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Argentina's Banking System: Restoring Financial Viability

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Summary¹

Argentina's banking system was, for most of the past decade, a fundamental pillar on which domestic confidence was based, as was the one-to-one convertibility of the Argentine peso to the US dollar. The strength of the banking system and the presence of major international banks allowed Argentina to withstand successive and severe external shocks (the crises of Mexico in 1994, Asia in 1997, Russia in 1998, Brazil in 1999, the appreciation of the US dollar against the Euro and Ecuador's default in 2000), as well as a severe and prolonged domestic recession since the third quarter of 1998 .

Prior to the crisis, the Argentinean banking system *per se* was considered relatively well capitalized, well provisioned, very liquid, well supervised and well managed. Indeed, 40% of the financial system's total assets were in the hands of first rate international banks. However, prior to the 2001 crisis, the banking system was considered highly vulnerable to three major risks: (i) high exposure to government risk; (ii) high exposure to credit risk denominated in foreign currency exposures; and (iii) signs of weakening of the autonomy of key institutions, particularly the BCRA and the SBIF.

The continuous weakening of the government's fiscal position, undermined the confidence of foreign investors and the public. This trend accelerated following the resignation of two finance ministers in March 2001, followed one month later by that of BCRA's President. These events unleashed the depositors' run on the banks, which continued throughout most of 2001, resulting by year-end in a loss of bank deposits of approximately US\$18 billion (about 20%). The run on the banks depleted banks' liquidity, forcing them to further reduce credit to the private sector and to inordinately rely on support from the BCRA's lender-of-last-resort (LOLR) facility. Imposition of the "corralito" in December 2001 led to public uproar and riots, and ultimately to the resignation of President de la Rúa, followed by additional instability, culminating with the largest ever sovereign default on the domestic and foreign public debt.

Following the outbreak of the crisis, the Government adopted questionable policy measures, particularly an asymmetric devaluation of the peso and asymmetric indexation of banks' assets and liabilities, that resulted in huge losses to banks, destroying depositors' confidence in the system and rendering uneconomical the scale of most large banks due to the resulting overcapacity in the sector. These measures led to major financial mismatches in terms of currency, maturities, indexes, and yields, threatening the viability of the banking system. Even the most robust and well supervised banking system would not have been able to withstand the impact of the stock and flow losses that these mismatches generated, in addition to the contingent losses from the judicial injunctions that forced banks to redeem dollar deposits at market rates.

Moreover, while the Government has reluctantly and only partially compensated banks for the policy-incurred losses, the compensation has not been finalized, the bonds used to

¹ This paper carries the name of the authors and should be used and cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors' own and should not be attributed to the World Bank, its Executive Board of Directors, or any of its member countries. We appreciate comments received to earlier versions of this paper by Danny Leipziger, Augusto de la Torre, Axel van Trotsenburg, Juan Gaviria, Daniel F. Oks, Guillermo Perry and Aquiles Almansi.

repay banks are illiquid, their cash spread does not cover the cost of funds plus operational expenses, their economic value is contingent on future debt restructuring, and the government's fiscal sustainability, and this solution leads to an increasing share of government exposures in total bank assets. The latter have risen since 2001, from 23% to close to 50% by the end of 2002 for the system as a whole and it is likely to continue rising once the "compensations" are finalized. The termination of the Convertibility Law and the decisions taken to handle the crisis and allocate losses to the different parties, resulted also in a breach of property rights and private contracts, harming the credibility of the legal and judicial process and, potentially, inflicting long-term institutional damage. The necessary rebuilding of the banking system requires the preparation and implementation of an action plan and, as a first, *sine qua non*, condition, the restoration of the government's fiscal viability.

In order to assess the extent of problems for the banking system as a whole, this working paper presents a simple framework or "snapshot" of the system's balance sheet as of end 2002, synthesizing the operational cash flow impact of the mismatches discussed, by dividing the balance sheet into three "books" by "type of currency": the Argentinean peso "book", the indexed "book", and the dollar "book". This decomposition makes flow mismatches more evident.

Assuming various plausible rates of interest and spreads, banks end up with a negative net-cash interest margin of -1.8%, with fee income insufficient to break even on operational expenses. The resulting pre-provision losses of about 4.1% of total assets, implying some A\$7.7 billion in projected losses for a full year (in line with the annualized losses observed during the first half of 2003), must be refinanced with new deposits at market rates. Unless this fundamental unbalance is resolved, banks' economic insolvency is likely to worsen.

This working paper simulates the effect of four types of adjustments planned by the authorities to the three "books". The negative operational cash flow losses would be mitigated, but not solved, leaving the system with an estimated cash flow loss in 2003 of about A\$2.4 billion. Bank restructuring requires restoring economic solvency, which regulatory accounting forbearance per se cannot ever resolve. As it stands, therefore, the system is not able to attain equilibrium and halt its negative cash-flow losses which will not go away until the government's fiscal position improves, possibly with external assistance, and its capacity to service in cash a larger portion of its liabilities improves. There are parallels with other regional systemic banking crises in which the least cash solution has proven not to be the least cost solution.

The likely viability of all banks needs to be determined without further delay, conducting the necessary strategic and financial diagnostics - for private and public banks - in the context of a significantly smaller banking system because, simply stated, "there are not enough profitable business opportunities" for all of them.

One idea mentioned in the paper is the design of a fully funded special purpose vehicle (SPV) to facilitate and speed the banks' recovery. The support that the SPV could provide would be conditioned to the adoption of holding actions aimed at cost reduction, and to the willingness of shareholders to contribute fresh capital.

***“The trouble with banks:
Nobody loves them, everybody needs them”***
The Economist, May 3rd, 2003

Introduction

Argentina’s banking system was, for most of the past decade, a fundamental pillar on which domestic confidence was based, as was the one-to-one convertibility of the Argentine peso to the US dollar. The strength of the banking system and the presence of major international banks allowed Argentina to withstand successive and severe external shocks (the crises of Mexico in 1994, Asia in 1997, Russia in 1998, Brazil in 1999, the appreciation of the US dollar against the Euro and Ecuador’s default in 2000)², as well as a severe and prolonged recession since the third quarter of 1998. This strength, achieved in part through a sound regulatory framework, high capital and liquidity, enforced by a relatively independent central bank (Banco Central de la República Argentina -BCRA) and Superintendency of Banks and Financial Institutions (SBIF), built confidence among the public. Ironically, the growth of the banking system over the 1990s³ and its high esteem among most Argentines allowed the fiscal authorities to accumulate an ever growing stock of public debt in the banks’ portfolio, postponing the implementation of fiscal measures, particularly expenditure cuts, needed to reverse budgetary imbalances at the central and provincial levels. Eventually, this state of affairs forced Argentina into a severe recession and a fiscal and financial crises.

This Working Paper will provide some background to the pre-crisis and the crisis itself, which exploded in December 2001 (Part I). It will then focus on the agenda of pending issues and recommendations for the immediate, short-, and mid-term (Part II). The analysis reflects the situation as of the end of May, 2003 when this paper was written. Selectively we have updated some of the information, but no attempt has been made to re-estimate the scenarios presented in Part II to reflect the lower rates of interest and inflation, although some comments have been added at the end of the paper on the likely implications for the financial condition of the banks. Latest developments are mentioned in Annex I.

² See Morgan Stanley, Equity Research, several issues.

³ Financial depth in terms of M3 to GDP reached 40% by 2000, a relatively low level for a country with a GDP such as that of Argentina, but a major recovery from the extremely low levels of the 1980s.

Part I: Evolution and Unraveling of the Crisis

A. Background: Condition of the Banking System Prior to the Crisis

Prior to the crisis, Banks dominated the financial system in Argentina, accounting for 75% of the system's assets. Between 1995 and 2000, the banking system underwent a substantial consolidation and privatization, with increased entry of foreign institutions, all of which resulted in an intensified concentration. The largest 10 private banks plus the two largest public banks (Nacion and Provincia de Buenos Aires) held about three quarters of total bank assets as of end 2000, while the remaining 77 banks held the balance. This process was accompanied by more stringent regulation and supervision. The Argentinean banking system *per se* was well capitalized, well provisioned, very liquid,⁴ well supervised and well managed. Indeed, 40% of the financial system's total assets were in the hands of first rate international banks. In other words, the 2001 crisis was **not** the result of a poorly managed or poorly supervised banking system, as has been the case in most of the region's past crises. Rather, it was the result of excessive exposure to government risk and to the implicit currency mismatch resulting from the termination of the Convertibility Law. This situation was aggravated by the government's policies in exiting the currency board, as discussed below.

