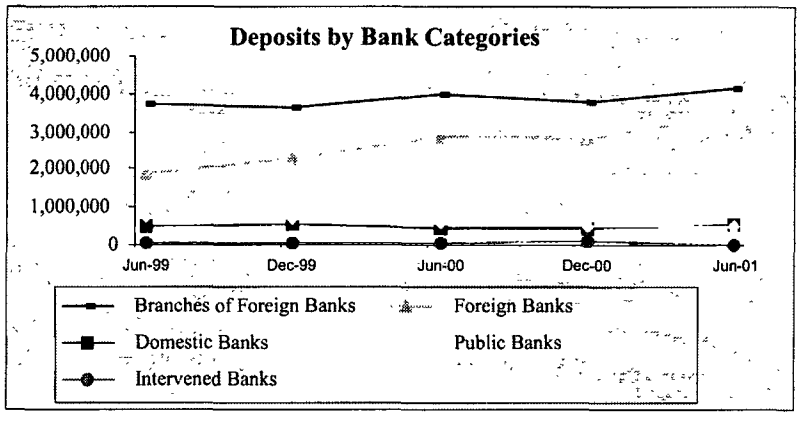


TABLE 5. LOANS OF THE BANKING SYSTEM
(in million guaraníes)

Loans	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**5,462,968**	**5,636,268**	**5,109,737**	**5,541,695**	**5,732,942**	**6,491,095**	**6,628,851**	**7,118,168**
Branches of Foreign Banks	1,992,512	2,130,928	2,339,548	2,877,378	2,852,309	3,283,102	3,160,140	3,387,730
Foreign Banks	1,415,837	1,526,517	1,593,956	1,559,236	1,691,128	2,099,571	2,337,236	2,675,872
of which:								
intervened banks (1)	159,384	178,059	141,545	0	0	0	0	0
rest of banks	1,256,453	1,348,458	1,452,411	1,559,236	1,691,128	2,099,571	2,337,236	2,675,872
Domestic Banks (2)	896,725	967,547	402,759	431,680	510,694	442,682	468,121	502,751
of which:								
intervened banks (1)	478,292	535,559	0	0	0	0	0	0
rest of banks	418,433	431,988	402,759	431,680	510,694	442,682	468,121	502,751
Public Banks	1,095,148	946,579	717,205	615,964	622,272	614,737	602,481	551,815
of which:								
intervened banks (1)	317,373	236,666	0	0	0	0	0	0
rest of banks	777,775	709,913	717,205	615,964	622,272	614,737	602,481	551,815
Intervened Banks (3)	62,746	64,697	56,269	57,437	56,539	51,003	60,873	0
Finance Companies	**n.a.**	**n.a.**	**n.a.**	**545,294**	**551,456**	**600,765**	**707,698**	**770,651**

(1) These rows includes data from banks that were intervened at different periods of time in each category One foreign bank was intervened in the second semester of 1998 and one in the first semester of 1999, five domestic banks in the second semester of 1998 and one public bank in the second semester of 1998

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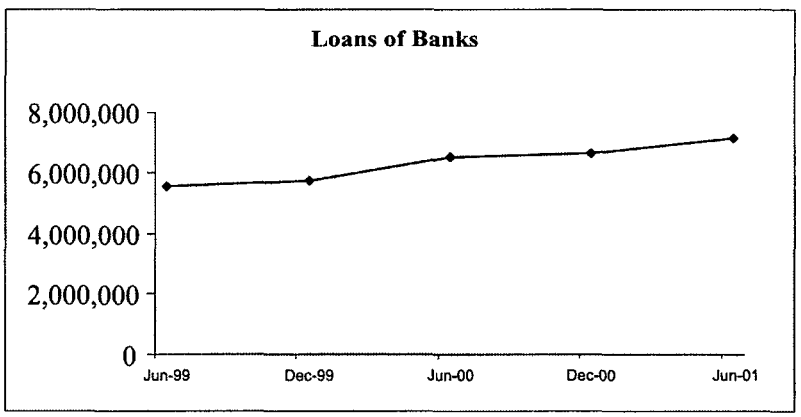

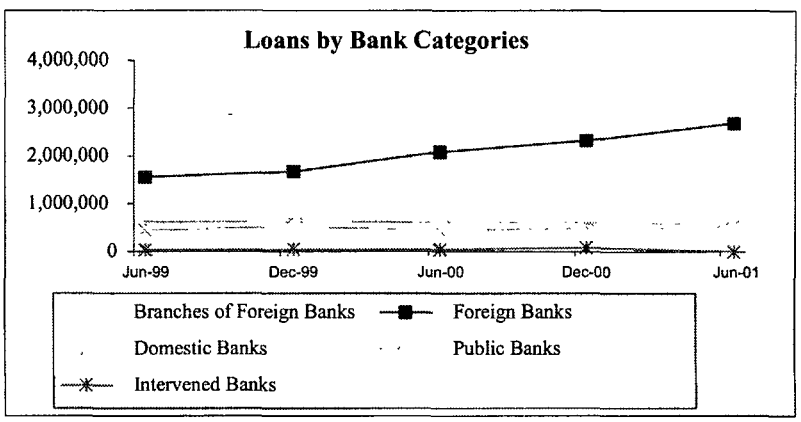

TABLE 6. EQUITY OF THE BANKING SYSTEM
(in million guaraníes)