The persistence of the recession since the third quarter of 1998 and the impact of three external shocks: the sharp rise in the dollar; the recession in Brazil and the sharp devaluation of the real; and the retreat of international capital flows following the Asian and Russian crises threatened the sustainability of the Convertibility Law. Each of these shocks was quite severe by itself: (i) from 1996 to 2001 the dollar rose 44.2% against the Euro, taxing exports to the Euro-area by the equivalent of 44%; (ii) the real fell from 1.16 per US\$ in 1998 to 2.36 in 2001, while domestic prices rose 20% in Brazil. As Cline indicates,⁵ this combined effect "was equivalent to imposing a tax of 70% on Argentine exports to Brazil and an import subsidy of 40% on Argentine imports from Brazil"; and (iii) net private credit flows to emerging market economies fell from an annual average of US\$153 billion in 1995-97 to an average of only US\$2 billion in 1998-2001 ("sudden stop"), while the EMBI+ index jumped from a range of 500-600 basis points during the first half of 1998 to a range of 1200-1700 basis points in October of that year. Under the straightjacket imposed by the Convertibility Law Argentina could not respond to these shocks except through a continuous contraction of real output and a slow deflationary process. These economic shocks were followed by serious political shocks starting with the resignation of the Vice-President in October, 2000, breaking the Alliance and eroding President de la Rúa's Congressional support, further undermining confidence.

In the absence of an FX "shock-absorber", output, prices and interest rates had to take the bulk of the adjustment, worsening the contractionary spiral. The high real interest rates over the years preceding the crisis, increased the banks' credit risk and raised the odds of financial distress for corporations and households. Cash flows of loan recipients worsened, leading to a deterioration in the quality of bank loan portfolios. Currency mismatches further increased the likelihood of default for business and households whose

⁴ By some accounts as much as 40% of bank deposits were held in US dollars.

⁵ See William R. Cline, "Restoring Economic Growth in Argentina", mimeo, Center for Global Development and Institute for International Economics, Draft, April 8, 2003, pages 40-41.

earnings were in pesos but whose debts were in dollars. Although the supervisory authorities were aware of these risks, they did not actively monitor the negative effects of the mismatch, and abstained from introducing regulatory measures to mitigate potential problems.⁶

Financial intermediation by banks was also limited by a prolonged economic recession combined with high domestic interest rates offered on government securities. Total banking-system credit to the private sector increased by 24% between December 1994 and December 2000, with virtually no growth during 1999-2000. Holdings of government securities, on the other hand, grew three-fold over those six years, leading to an increased concentration of bank portfolios in government securities. If direct lending to the public sector is also considered, the exposure of banks to the public sector increased sharply during the six years prior to mid 2001, rising from 10% of banking-system assets to 21% for the system and for most groups of banks.

While the banking system was strong, its profitability was weak. Profitability had been extremely low throughout the period of 1994-2000, with after tax ROA and ROE turning negative since 1998. Since 1997, most banks were not recovering the risk adjusted cost of capital. This lack of profitability reflects the combined impact of a prolonged economic recession with worsening asset quality. Loan loss provisions were responsible for most of the erosion in profits. For the year 2000, total ROE before provisioning had more than halved to 7.76%, and was negative (1.01) after provisioning. Gross non-performing loans (NPLs) rose to almost 11% of total loans and to as much as 25% for public banks.⁷

Figure I.0: Selected Banking System Indicators
(Percentages at end-year)

	1997	1998	1999	2000
Net Worth/ Assets	12.11	11.44	10.72	10.52
Capital / Risk Weighted Assets	18.13	17.64	18.56	21.18
Non Performing Loans/Total Loans	8.23	5.98	7.14	10.21
Provisions/Total Loans	7.7	7.1	7.82	8.65
Provisions/Non Performing Loans	108.64	140.4	122.25	77.13
Systemic Core Liquidity	42.98	39.58	40.89	38.69
Return on Equity before Provisions	22.59	10.61	8.43	7.76
Return on Equity after Provisions	7.41	-2.24	-6.71	-9.42
Return on Assets after Provisions	1.04	-0.27	-0.77	-1.01
Leverage Ratio (not in percent)	6.11	7.26	7.74	8.33

Source: Central Bank of Argentina

Source: G. Perry and Luis Servén (May, 2002) and BCRA

The dramatic drop in the coverage of non-performing loans (from 122.25% in 1999 to 77.13% in 2000) also indicates the asset quality deterioration that was building up in the

⁶ In fact, the financial statements did not differentiate between pesos and US dollars under the Convertibility Law, since the 1:1 peso:dollar parity was seen as a permanent, not a temporary, arrangement.

⁷ Guillermo Perry and Luis Servén, "Argentina What Went Wrong?", Chief Economist Office, Latin America and the Caribbean Region, World Bank, May, 2002.

system. Low profitability indicators are not inconsistent in the short-term with satisfactory indicators of high levels of capitalization and liquidity. In part the latter were responsible for the low ROEs observed.⁸

Weak profitability was also reflected in the inefficiency of operations, as indicated by the ratio of non-interest expenses (administrative expenses and other non-interest expenses) to gross income. While the prolonged stagnation reduced the banking system's overall profitability, significant differences existed among banking segments. The larger banks (both foreign and domestically owned) were the most efficient, followed by those owned by the federal government and the provinces. Small and medium banks were the least efficient. Their administrative expenses as a percent of gross income were the highest and their return on assets the lowest. A significant proportion of these small and medium-sized banks were foreign branches (thus their profitability may have been understated). Small domestic banks represented slightly less than 3% of banking assets, holding \$2 billion in deposits.

Government-owned banks held 30% of total system assets and almost 35% of total deposits, but already had significant levels of non-performing loans and poor profitability.⁹ Nonetheless, the government-owned banks had a competitive advantage derived from a preferential regulatory regime and access to cheaper fiscal funds. The banks acted as agents for the government, managing both revenue collections and payments. The largest government bank, Banco de la Nación, also acts as a clearing and settlement agent for many of the banks outside of Buenos Aires. Notwithstanding these advantages, even prior to the crisis, the government-owned banks already faced a difficult financial situation. Non-performing loans, net of provisions, were 72% of capital in August 2000 (prior to their capitalization in the fourth quarter of 2000) and the banks recorded no profits for that year.

Prior to the crisis, the mainstream assessment was that, in the short run, the banking system was vulnerable to the effects of interest-rate reductions on government securities unless accompanied by a reactivation in economic activity. Owing to the high exposure to the government sector, the banking system was judged to be unable to continue meeting provisioning requirements unless government revenues could offset further deterioration in its loan portfolios. While the foreign banks might have been somewhat less vulnerable than domestically-owned banks because of the financial ties between foreign owners and their branches and subsidiaries in the Argentine market, it was unlikely that foreign owners would be willing to accept losses for a sustained period of time.

Argentine banks were already highly exposed to the public sector, with almost 21% of total banking system assets taking the form of claims on that sector as of end-2000.¹⁰ Exposure to the public sector amounted to 160% of banking-system capital. This made the banks very sensitive to changes in the contractual terms of the debt and potentially

⁸ This figure includes loans written off and recorded as off-balance-sheet items.

⁹ Public banks' non-performing loans accounted for 50% of the system's NPLs.

¹⁰ Public sector external bonds had risen from US\$32 billion at end-1993 (Bradys) to US\$58 billion at the end of 2000 (Cline, page 41).

vulnerable to shocks associated with a perceived risk of public-sector default.¹¹ Bank financing to the government differed significantly across bank segments. Government-owned banks were by far the most exposed, with such financing accounting for 26% of assets and 246% of capital at end-2000. Banco de la Nación and Banco de la Provincia de Buenos Aires accounted for 99% of this exposure. Foreign banks were the second most exposed segment, with public sector exposure accounting for 20% of assets and 167% of capital at end-2000.

The rapid increase in the share of government paper in the banks' books followed three major actions taken by Minister Cavallo:

- (i) the first and more modest, led the government to cover its financing needs of the IIQ of 2001 with the issue of a bond sold to local financial institutions which were allowed to integrate liquidity requirements with the new instruments;
- (ii) the second included the first, voluntary, “mega-canje” covering in principle a total nominal value of US\$65 billion. In the end offers were received for US\$32.8 billion of which US\$29 billion were exchanged, providing a reduction of debt obligations of close to US\$16 billion in the initial five years. Maturities were extended (2008, 2018 and 2031), but it entailed the transformation of low coupon debt for high coupon debt, at a cost of about 16% and substantial capitalization of interest which increased the nominal stock of debt; and
- (iii) the second “mega-canje” of November 2001 which tried to segment the domestic bond-holders' market (largely banks and pension funds) from the foreign, allowing local bondholders to swap their bonds for a guaranteed loan governed by Argentina's law. The latter was backed by the transaction tax, but the bondholders kept the option of claiming the original bond if any of the terms and conditions of the guaranteed loans were changed in the future. In exchange for the guarantee interest payments were reduced by 30% with a cap of 7%. The bond exchange was successful with US\$41 billion of debt instruments swapped. It also reduced debt payments in the short-run at the cost of higher payments later. However, given the incentives for participation (value at par rather than mark to market the instruments) and the quasi-compulsory nature of the exchange for local financial institutions, the obligation of the government was considered a technical default by rating agencies and S& P moved Argentina to the “selective default” category. In the end these “involuntary or distressed” swap loaded banks with more and less liquid government debt.¹²

In summary, prior to December 2001, Argentina's banking system was considered highly vulnerable to three major risks: (i) high exposure to government risk, both at the federal

¹¹ This was specially so, given that the exposure of the largest banks in some cases exceeded 200 percent of their capital.

¹² Sturzenegger, Federico, “Default Episodes in the 90s: Factbook and Preliminary Lessons”, Business School, Universidad Torcuato di Tella, June, 2002, pages 66-71.

and provincial levels; (ii) high exposure to credit risk derived from foreign currency exposures, that is, lending in US dollars to peso earners (including mortgage loans); and (iii) signs of serious erosion of the integrity of key institutions, particularly the BCRA and the SBIF, which, for all practical purposes, were subordinated to the Ministry of Economy six months prior to the formal termination of the Convertibility Law.

B. Background: Condition of the Banking System during the Crisis

There are at least six features which have made the current financial crisis in Argentina different from other crises observed in the past, both within the region and elsewhere.

- First, it was generally expected. The crisis started much earlier than the deposit freeze of December 3, 2001 and the subsequent 40% initial devaluation of the currency. Banks lost over US\$18 billion in deposits in the 12 months preceding the deposit freeze, while country risk increased dramatically.
- Second, banks did not have an *accounting* foreign exchange (FX) mismatch in their books prior to the devaluation. On the contrary, most banks had long dollar positions, making money from the initial impact of the devaluation. However, banks *were highly exposed to their borrowers' FX risks* to the extent that the borrowers had FX liabilities but mainly peso-denominated earnings (i.e.; credit risk was latent, masked behind the FX risk).¹³
- Third, the crisis and the banks' insolvency arose almost entirely from the impact of inconsistent government policies (i.e.: a currency board-like system with a large and persistent fiscal deficit in a fairly closed economy) – sovereign risk.
- Fourth, the banking system was highly dollarized, on both the asset and liability sides of their balance sheets, with over 70% of loans and deposits denominated in US dollars. The authorities faced a set of unattractive options: to continue and deepen a ongoing deflationary process; to devalue the peso (symmetrically) and face generalized bankruptcies and defaults; pesify and devalue, taxing depositors and FX borrowers; or to go to full dollarization.¹⁴
- Fifth, depositors initially lost confidence in the banking system, in the currency, and in the government, making it very difficult to restore the banks' cash flows. Bank deposits started to recover from August/September 2002 after 16 months of continuous decline.
- Sixth, the crisis had an un-paralleled scope, threatening the enforceability of all contracts and basic property rights.

The combined features described above make the Argentine crisis the first such bank and currency crises incurred by a globalized, well-integrated, national financial system in a major country of the Latin America. A good understanding of these problems is

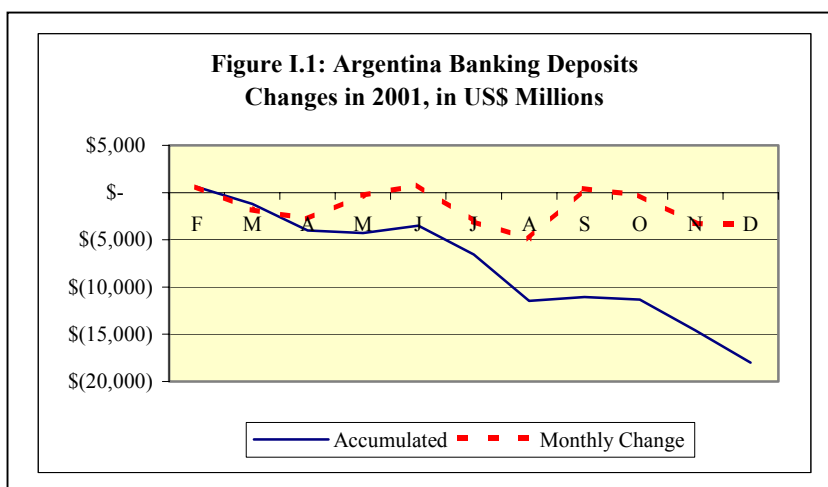
¹³ This was not the banks' fault since convertibility was the governing law.

¹⁴ See Guillermo Perry and Luis Servén, *Argentina What Went Wrong?*, Chief Economist Office, Latin America and the Caribbean Region, World Bank. May, 2002.

important, because the issues in Argentina are just not about asset and banking resolution. There is a need to restore the solvency of the State and trust in government, in contracts, and in institutions. Beyond improving the regulatory and bank resolution frameworks, there is a need to restore credit intermediation in a devastated banking system plagued by government-inflicted financial mismatches, where the largest problem debtor (and a major owner of banks) is the State. Moreover, the challenge is not merely to bring foreign investment into the banking sector, but to entice foreign banks not to withdraw from the country, and to restructure the system so as to ensure that surviving banks earn a spread that allows them to recover intermediation costs and make a reasonable profit.

Nonetheless, there are indeed certain **similarities to other financial crises**: the major role played by public-sector banks, which still controlled about one third of the system's total assets; the still insufficient consolidation of the banking sector, with too many small banks; pressure to under-provision loans and government exposures, which resulted in overstating the quality of the banks' portfolios after almost four years of recession; and last but not least, the unequivocal trend to limit the autonomy of the central bank (BCRA) and weaken banking supervision. Institutional instability was paramount in this crisis.

To a large extent the current financial crisis is nothing more than a fiscal crisis combined with the ensuing institutional and legal breakdown, reflected in the confrontation and lack of coordination among the three branches of government.



Evolution of the Crisis and Policy Response

Long before the disorderly disengagement from the currency peg, before the imposition, in December 2001, of major restrictions to the availability of transactional deposits (the “corralito”), and before President Rodríguez Saá’s announcement on Christmas eve of that year of the largest default in history by a sovereign nation, the crisis was already well underway.

The increasingly unsustainable FX regime, with a 1:1 parity between the Argentinean peso and the US dollar and the continuous weakening of the government’s fiscal position, undermined the confidence of foreign investors and the public. This trend accelerated after the resignation of Minister Machinea, and thereafter of Minister López Murphy

early in March 2001, followed one month later by that of BCRA’s President Pou. These events contributed to the depositors’ run on the banks, which continued throughout most of 2001, resulting by year-end in a loss of bank deposits of approximately US\$18 billion (about 20% of total bank deposits). As former BCRA Governor Blejer indicated ¹⁵, “A variety of economic and political events affected deposits evolution, but the run accelerated as the government interfered with the autonomy of the central bank, changed its authorities, and affected the level and composition of reserve requirements”. The run on the banks depleted banks’ liquidity, forcing them to further reduce credit to the private sector and to inordinately rely on support from the BCRA’s lender-of-last-resort (LOLR) facility. Imposition of the “corralito” in December 2001 led to public uproar and riots.