Equity	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**1,284,234**	**1,375,344**	**1,325,438**	**1,294,071**	**1,267,232**	**1,364,502**	**1,345,863**	**1,408,917**
Branches of Foreign Banks	465,775	522,497	599,052	616,429	615,386	669,755	653,966	692,265
Foreign Banks	378,494	395,079	438,550	382,046	398,200	449,822	457,786	482,659
of which:								
intervened banks (1)	41,169	46,536	38,904	0	0	0	0	0
rest of banks	337,325	348,543	399,646	382,046	398,200	449,822	457,786	482,659
Domestic Banks (2)	206,844	226,354	91,019	93,779	99,889	72,793	78,006	81,128
of which:								
intervened banks (1)	131,219	160,145	0	0	0	0	0	0
rest of banks	75,625	66,209	91,019	93,779	99,889	72,793	78,006	81,128
Public Banks	218,763	214,786	178,368	181,806	134,861	154,469	135,925	152,865
of which:								
intervened banks (1)	106,092	102,993	0	0	0	0	0	0
rest of banks	112,671	111,793	178,368	181,806	134,861	154,469	135,925	152,865
Intervened Banks (3)	14,358	16,628	18,449	20,011	18,896	17,663	20,180	0
Finance Companies	**n.a.**	**n.a.**	**n.a.**	**283,123**	**280,566**	**277,450**	**303,444**	**328,796**

(1) These rows includes data from banks that were intervened at different periods of time in each category. One foreign bank was intervened in the second semester of 1998 and one in the first semester of 1999, five domestic banks in the second semester of 1998 and one public bank in the second semester of 1998

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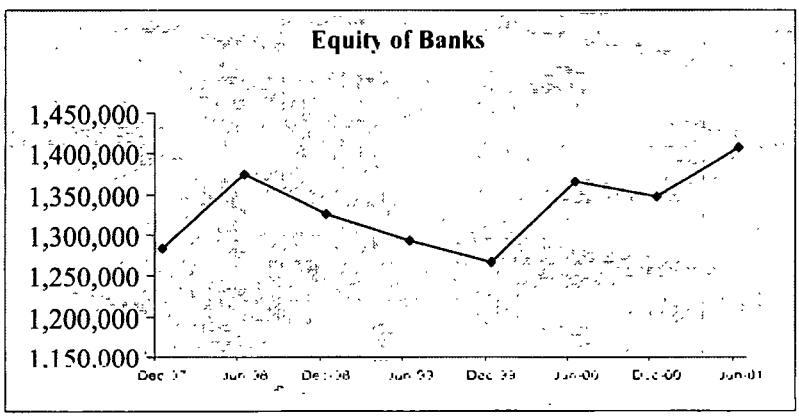


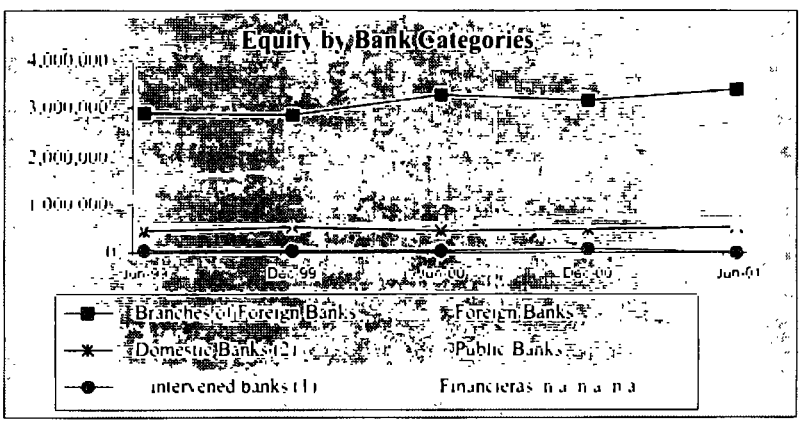
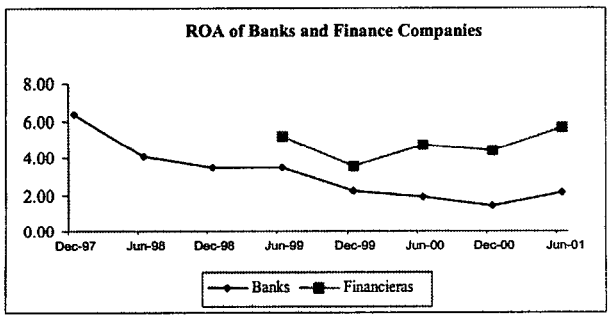


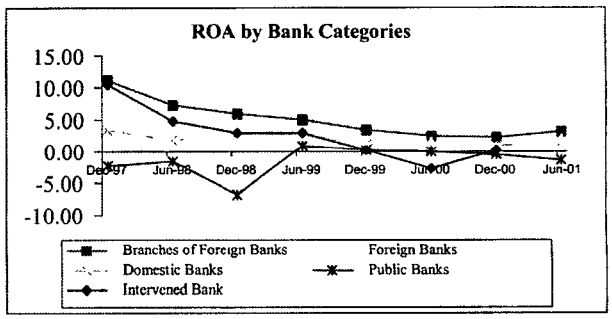
TABLE 7. PROFITABILITY OF THE BANKING SYSTEM
(in percentage)

ROA	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**6.38**	**4.10**	**3.44**	**3.48**	**2.21**	**1.85**	**1.44**	**2.15**
Branches of Foreign Banks	11.05	7.27	5.86	5.11	3.38	2.60	2.29	3.17
Foreign Banks	8.25	4.63	4.28	2.03	1.52	1.62	1.02	1.97
Domestic Banks	3.37	1.85	2.88	2.65	1.21	0.81	0 99	1.64
Public Banks	-2.31	-1.50	-6.93	0.80	0.15	0.01	-0.52	-1.31
Intervened Bank (1)	10.55	4.80	2.91	3.01	0.28	-2.81	0.21	-
Finance Companies	**n.a.**	**n.a.**	**n.a.**	**5.14**	**3.56**	**4.71**	**4.39**	**5.63**

(1) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened.

Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)

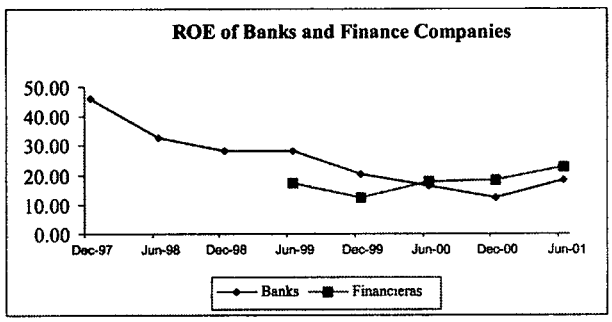




ROE	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**45.82**	**32.64**	**28.00**	**28.33**	**20.06**	**16.35**	**12.38**	**18.55**
Branches of Foreign Banks	79.00	62.68	60.28	47.34	33.51	21.52	20.19	25.92
Foreign Banks	55.26	37.45	36.75	14.62	12.37	13.75	8.55	18.71
Domestic Banks	26.64	13.91	22.67	20.31	9.68	7.02	8.88	17.13
Public Banks	-16.87	-10.44	-30.37	5.69	1.43	0.09	-4.19	-9.48
Intervened Bank (1)	73.51	32.35	17.14	15.48	1.42	-13.06	1.35	-
Finance Companies	**n.a.**	**n.a.**	**n.a**	**17.34**	**12.55**	**17.72**	**18.51**	**22.73**

(1) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened

Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)



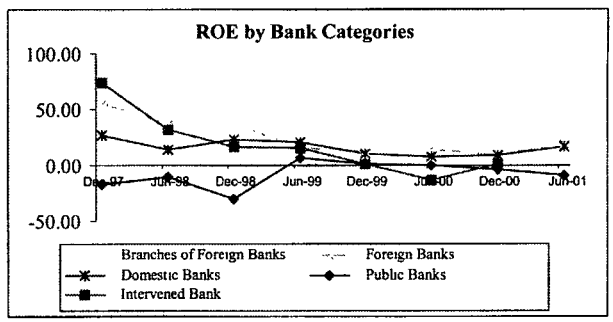
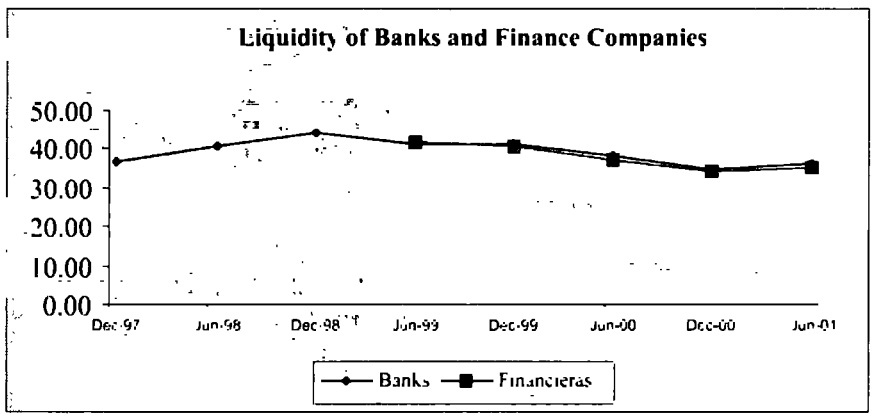


TABLE 8. LIQUIDITY OF THE BANKING SYSTEM
(in percentage)

Liquidity = Liquid Assets/Deposits (1)	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**36.82**	**40.93**	**44.15**	**40.96**	**41.35**	**38.11**	**34.67**	**36.15**
Branches of Foreign Banks	41.71	46.27	46.29	40.29	38.35	33.02	32.49	32.14
Foreign Banks	46.35	48.80	46.90	42 42	42.48	41.06	33.06	36.61
Domestic Banks	29.45	29.08	32.47	36 90	30.95	31.62	30.69	30.98
Public Banks	16.22	21.20	33.68	43.75	62.62	63 39	63 00	71.92
Intervened Bank (2)	26.77	24.43	32.98	26.23	23.66	19.04	38.37	-
Finance Companies	**n.a**	**n.a.**	**n.a.**	**41.51**	**40.68**	**37.30**	**34.46**	**35.15**

(1) Liquid assets include "disponibilidades" and "inversiones temporales".
(2) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened
Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)



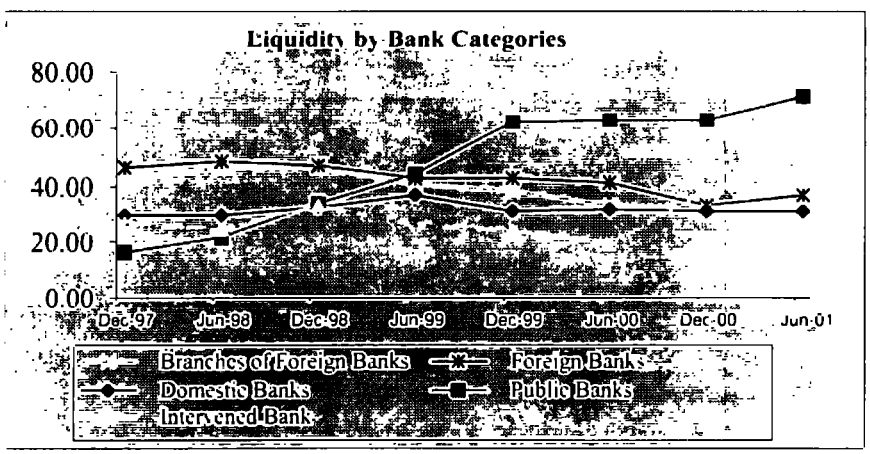
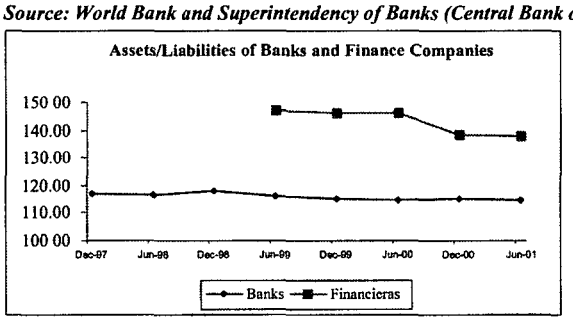