Box I.1: Short Chronology of the Argentine Crisis	
2001	
Mar. 1 st .	Minister Machinea resigns and is substituted by Mr. Murphy
Mar. 3 rd .	Minister Mr. Murphy is substituted by Mr. Cavallo
Apr. 28 th .	Minister Cavallo forces BCRA’s President Mr. Pou to resign Mr. Maccarone appointed as BCRA’s new President
Nov. 19 th .	Mr. Cavallo orchestrates the 2 nd ., domestic mega swap
Dec. 3 rd .	“Corralito” is born limiting cash out to us\$250 per week
Dec. 12 th .	The IMF suspends loan disbursements to Argentina
Dec. 23 rd .	President Rodriguez Saá declares the biggest default in history
2002	
Jan. 2 nd .	Mr. Duhalde appointed as interim President till Dec. 2003
Feb. 1 st .	The Supreme Court declares the “corralito” unconstitutional.
Feb. 3 rd .	Pesified time deposits are reprogrammed: “Corralón” is born
Feb. 6 th .	Congress and the Supreme Court initiate a series of disagreements
Apr. 23 rd .	Finance Minister Mr. Lenicov steps down after “Bonex” plan fails
Apr. 25 th .	“Ley Tapon” enacted to contain “amparos” lawsuits
Apr. 26 th .	Mr. Lavagna is appointed Minister of Finance
Jun. 18 th .	First Boden voluntary Swap of reprogrammed deposits: CEDROS
Jun. 25 th .	BCRA’s President Mr. Blejer replaced by Mr. Pignanelli.
Jul. 20 th .	IMF brings a group of “notables” to mediate with government.
Jul. 22 nd .	Emergency Decree suspends execution of “amparos” for 120 days
Nov. 11 th .	Minister Lavagna announces plans to lift the “corralito”.
Dec. 2 nd .	“Corralito” lifted without major impact on FX/monetary stability
Dec. 2 nd .	BCRA’s President Pignanelli replaced by Mr. Prat-Gay
2003	
Jan. 14 th .	Banks allowed to pay Cedros < 7,000 ARP – “Corralon” narrows
Feb. 5 th .	Banks actively start offering pre-payment of CEDROS
Mar. 5 th .	Supreme Court rules deposit pesification Decree 214/02 illegal

The turmoil led to the resignation from office of President de la Rúa, followed by a succession of three Peronist Presidents in a matter of days (see Box I-1), culminating in the appointment of Eduardo Duhalde as president until the new presidential elections were held - originally scheduled for December 2003.

Far from containing the problems, the initial policy measures adopted by the newly appointed Government made things worse. Among other results, these policies inflicted continuous financial and economic damage on banks, in an attempt to redistribute - yet to be fully acknowledged - losses away from local borrowers (debtors) at the expense of banks, depositors (creditors) and the government.¹⁶ The measures adopted had a negative

¹⁵ Blejer, Mario, “Financial Crisis and Monetary Policy in Argentina”, presentation delivered at the World Bank, Washington D.C., 2002.

¹⁶ The most immediate impact resulted from the conversion of bank liabilities from dollars into pesos at 1.40 pesos per dollar, while converting assets at only 1 peso per dollar, wiping out most the banks’ capital.

“Argentina’s Banking System: Restoring Financial Viability”. By Joaquin G. Gutierrez and Fernando Montes-Negret.

impact well beyond the banking system since it interfered with all private contracts in the economy.

Box I.2: Preliminary Estimates of the Banking Losses		
Figures in millions of ARP	Moody's	Initial *Estimate
	1/31/2002	23-Jan-02
	1:1.4	1:2.00
Total estimated Economic Loss	(70,100)	(48,639)
Reported Net Worth	16,500	16,442
Asymmetric Pesification	-	(17,725)
Credit Loss from Private Loans	(43,100)	(16,041)
Credit Loss from Public Exposure	(27,000)	(14,873)
Adjusted Net Worth (ANW)	(53,600)	(32,197)
NW + Economic Compensation Value	(53,600)	(32,197)
Net Worth without adjusting compensation		
Discount on Public Debt	75%	28%
Discount on Private Debt	58%	30%

Following the initial default and devaluation, a political confrontation between the government and the Supreme Court ensued. Subsequently, less than one month after taking office, the new administration unilaterally declared a de-dollarization of the economy, voided private contracts, declared the asymmetric conversion into pesos (“pesification”) of banks’ assets and liabilities, and imposed a deposit freeze, forcefully reprogramming all time deposits (the “corralón”).

While no official estimate has ever been made of the extent of economic losses, we estimated early in the crisis (January 2002) that the banking system may have suffered an impairment equivalent to no less than three times its equity, leading to a negative net worth for the system of at least US\$32 billion. We arrived at this “rough guess” by estimating an economic loss of US\$49 billion, roughly divided into equal amounts, in three “buckets”: (i) losses from the asymmetric pesification, (ii) expected losses from the deteriorating private loan portfolio, and (iii) losses calculated by valuing government paper at close to market prices. Our preliminary estimate was not out of line with other, more pessimistic, assessments made by bank analysts at the time (see Box I.2).

On February 3, 2002, the Government introduced exchange and capital controls. It abolished the dual exchange-rate system and immediately adopted a unified exchange rate float. The BCRA proceeded to intervene in the exchange market to smooth out fluctuations (dirty float). In addition, previous controls on payments abroad were maintained in the sense that BCRA had to approve all FX transactions.

The run on the banks during 2001 and the avalanche of leaks (“goteo”) in 2002 forced the authorities - especially BCRA - to concentrate on liquidity crisis management¹⁷ and on

¹⁷ The BCRA provided large rediscounts to illiquid banks, particularly to the two largest public banks (Nacion and BAPRO) and to the largest, locally-owned, private bank (Galicia), while financing about one third of the deposit drop. To mop up liquidity from the system the BCRA introduced the LEBACs (“Letras *Argentina’s Banking System: Restoring Financial Viability*”. By Joaquin G. Gutierrez and Fernando Montes-Negret. 9

the mechanisms needed to support the new FX regime¹⁸, while seeking to develop consistent monetary policy rules and new tools. Bank deposits fell at a slower pace through out the first half of 2002 and started to grow again after August of that year. BCRA foreign exchange reserves also recovered and BCRA became a net buyer of US dollars in the second half of that year. In retrospect, aside from the impact on the payment system and depositor confidence, the controls proved efficient in stopping the hemorrhage of deposit withdrawals from the system. Nonetheless, little attention was paid to establishing and rebuilding the solvency of banks, both in stock and flow terms. Moreover, many subsequent decisions still overlooked the fact that it may be very difficult to restore depositor confidence and the banks' credit intermediation function in an insolvent banking system. The setting of priorities and commencement of the bank debt-restructuring process continued to be postponed (see Box I.3). The restoring of balance, in flow terms, to banking finances - fundamental for the BCRA - took on a secondary importance for the government, which focused mainly on minimizing the fiscal impact of the measures adopted. The stress between the Ministry of the Economy and the BCRA produced major institutional confrontations, which provoked the resignation of three BCRA Presidents in less than a year.

Initial policy measures focused on stabilizing deposit losses and containing the impact of increased liquidity over the FX market. Once monetary and exchange conditions were "normalized," the authorities tried to relax the "corralito" and the "corralón" as much as possible in order to restore the operation of the payment system.

While restrictions on transaction deposits were eliminated and bank deposits increased, attracted by very high real interest rates, the freeze on time deposits was maintained until recently (see below). Nonetheless, the viability of banks and the resolution or restructuring of unviable banks, continuously overlooked, will eventually need to be tackled.

del Banco Central"), auctioning them initially at very high interest rates (140%) and with very short maturities (7 days, later extended to 14 and 28 days), in order to satisfy "Blejer's inequality": *Greed > Panic*.

¹⁸ BCRA foreign exchange interventions reached about US\$2 billion in the first five months of 2002 to smooth an over-shooting FX which reached A\$3.6 per US dollar in mid-2002.