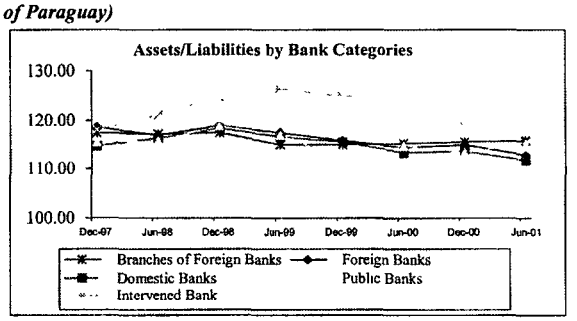
TABLE 9. SOLVENCY OF THE BANKING SYSTEM
(in percentage)

Assets/Liabilities	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**116.83**	**116.67**	**118.16**	**116.00**	**115.05**	**114.78**	**114.98**	**114.42**
Branches of Foreign Banks	117.32	117.20	117.53	114.92	115.13	115.29	115.64	115.95
Foreign Banks	118.47	117.00	118.75	117.42	115.94	114.40	114.89	112.94
Domestic Banks	114.86	116.49	118.26	116.63	115.63	113.39	113.75	111.60
Public Banks	115.58	115.73	118.89	116.84	112.32	114.74	113.37	115.23
Intervened Bank (1)	117.97	120.88	124.87	126.54	124.79	125.19	118.73	-
Finance Companies	**n.a.**	**n.a.**	**n.a.**	**147.24**	**146.09**	**146.33**	**138.41**	**137.81**

(1) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened

Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)

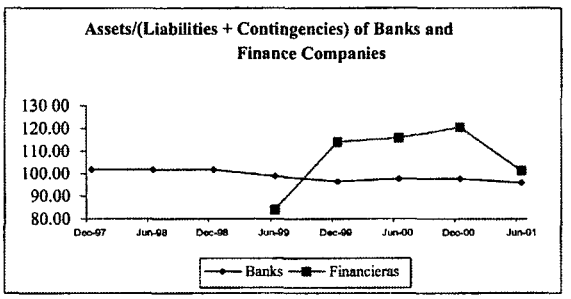


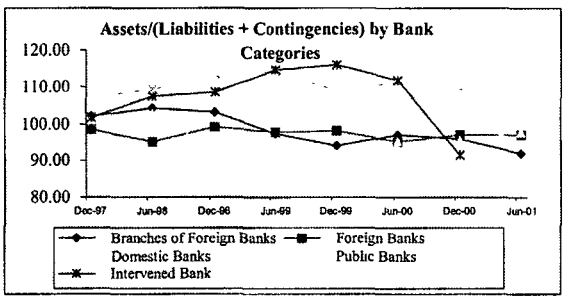


Assets/(Liabilities + Contingencies)	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**101.74**	**101.90**	**102.02**	**98.88**	**96.53**	**97.56**	**97.59**	**95.88**
Branches of Foreign Banks	101.93	104.08	103.12	97.39	94.05	96.81	95.92	91.87
Foreign Banks	98.34	95.21	99.09	97.52	97.98	95 16	96.95	96.79
Domestic Banks	101.40	102.54	92.93	91.82	90.38	95.05	95.34	97.63
Public Banks	107.29	109.21	113.59	114.28	108.98	111 43	109.63	111.96
Intervened Bank (1)	101.66	107.54	108.31	114.56	115.96	111.84	91.57	-
Finance Companies	**n.a.**	**n.a.**	**n.a.**	**84.17**	**114.07**	**115.95**	**120.51**	**100.90**

(1) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened.

Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)

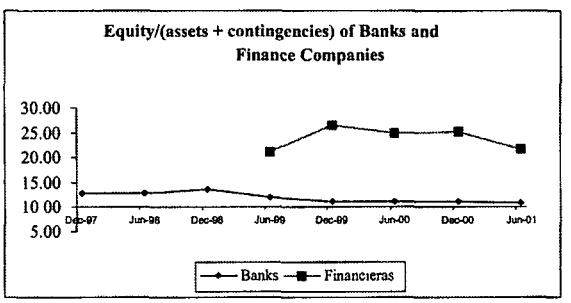




Equity/(Assets + Contingencies)	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**12.78**	**12.77**	**13.55**	**12.00**	**11.21**	**11.18**	**11.28**	**10.78**
Branches of Foreign Banks	13.08	13.25	13.33	11.23	11.00	11.38	11.48	11.22
Foreign Banks	13.30	12.15	13.53	12.64	11.87	10.69	11.16	9.99
Domestic Banks	11.60	12.68	12.47	11.58	10.89	10.09	10.34	9.21
Public Banks	12.64	12.92	15.29	14.14	10.67	12.52	11.45	12.89
Intervened Bank (1)	13.41	15.67	17.75	19.37	18.72	18.37	12.62	-
Finance Companies	**n.a.**	**n.a.**	**n.a.**	**21.26**	**26.46**	**24.95**	**25.06**	**21.68**

(1) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened.

Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)



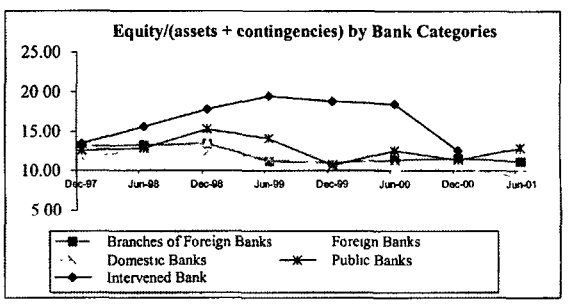
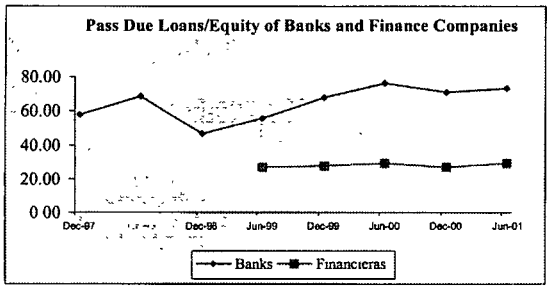


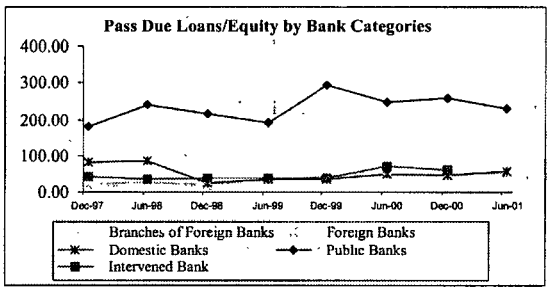
TABLE 10. ASSET QUALITY OF THE BANKING SYSTEM
(in percentage)

Pass Due Loans/ Equity	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**57.93**	**68.21**	**46.11**	**55.48**	**67.99**	**76.05**	**71.18**	**73.05**
Branches of Foreign Banks	16 84	19.49	19.72	31.66	41.52	59.62	54.23	54.73
Foreign Banks	22 86	28.92	18.00	34.12	41.65	46.71	45.31	52.39
Domestic Banks	81.67	83.56	23.61	37.12	36.87	49 31	46 23	55.68
Public Banks	182.12	241.64	217.67	192.62	293.95	248.40	257.89	230.48
Intervened Bank (1)	43.10	35.99	39.29	40.45	37.82	70.75	59.78	-
Finance Companies	**n.a.**	**n.a.**	**n.a.**	**26.96**	**27.47**	**28.69**	**26.75**	**29.23**

(1) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened

Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)





Pass due Loans/ Total Loans	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**12.97**	**15.93**	**11.79**	**12.93**	**14.77**	**18.23**	**16.20**	**17.19**
Branches of Foreign Banks	3.99	4.94	5.22	7.19	9.30	15.22	13.75	14.54
Foreign Banks	6.13	7.49	5.01	8.45	9.78	11.43	10.28	11.66
Domestic Banks	16.42	17.18	5.46	8.36	7.53	9.25	8.51	9.13
Public Banks	31.59	46.26	44.46	44.51	49.11	51.28	44.66	49.06
Intervened Bank (1)	9.98	9.46	11 76	13.33	12.56	23.13	19.28	-
Finance Companies	**n.a.**	**n.a.**	**n.a.**	**12.82**	**12.86**	**12.97**	**10.95**	**12.18**

(1) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened.

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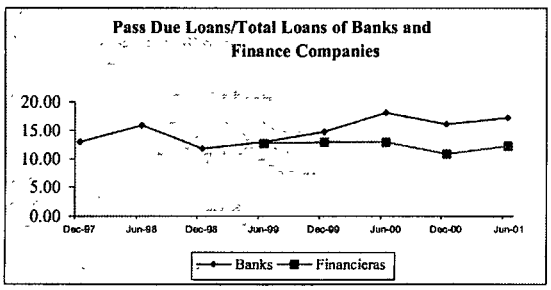
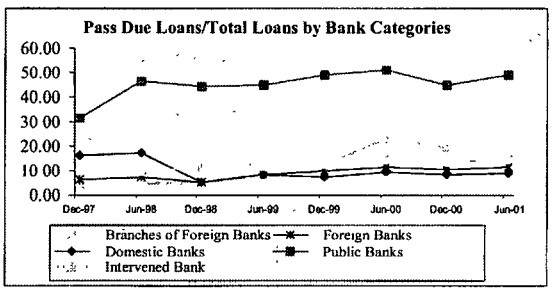
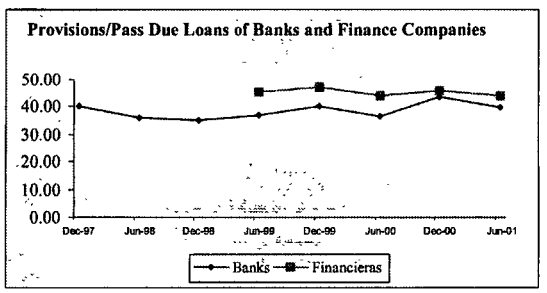


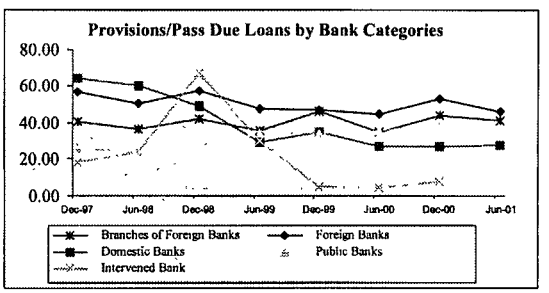


Provisions/Pass due Loans	Dec-97	Jun-98	Dec-98	Jun-99	Dec-99	Jun-00	Dec-00	Jun-01
Banks	**40.14**	**35.86**	**34.90**	**36.72**	**40.11**	**36.52**	**43.38**	**39.79**
Branches of Foreign Banks	40.48	36.13	42.02	35.63	45.73	34.64	43.49	40.72
Foreign Banks	56.33	49.87	56.83	47.58	46.73	44.33	53.07	46.15
Domestic Banks	64.09	59.70	48.79	29.36	34.89	26.99	26.90	27.56
Public Banks	25.70	23.40	27.35	34.17	34.29	35.29	39.67	35 79
Intervened Bank (1)	18.22	23.86	67.02	30.02	4.98	4.47	7.34	-
Finance Companies	**n.a.**	**n.a.**	**n.a.**	**45.14**	**47.07**	**44.13**	**45.73**	**43.85**

(1) This row includes data for the bank that has been intervened in the first quarter of 2001, that is, the only bank that remains intervened.

Source: World Bank and Superintendency of Banks (Central Bank of Paraguay)





C. FINANCIAL STATEMENTS STRESS TEST

TABLE 11. ADJUSTMENT TO CAPITAL ADEQUACY RATIO (CAR) (IN GUARANÍES)

Entity	Adjustment CAR	Reported Equity	Reported Equity after Adjustment CAR	Reported Risk Weigthed Assets (RWA)	Adjusted RWA	Reported Capital Adequacy Ratio (CAR)	Adjusted CAR
	1	2	3=2-1	4	5	6=2/4	7=3/4
Branches of Foreign Banks	26,504,500,000	598,770,000,000	572,265,500,000	3,613,856,000,000	4,507,913,000,000	16.57	12.69
Foreign Banks	31,168,000,000	440,246,000,000	409,078,000,000	2,583,114,000,000	3,097,485,000,000	17.04	13.21
Domestic Banks	4,628,500,000	74,948,000,000	70,319,500,000	513,246,000,000	789,830,500,000	14.60	8 90
Public Banks	18,546,500,000	160,468,000,000	141,921,500,000	672,268,000,000	1,072,881,500,000	23.87	13.23
Intervened Banks*	1,318,500,000	12,947,000,000	11,628,500,000	100,475,000,000	136,415,000,000	12.89	8.52
Total Banks	**82,166,000,000**	**1,287,379,000,002**	**1,205,213,000,002**	**7,482,959,000,004**	**9,604,525,000,000**	**17.20**	**12.55**
Total Finance Companies	**8,805,500,000**	**286,968,000,000**	**278,162,500,000**	**989,204,000,000**	**1,032,514,000,000**	**29.01**	**26.94**

** Data at the end of December 2000*

Source: World Bank

TABLE 12. ADJUSTMENT 1: LOAN LOSSES PROVISIONS INCREASE BASED ON ADJUSTMENT TO DEDUCTIBLE COLLATERAL (IN GUARANÍES)

Entity	Adjustment 1	Reported Equity	Reported Equity after Adjustment 1	Adjusted Equity	Adjusted Equity after Adjustment 1	Adjusted RWA	Adjusted CAR	Adjusted CAR after Adjustment 1
	1	2	3=2-1	4	5=4-1	6	7=4/6	8=4/(6-1)
Branches of Foreign Banks	84,493,963,038	598,770,000,000	514,276,036,962	572,265,500,000	487,771,536,962	4,507,913,000,000	12.69	11.03
Foreign Banks	64,754,456,489	440,246,000,000	375,491,543,511	409,078,000,000	344,323,543,511	3,097,485,000,000	13.21	11.35
Domestic Banks	14,109,479,898	74,948,000,000	60,838,520,102	70,319,500,000	56,210,020,102	789,830,500,000	8.90	7.25
Public Banks	107,061,407,350	160,468,000,000	53,406,592,650	141,921,500,000	34,860,092,650	1,072,881,500,000	13.23	3.61
Intervened Banks*	5,201,062,152	12,947,000,000	7,745,937,848	11,628,500,000	6,427,437,848	136,415,000,000	8.52	4.90
Total Banks	**275,620,368,927**	**1,287,379,000,000**	**1,011,758,631,073**	**1,205,213,000,000**	**929,592,631,073**	**9,604,525,000,000**	**12.55**	**9.96**
Total Finance Companies	**12,219,865,900**	**286,968,000,000**	**274,748,134,100**	**278,162,500,000**	**265,942,634,100**	**1,032,514,000,000**	**26.94**	**26.07**

** Data at the end of December 2000*

Adjustment 1 = increase in provisions by risk category adjusting deductible collateral (money 100%, mortgage 50%, other 0%)

Source: World Bank

TABLE 13. ADJUSTMENT 2: PROVISIONS FOR REFINANCED LOANS (IN GUARANÍES)

Entity	Adjustment 2	Reported Equity	Reported Equity after Adjustment 2	Adjusted Equity	Adjusted Equity after Adjustment 2	Adjusted RWA	Adjusted CAR	Adjusted CAR after Adjustment 2
	1	2	3=2-1	4	5=4-1	6	7=4/6	8=4/(6-1)
Branches of Foreign Banks	166,786,141,247	598,770,000,000	431,983,858,753	572,265,500,000	405,479,358,753	4,507,913,000,000	12.69	9.34
Foreign Banks	91,963,423,025	440,246,000,000	348,282,576,975	409,078,000,000	317,114,576,975	3,097,485,000,000	13.21	10.55
Domestic Banks	19,794,148,107	74,948,000,000	55,153,851,893	70,319,500,000	50,525,351,893	789,830,500,000	8.90	6.56
Public Banks	61,705,522,259	160,468,000,000	98,762,477,741	141,921,500,000	80,215,977,741	1,072,881,500,000	13.23	7.93
Intervened Banks*	6,180,494,874	12,947,000,000	6,766,505,126	11,628,500,000	5,448,005,126	136,415,000,000	8.52	4.18
Total Banks	**346,429,729,512**	**1,287,379,000,000**	**940,949,270,488**	**1,205,213,000,000**	**858,783,270,488**	**9,604,525,000,000**	**12.55**	**9.28**
Total Finance Companies	**21,334,389,437**	**286,968,000,000**	**265,633,610,563**	**278,162,500,000**	**256,828,110,563**	**1,032,514,000,000**	**26.94**	**25.40**