"Argentina's Banking System: Restoring Financial Viability". By Joaquin G. Gutierrez and Fernando Montes-Negret.

Box I.3: Argentine Bank Debt Restructuring

November 30, 2001: Domestic debt exchange. US\$42 billion of Globals, FRBs, and various local bonds are converted into “guaranteed” loans governed by Argentine law.

December 1, 2001: Deposit withdrawals prohibited, with low limits for wage accounts and the elderly. Free mobility within financial system. This was the first version of the so-called “corralito,” which was subsequently tightened.

February 3, 2002: Decree 214/02 asymmetrically and partially “pesifies” assets (1:1) and liabilities (mainly deposits at 1:1.4) creating a massive stock and flow mismatch in the bank’s balance sheets. Time deposits are reprogrammed to longer maturity dates under the “corralón”.

March 13, 2002: Decree 471 converts government, provincial, and municipal debt under Argentine law originally denominated in foreign currency into Argentine pesos at A\$1.4/1US\$, indexed to inflation (often referred as “pesification”).

June 3: Decree 905 restructures deposits, giving depositors the option to swap into the BODEN '05s, '07s, or '12s. Depositors who choose bonds denominated in US\$ initiate a re-dollarization of the previously “pesified” government debt.

September 20: Government issues BODENs: a total of US\$12.6 billion of BODEN '05s and '12s, and A\$3.4 billion of the BODEN '07s. Trading begins. This represents restructuring of 26% of the stock of time deposits.

September 30: Freeze is lifted on time deposits of less than A\$7,000; most banks lift freeze on time deposits of up to A\$10,000. Less than 10% of the unfrozen deposits leave the banking system. During October, freeze is lifted on time deposits, corresponding to approximately 70% of the originally reprogrammed depositors.

October 29: Deadline to convert remaining deposits into either BODEN '13s or into new bank bonds with an FX hedge provided by the government. The BODEN '13s will have terms similar to the BODEN '12s, but with a cap of 3%.

December 2: demand and saving-accounts restrictions (the “corralito”) are lifted without increased pressure on the exchange rate.

February 5, 2003: Several banks use the authorization to pre-pay CEDROS, but few depositors (15%) agree to the transaction. Given the 40% accumulated CER, offers imply a 36% discount on the dollar, versus 47% market price of the BODENs. Apparently, depositors are still waiting for the Supreme Court’s decision regarding the legality of the pesification under Decree 214/02.

March 5: In the case of San Luis Province vs. Banco Nación, the Supreme Court rules that Decree 214/02 is illegal, which can compromise the future of the deposit/public debt restructuring, creating major changes in the fiscal position of the State.

March 28: Decree 739/03 enables a partial matching of the maturities of BCRA rediscounts and long-term bonds, while including a third deposit-to-bond voluntary swap for CEDROS (offsetting, with BODEN '13s, the difference between 1.4 plus CER and the reference 2.9792 A\$ per US\$).

May 26: Decree 1262/03 creates the Financial System Restructuring Unit. This body will take charge of extending maturities, as indicated under Decree 739/03, determine restructuring strategies and action plans, approve transformation and rehabilitation plans, and accelerate repayment of BCRA’s rediscounts.

C. Measures Adopted to Contain and Manage the Crisis

1. Liquidity Management. Under these circumstances, in an attempt to avoid a run on bank deposits and the devaluation of the currency, the government, in early December 2001, imposed a deposit freeze (known as the “corralito”). The deposit freeze was a desperate measure to prevent a complete meltdown of the banking system. Naturally, it was impossible to return all deposits at the same time, given the illiquid nature of a large portion of bank assets. The freeze interfered with the voluntary nature of financial contracts between two parties, and thus created enormous legal uncertainty, undermining the operations of the domestic banking system. The second set of measures to prevent certain banks (mainly Galicia and the two larger public banks: BAPRO and Banco de la Nación) from becoming illiquid, led to the extension of BCRA liquidity support to banks - via repos and rediscounts - thus redistributing liquidity within the banking system. To

complement this effort, a new liquidity fund outside the BCRA (“Fondo de Liquidez Bancaria”) was established, funded with a 5% reserve on bank deposits. Finally, to avoid changes in market share among banks, a 75% incremental reserve requirement on bank deposits was established. The application of BCRA’s lender of last resort support favored mainly the larger national banks, as foreign banks were initially required to bring additional external funds in exchange for accessing BCRA’s resources (at a 2:1 ratio).

The “corralito” resulted in a complete breakdown of the country’s payment system, increasing the public’s uncertainty and severely deepening the economic recession. The deposit freeze (“corralito”) had two phases. During the first phase, under Minister Cavallo, payments were allowed **within** the banking system, with controls to avoid leakages (although the number of accounts increased exponentially as depositors attempted to withdraw the maximum amount of cash possible). The second phase, under Minister Remes Lenicov, was even more restrictive, practically stopping payments within the “corralito” in order to protect Banco Galicia, Banco de la Nación, and Banco de la Provincia de Buenos Aires.¹⁹

However, in both phases the authorities did not make a clear distinction, nor provided for different treatment, for transaction balances and time deposits. The result, as explained below, was that the “reprogrammed time deposits” increasingly moved into sight deposits and from there they tried to exit the banking system into cash and ultimately into US dollars or hoarding of cash. The consequence was a worsening of the banks’ liquidity problems, to the extent that a larger volume of liquid deposits were able to exit, while those deposits which remained in the banks, now as sight deposits, produced a dangerous “monetary overhang” which became an additional impediment to find an early and orderly exit, as opposed to a “stampede”.²⁰

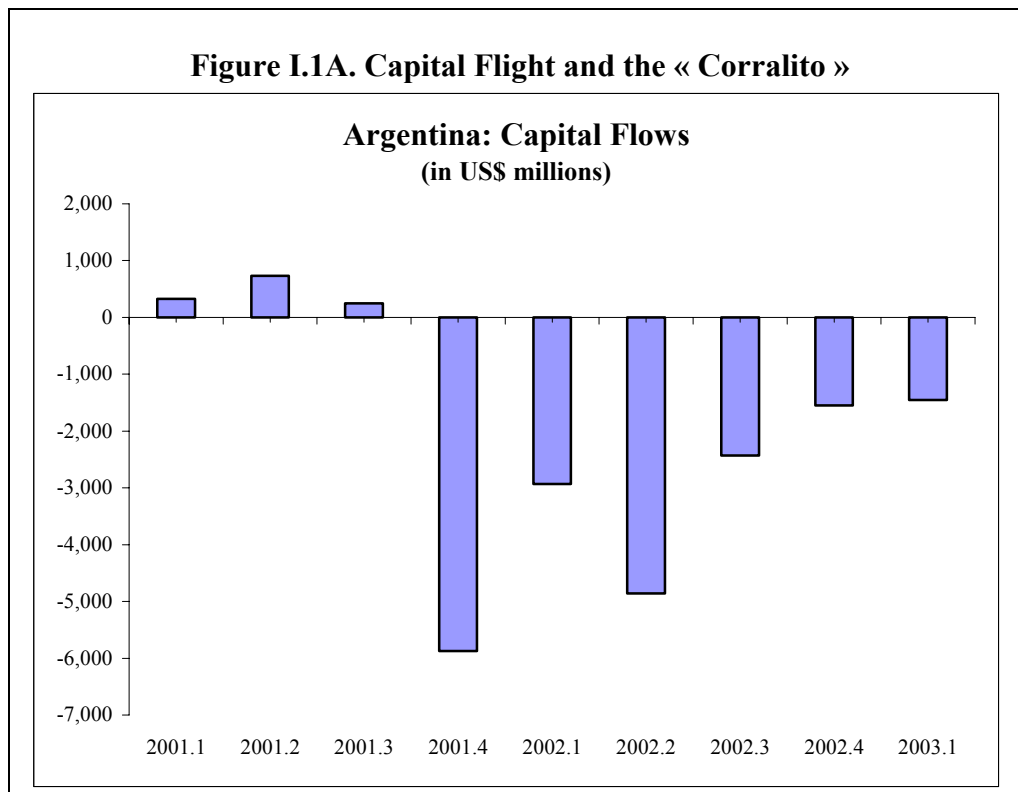
Note that the composition of deposits prior to the “corralito” - as of end of November, 2001 - amounted to US\$78.5 billions, out of which only US\$20 billion (25%) were sight deposits and US\$58.5 billion were time deposits. With the loss of confidence, depositors moved “closer to the exit” within the “corralito”. As a result, as of January 10th, AR\$39 billion or about 50% of bank deposits were held in the form of sight deposits and only AR\$38 billion remained as time deposits. Clearly the mixing of transaction balances and savings deposits made the rapid dismantling of the “corralito” impossible.