** Data at the end of December 2000*

Adjustment 2 = increase in provisions due to refinanced loans. Refinanced loans in risk category 1 net of estimated provisions and Ccollateral (modified following adjustment 1) reclassified to risk category 3 (20% of provision) and interest and dinamic effect (30% of provision)

Source: World Bank

TABLE 14. ADJUSTMENT 3: GENERIC PROVISION AND INCREASE IN PROVISION FOR LOANS IN RISK CATEGORY 2 (IN GUARANÍES)

Entity	Adjustment 3	Reported Equity	Reported Equity after Adjustment 3	Adjusted Equity	Adjusted Equity after Adjustment 3	Adjusted RWA	Adjusted CAR	Adjusted CAR after Adjustment 3
	1	2	3=2-1	4	5=4-1	6	7=4/6	8=4/(6-1)
Branches of Foreign Banks	48,076,652,314	598,770,000,000	550,693,347,686	572,265,500,000	524,188,847,686	4,507,913,000,000	12.69	11.75
Foreign Banks	36,602,318,145	440,246,000,000	403,643,681,855	409,078,000,000	372,475,681,855	3,097,485,000,000	13.21	12.17
Domestic Banks	8,038,445,681	74,948,000,000	66,909,554,319	70,319,500,000	62,281,054,319	789,830,500,000	8.90	7.97
Public Banks	5,864,203,830	160,468,000,000	154,603,796,170	141,921,500,000	136,057,296,170	1,072,881,500,000	13.23	12.75
Intervened Banks*	1,374,974,825	12,947,000,000	11,572,025,175	11,628,500,000	10,253,525,175	136,415,000,000	8.52	7.59
Total Banks	**99,956,594,795**	**1,287,379,000,000**	**1,187,422,405,205**	**1,205,213,000,000**	**1,105,256,405,205**	**9,604,525,000,000**	**12.55**	**11.63**
Total Finance Companies	**15,919,405,058**	**286,968,000,000**	**271,048,594,942**	**278,162,500,000**	**262,243,094,942**	**1,032,514,000,000**	**26.94**	**25.80**

** Data at the end of December 2000*

Adjustment 3 = generic provision of 1.5% for risk category 1 and increase in provision for risk category 2 from 1% to 10%.

Source: World Bank

TABLE 15. ADJUSTMENT 4: REPOSSESSED PROPERTY AND DEFERRED CHARGES (IN GUARANÍES)

Entity	Adjustment 4	Reported Equity	Reported Equity after Adjustment 4	Adjusted Equity	Adjusted Equity after Adjustment 4	Adjusted RWA	Adjusted CAR	Adjusted CAR after Adjustment 4
	1	2	3=2-1	4	5=4-1	6	7=4/6	8=4/(6-1)
Branches of Foreign Banks	12,689,689,306	598,770,000,000	586,080,310,694	572,265,500,000	559,575,810,694	4,507,913,000,000	12.69	12.45
Foreign Banks	28,483,057,285	440,246,000,000	411,762,942,715	409,078,000,000	380,594,942,715	3,097,485,000,000	13.21	12.40
Domestic Banks	6,720,352,837	74,948,000,000	68,227,647,163	70,319,500,000	63,599,147,163	789,830,500,000	8.90	8.12
Public Banks	19,751,993,969	160,468,000,000	140,716,006,031	141,921,500,000	122,169,506,031	1,072,881,500,000	13.23	11.60
Intervened Banks*	6,003,599,668	12,947,000,000	6,943,400,332	11,628,500,000	5,624,900,332	136,415,000,000	8.52	4.31
Total Banks	**73,648,693,064**	**1,287,379,000,000**	**1,213,730,306,936**	**1,205,213,000,000**	**1,131,564,306,936**	**9,604,525,000,000**	**12.55**	**11.87**
Total Finance Companies	**18,937,532,468**	**286,968,000,000**	**268,030,467,532**	**278,162,500,000**	**259,224,967,532**	**1,032,514,000,000**	**26.94**	**25.58**

** Data at the end of December 2000*

Adjustment 4 = increase in provisions due to adkustments in repossesed property and deferred charges.

Source: World Bank

TABLE 16. GLOBAL ADJUSTMENT: ACCUMULATED EFFECT OF ADJUSTMENTS 1 TO 4 (IN GUARANÍES)

Entity	Global Adjustment	Reported Provisions Surplus/Deficit over MRP	Reported Equity	Reported Equity after Global Adjustment	Adjusted Equity	Adjusted Equity after Global Adjustment	Adjusted RWA	Adjusted CAR	Adjusted CAR after Global Adjustment
	1	2	3	4=3-1+2	4	5=4-1	6	7=4/6	8=4/(6-1)
Branches of Foreign Banks	312,046,445,905	15,305,663,000	598,770,000,000	302,029,217,095	572,265,500,000	260,219,054,095	4,507,913,000,000	12.69	6.20
Foreign Banks	221,803,254,944	4,390,293,000	440,246,000,000	222,833,038,056	409,078,000,000	187,274,745,056	3,097,485,000,000	13.21	6.51
Domestic Banks	48,662,426,522	1,080,985,106	74,948,000,000	27,366,558,584	70,319,500,000	21,657,073,478	789,830,500,000	8.90	2.92
Public Banks	194,383,127,409	1,549,769,000	160,468,000,000	-32,365,358,409	141,921,500,000	-52,461,627,409	1,072,881,500,000	13.23	-5.97
Intervened Banks*	18,760,131,519	0	12,947,000,000	-5,813,131,519	11,628,500,000	-7,131,631,519	136,415,000,000	8.52	-6.06
Total Banks	**795,655,386,299**	**22,326,710,106**	**1,287,379,000,000**	**514,050,323,807**	**1,205,213,000,000**	**409,557,613,701**	**9,604,525,000,000**	**12.55**	**4.65**
Total Finance Companies	**68,411,192,864**	**847,000,000**	**286,968,000,000**	**219,403,807,136**	**278,162,500,000**	**209,751,307,136**	**1,032,514,000,000**	**26.94**	**21.76**

** Data at the end of December 2000*

Glogal Adjustment 1 = accumulated effect of adjustments 1 to 4 taking into account reportedprovisions surplus/deficit.