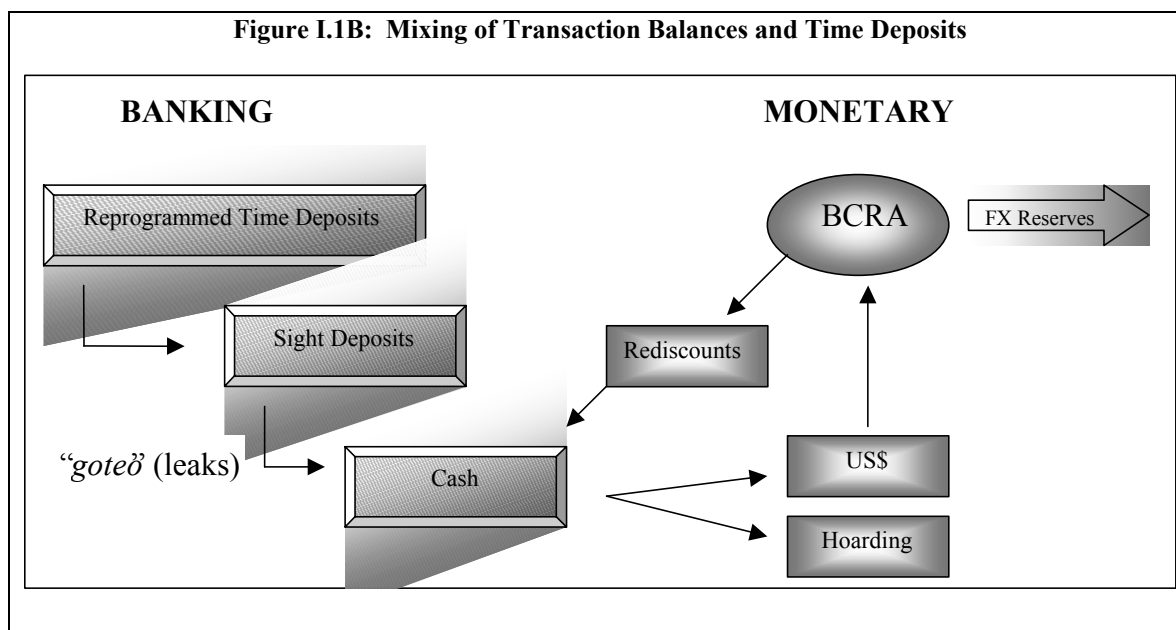
The leaks from the “corralito” (known as “goteo” in Argentina) became quite high (AR\$2.5 - 3.0 billion per month) in the first part of 2002. In many instances these “leaks” were perfectly legitimate since the authorities initially allowed the withdrawal of up to AR\$1,500 per month per account from salaries, created exceptions for sickness and old age, etc., although there were also widespread abuses (multiplicity of accounts, use of credit cards, purchase of ADRs, etc.).

¹⁹ BCRA’s Communications “A” 3426 (10/1/02) and 3467 (8/2/02) extended the reprogramming of time deposits in pesos and savings deposits in dollars above US\$3,000 and sight deposits above US\$10,000 to limit even further the flight to quality of deposits, tightening the overall deposit freeze.

²⁰ The “bi-monetary” nature of the system in which short-term deposits and loans were largely denominated in pesos, while longer-term loans and savings were denominated in dollars could have led to a different exit mechanism, in which only the longer-term savings would have been frozen, while the BCRA could have redeem the peso deposits with its new powers to issue local currency after the Convertibility Law.

As the cash exited the banking system, not to return, it went, at least temporarily, into hoarding or more likely to chase dollars in the free market (as cash or capital flight – see Figure I.1A). This demand for dollar bills and the bank’s own demand in the wholesale market, exacerbated the pressure over the exchange rate and worsened the overshooting of the exchange rate of the peso. This process drained the foreign exchange reserves of the BCRA, while creating additional demands for liquidity support from the banking system (rediscounts and advances) in a perverse cycle which inexorably threatened BCRA’s foreign exchange reserves (see Figure I.1B).





During the first quarter of 2002, the Superintendency of Banks estimated that the “leakage” (“goteo”) had been as high as A\$4.2 billion per month, in contrast to higher commercial bank estimates of “corralito” leakages of A\$5 to 6 billion per month. This forced the BCRA to continue granting increased liquidity to public banks and large local banks. Eventually, it also transformed the “flight to quality” into a “flight to liquidity” (BCRA rediscounts), affecting major foreign banks (which received a discriminatory treatment in accessing the BCRA’s lender of last resort facility)²¹. This spiral also increased M1 and led to a serious “monetary overhang”. When BCRA’s lending reached the limit authorized by law it prompted a new amendment to its Charter.²²

²¹ BCRA’s Communication “A” 3748 (09/27/2002) set new rules linking the liquidity support provided by the BCRA to the capital of a bank (setting a range going from 0.5 to 1.5 times), while imposing restrictions on the increase of credits and investments to the private sector. The new methodology included additional limitations **solely applicable to subsidiaries of foreign banks**. The latter was intended to require incremental liquidity support or capital by the foreign parent in order to access BCRA’s LOLR facility. In order to establish the new limits of BCRA’s liquidity support, the new rules included conversion factors for different modalities of support provided by the foreign parent bank, such as: new capital (100% limit); new subordinated debt (33%-50% limit depending on the maturity of the debt); capitalization of external lines of credit (33% limit for BCRA’s assistance), and among other, acquisition by the parent bank of performing and non-performing loans (from 100% to 10% limit, depending on SBF’s loan classification scale from 1 to 6 and the type of guarantee of the loan). As of September, 2002 the interest rate charged by the BCRA was set at (4/5) of the average LEBAC rate (not a penalty rate).

²² Law 65 of January 23, 2002 amended BCRA’s Charter, granting its Board of Directors additional ordinary and extraordinary powers to provide rediscounts. Art. 6 b) and c) of the new law authorizes BCRA to provide rediscounts to financial institutions faced with temporary liquidity problems up to their equity. Such loans must be guaranteed by loans or government paper or other specific assets. Faced with the need to provide liquidity support to the system or when faced with generalized and extraordinary circumstances, BCRA can - with the approval of the majority of its Board – exceed the individual support limit of one time a bank’s equity. In such event, the bank must pledge not only sufficient assets as collateral but also the bank’s controlling shares and agree to abide by the mechanism for intervention defined in Art.35 bis. of the Banking Law.

2. Devaluation and Currency Mismatch. The asymmetric 40% devaluation of the peso of January 6, 2002 created a massive currency mismatch for banks. This measure changed the currency denomination of contracts on the asset side of the banks' balance sheet in an attempt to soften the blow of the peso's devaluation on a segment of (over-indebted) local borrowers.²³ At the same time, it aimed to protect depositors from the effects of the devaluation (i.e.; a promise to return bank deposits in the original currency).

Accordingly, the government decided to convert dollar-denominated loans of up to US\$100,000 into pesos at the pre-devaluation rate of 1:1, passing the FX losses onto the banks.²⁴ By "pesifying" part of the assets, while keeping most of the banks' liabilities in dollars, an explosive currency mismatch was created, with enormous losses for the banks (see below).

3. Maturity Mismatch. New measures announced on January 15, 2002 rescheduled maturities and reduced interest rates on all bank loans not covered by the "pesification." These measures set minimum maturity deferments on various types of loans, depending upon the loan's size. The result was an aggravation of the (still unmeasured) maturity mismatch faced by banks, since, within the "corralito," most bank deposits moved "closer to the exit" (very liquid), at the same time as loan maturities were being deferred, and the likelihood that banks could recover assets was becoming more remote. Particularly, as more populist legislation was passed, bankruptcies were suspended, and then foreclosures on mortgage collateral were temporarily suspended as well (followed by several extensions by Congress).