Source: World Bank

D. MACROECONOMIC VARIABLES SHOCK STRESS TEST

TABLE 18. REGRESSION RESULTS

Regressions	1 Lag					3 Lags				
	Nominal Exchange Rate Elasticity	Real Economic Activity Growth Elasticity	Regression Statistics			Nominal Exchange Rate Elasticity	Real Economic Activity Growth Elasticity	Regression Statistics		
			R^2	D-W	F			R^2	D-W	F
Banks	**0.31**	**0.27**	72%	1.84	11.95	0.17	0.17	74%	2.10	7.60
Branches of Foreign Banks	**0.96**	**0.27**	92%	1.71	53.40	0.95	0.11	95%	1.57	49.27
Foreign Banks	**0.76**	**0.39**	63%	1.89	4.91	0.60	0.57	67%	1.65	2.92
Domestic Banks	**0.68**	**0.47**	40%	2.11	3.00	0.61	0.61	43%	1.87	1.77
Public Bank	0.36	0.27	84%	1.27	24.64	**0.10**	**0.03**	95%	2.38	48.22
Finance Companies	0.01	0.07	53%	1.81	1.83	**0.24**	**0.12**	71%	1.92	1.92

Source: World Bank and Central Bank of Paraguay

TABLE 19. STRESS TEST 1 + 2: NOMINAL EXCHANGE RATE AND REAL ECONOMIC ACTIVITY GROWTH SHOCKS REGRESSION ELASTICITIES CALCULATED FOR THE SYSTEM NET EFFECT FROM ADJUSTED CAR (IN GUARANIES)

Entity	Stress Test 1 + 2	Reported Equity	Reported Equity after Stress Test 1 + 2	Adjusted Equity	Adjusted Equity after Stress Test 1 + 2	Adjusted RWA	Adjusted CAR	Adjusted CAR after Stress Test 1 + 2
	1	2	3=2-1	4	5=4-1	6	7=4/6	8=4/(6-1)
Branches of Foreign Banks	18,469,948,229	598,770,000,000	580,300,051,771	572,265,500,000	553,795,551,771	4,507,913,000,000	12.69	12.34
Foreign Banks	12,403,570,597	440,246,000,000	427,842,429,403	409,078,000,000	396,674,429,403	3,097,485,000,000	13.21	12.86
Domestic Banks	2,277,866,281	74,948,000,000	72,670,133,719	70,319,500,000	68,041,633,719	789,830,500,000	8.90	8.64
Public Banks	16,028,642,282	160,468,000,000	144,439,357,718	141,921,500,000	125,892,857,718	1,072,881,500,000	13.23	11.91
Intervened Banks*	605,961,079	12,947,000,000	12,341,038,921	11,628,500,000	11,022,538,921	136,415,000,000	8.52	8.12
Total Banks	**49,785,988,468**	**1,287,379,000,000**	**1,237,593,011,532**	**1,205,213,000,000**	**1,155,427,011,532**	**9,604,525,000,000**	**12.55**	**12.09**
Total Finance Companies	**4,372,142,238**	**286,968,000,000**	**282,595,857,762**	**278,162,500,000**	**273,790,357,762**	**1,032,514,000,000**	**26.94**	**26.63**

** Data at the end of December 2000*

Stress Test 1= 30% devaluation of the nominal exchange rate, Stress Test 2= 3%drop in real economic activity growth

Source: World Bank

TABLE 20. STRESS TEST 1 + 2: NOMINAL EXCHANGE RATE AND REAL ECONOMIC ACTIVITY GROWTH SHOCKS
REGRESSION ELASTICITIES CALCULATED BY BANK CATEGORIES
NET EFFECT FROM ADJUSTED CAR
(IN GUARANIES)

Entity	Stress Test 1 + 2	Reported Equity	Reported Equity after Stress Test 1 + 2	Adjusted Equity	Adjusted Equity after Stress Test 1 + 2	Adjusted RWA	Adjusted CAR	Adjusted CAR after Stress Test 1 + 2
	1	2	3=2-1	4	5=4-1	6	7=4/6	8=4/(6-1)
Branches of Foreign Banks	53,495,985,364	598,770,000,000	545,274,014,636	572,265,500,000	518,769,514,636	4,507,913,000,000	12.69	11.65
Foreign Banks	28,827,321,226	440,246,000,000	411,418,678,774	409,078,000,000	380,250,678,774	3,097,485,000,000	13.21	12.39
Domestic Banks	6,018,980,430	74,948,000,000	68,929,019,570	70,319,500,000	64,300,519,570	789,830,500,000	8.90	8.20
Public Banks	4,841,252,431	160,468,000,000	155,626,747,569	141,921,500,000	137,080,247,569	1,072,881,500,000	13.23	12.83
Intervened Banks*	1,273,041,714	12,947,000,000	11,673,958,286	11,628,500,000	10,355,458,286	136,415,000,000	8.52	7.66
Total Banks	**94,456,581,165**	**1,287,379,000,000**	**1,192,922,418,835**	**1,205,213,000,000**	**1,110,756,418,835**	**9,604,525,000,000**	**12.55**	**11.68**
Total Finance Companies	**92,718,823**	**286,968,000,000**	**286,875,281,177**	**278,162,500,000**	**278,069,781,177**	**1,032,514,000,000**	**26.94**	**26.93**

** Data at the end of December 2000*

Stress Test 1= 30% devaluation of the nominal exchange rate, Stress Test 2= 3%drop in real economic activity growth

Source: World Bank

IMAGING

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