4. Pesification of the Domestic Debt and Unwinding of Prior Debt Swaps. On March 13, 2002, the Government issued Decree 471, followed by complementary regulations, unilaterally restructuring all (municipal, provincial, and federal) public sector debt under Argentine law.²⁵ This new set of measures affected the terms and conditions of the November, 2001 "mega-canje" mentioned above. It altered the currency (converting the dollar debts into pesos at \$1.4 and indexing the balance to the CER), the yield (mandating the accrual of interest at a rate of 2% except for the guaranteed loans which were restructured at rates going from 3% for loans with an average life of less than 5 years to 5% for average maturities of 10 years or more. Municipal and Provincial debts would accrue interest at a rate of 4% per year). Since this restructuring was a "credit event" (default) on the guaranteed loans, it would allow creditors to reclaim their original bonds unwinding the swap. Although this topic has complex legal and equity considerations we mention it here due to its possible financial impact on banks and pension funds. Analysts speculated that the incentives for banks to reclaim their old /original bonds (pre mega-canje) were low since it might have required to marked them ((about US\$9.5 billion) to market registering a loss. Pension funds were dimmed more likely to challenge this unilateral decision in the courts for their almost US\$14 billion held in bonds (at face value).

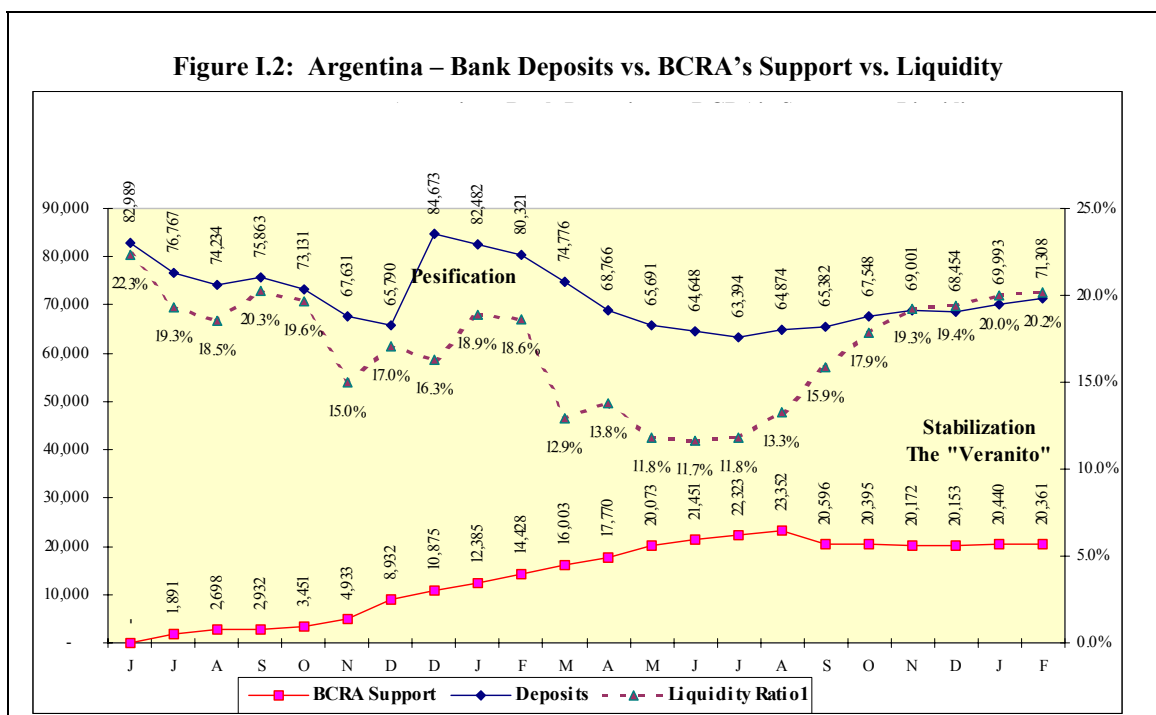
²³ In a way the asymmetric devaluation was a pre-emptive bailout of local borrowers with dollar-denominated debts.

²⁴ The US\$100,000 limit was later eliminated, resulting in a very regressive transfer of fiscal resources to high income borrowers.

²⁵ See JP Morgan, "Argentina: Pesification of Domestic Debt and Implications of the Unwinding of the Domestic Swap", Emerging Markets Research, March 15, 2002. This topic is not further explored in the rest of the paper.

D. Stabilization of the Monetary Overhang and the Run on the Banks

It was not until mid 2002 that the combination of measures started to alleviate the outflow of deposits from the banks (see Figure I.2). It must be noted, however, that the deposit freeze not only jammed the payment system, but also destroyed the chain of payments in the economy, leading to an additional deterioration of the banks' loan portfolios.



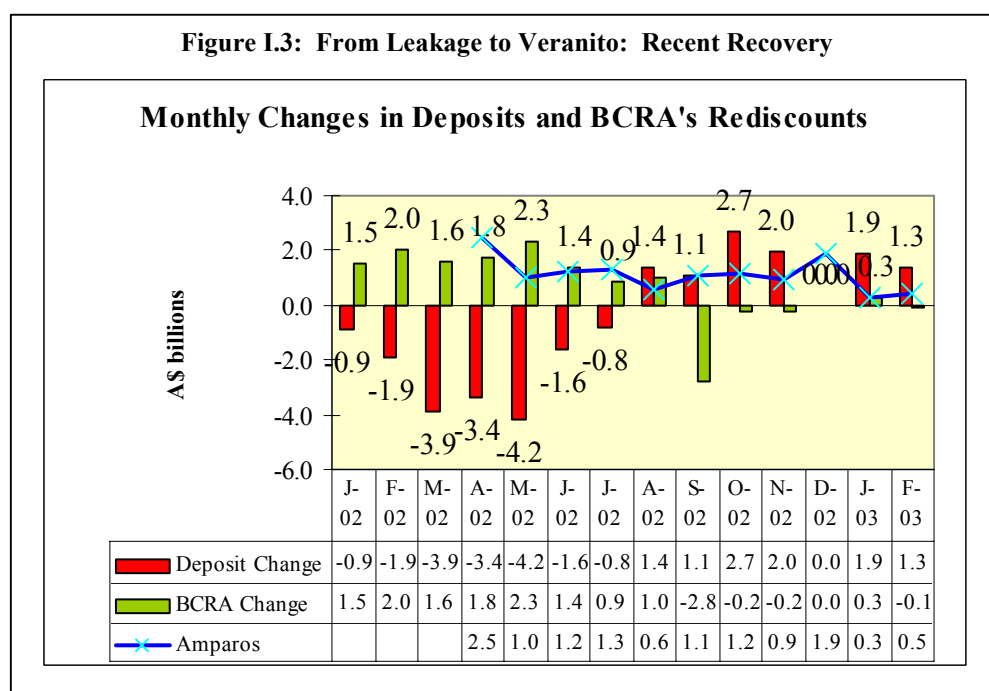
Nonetheless, stabilization was delayed, since both the “corralito” and the “corralón” became progressively porous. Indeed, regulations created sources of further “leakages” (i.e.: an explosion in the number of current accounts, the use of credit cards to make payments abroad, the use of ADRs to bypass the FX controls, etc.).

Apart from a multitude of exceptions and measures that allowed certain depositors access to their savings, an additional complication emanated from the confrontation between the Executive branch and the Judiciary. By means of challenges on constitutionality grounds (“amparos”), many depositors whose time deposits had been reprogrammed in the “corralón” obtained compulsory repayment by banks. The repayments generated additional losses for the banks, due to the differential between the FX rate at which deposits were “pesified” (1.4 to the dollar) and the prevailing market rate (at times reaching 3.62 to the dollar) at which deposits had to be repaid. The ensuing losses (estimated at A\$4.0 billion) have yet to be “compensated.”

In addition to the initial stock losses created by the asymmetric pesification and losses inflicted through court decisions on “amparo” actions, a change in the handling of retail loans also contributed heavily to losses. Retail loans had originally been indexed to the Consumer Price Adjustment Index (“Certificado de Estabilizacion de Referencia or CER”), to which banks’ funding sources were linked. Then they were asymmetrically

indexed to a lower Wage Inflation Adjustment Index (“*Certificado de Variacion Salarial* or CVS”). The ensuing losses (estimated at A\$4.6 billion) also remain to be “compensated.”

The Government addressed the initial impact of the asymmetric pesification through a program of compensatory bonds (“BODEN”) totaling about US\$10 billion. This program took shape after considerable delays. Meanwhile, losses attributable to the “amparo” actions and to asymmetric pesification had only recently been recognized by the government (not by Congress) as deserving additional “compensation.” Nonetheless, these additional “compensations” for “amparo” judgments and asymmetric indexation of loans have yet to be determined, and the bonds are still to be delivered. Moreover, a recent ruling by the Supreme Court regarding the legality of pesification of deposits²⁶ may inflict additional negative impacts on banks (see below). Once “compensated,” the exposure of banks to government risk will further increase.

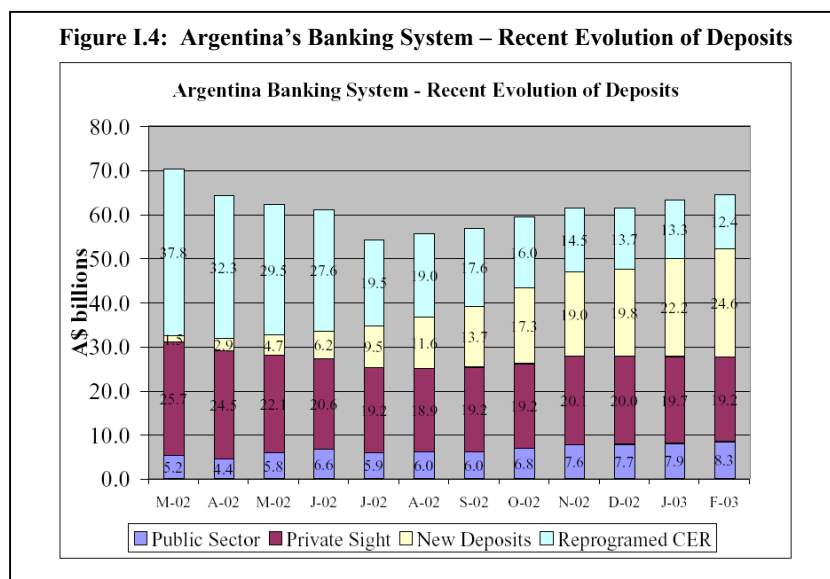


The measures that enabled stabilization of the run on the banks (see Figure I.3) included:

- a relatively successful BCRA monetary policy, at significant cost to the central bank (greed vs. fear policy), with effective FX and capital controls;
- the progressive lifting of freezes on transactional accounts (“corralito”), starting in December 2002;
- two voluntary time-deposit-to-bond swaps (BODEN I and II); and
- the continuous expectation by depositors whose accounts were frozen in the “corralón” that a potential Supreme Court ruling would declare pesification illegal (see below).

²⁶ The February, 2003 ruling was issued in the rather narrow context of a dispute between the Province of San Luis and Banco Nacion demanding the return of the province’s deposits in US dollars. The ruling makes the Bank responsible for the resulting losses. Markets reacted at the time with the expectation that this ruling was setting a precedent for the generalized re-dollarization of bank dollar deposits.

The policy of high interest rates initially implemented by the BCRA - paired with an implicit policy of no bank closures - attracted depositors (greed > fear) back to the banking system. In fact, with transactional deposits stabilized, as of mid 2002 there has been a net increase in new deposits (see Figure I.4), which allowed banks to restore their liquidity, while stopping BCRA rediscounts (A\$20.37 billion as of end-2002).



This combination of additional measures finally helped to stabilize deposits, and, in the second half of 2002, led to their increase and a generalized improvement in the liquidity of the system. However, there are still many unresolved issues that weigh negatively on the banks' viability.

In addition to the losses mentioned above²⁷, measures following the termination of the Convertibility Law have created structural mismatches, discussed in further detail in Part II, including: a) an overall negative prospective liquidity; b) mismatches between assets and liabilities denominated in pesos linked to inflation (CER) as well as in free-peso activities; c) negative spreads and liquidity mismatches in US-dollar activities; d) a small 2% spread over CER-linked activities; e) diminishing free-peso spreads, and f) high, low remunerated, reserve requirements.

The effect of the stabilization upon banks' profitability, in cash terms, has been negative. During the second half of 2002 and the first months of the current year, banks have increasingly been substituting CER-linked funding (with accruals indexed to inflation, and a cash payment of 2%) with new, costly, deposits at free-market rates (average cash cost of 23% at the end of 2002), in order to finance an inordinate and growing proportion of long-term assets (mostly government exposures linked to the CER). This trend most likely accelerated after the liberalization of deposits from the "corralon", since deposits

²⁷ Asymmetric pesification of assets (1 to 1) and liabilities (1 to 1.4); asymmetric indexation of retail loans to CVS rather than to the CER as the associated liabilities; court "amparo" rulings to pay frozen deposits at market rates; plus the likely impact of the Supreme Court ruling of February 5, 2003.

reprogrammed at CER plus a spread will be replaced by free deposits at market rates and with shorter maturities, altering the financial margin and presenting the risk of increased volatility (liquidity risk). The negative carryover has not yet been fully factored into the banks' financial statements, but we estimate that the net cash interest income of the banking could worsen by as much as A\$700 million per year from the impact of the liberalization, assuming a moderate cost increase of about 400 basis points in cash terms.

In addition, a major outcome of the initial stabilization of the deposit base has been a marked shift in market shares, from private and foreign to public banks. Most market analysts and rating companies believe that this latter group is in the worst financial condition and experiencing the largest operational losses.

Table I.1: Changes in Market Share: Bank Deposits

	Dec-00	Jan-02	Mar-03
Foreign banks	48.6%	52.0%	39.9%
Private local banks	18.5%	15.8%	15.3%
Public banks	32.9%	32.2%	44.8%
Total	100.0%	100.0%	100.0%

E. The Supreme Court Ruling on the Legality of Pesification

The legality of the government's pesification of deposits in February 2002 (Decree 214/02) had been a major outstanding issue in the relationship between the Executive branch and the Supreme Court. Since the introduction of the "corralito" in December 2001 (declared unconstitutional by the Supreme Court), there has been considerable legal uncertainty. Presumably, the pesification violated the invulnerability of deposits, as several lawsuits had tried to establish it during 2002. Nonetheless, the Supreme Court had postponed its ruling during 2002.²⁸

The government adopted measures aimed at reducing the number of "amparo" actions, under the "Bottlecap Law" ("Ley Tapón") and subsequent measures. These attempts, however, did not succeed in reducing the rate of court-ordered repayments during 2002. Nonetheless, many depositors were waiting for a positive ruling from the Supreme Court, which is one of the reasons why "amparo" filings may have slowed over in the months prior to the lifting of the deposit freeze. It seemed as though depositors expected that the ruling would declare pesification illegal and thus allow depositors to recover their original dollar deposits, or an equivalent peso amount at the current market dollar rate. In that sense, delays in the ruling of the Supreme Court indirectly contributed to mitigating the onslaught of "amparos."

²⁸ The Supreme Court Chief Justice resigned in July opening the way for the new Administration to change the composition of the Court.

Finally, on March 5, 2003, the Supreme Court ruled in a parallel case²⁹ against the legality of the pesification, opening another round of uncertainty and unknown consequences for banks, although this ruling included another aspect affecting the State. (See estimates below in Table I.2). The ruling, under a narrow interpretation limited to current reprogrammed deposits, directly affects approximately A\$12.6 billion in time deposits (originally US\$8.8 billion – see the following tables) that were pesified and subsequently reprogrammed.

Table I.2: Estimated Evolution of the “Corralón”

“Corralón” Reprogrammed Time Deposits (Cedros)		
De-Frosting Process	US\$ Mill.	%
Balance as of 31/12/01 (actual)	47,467	100.0%
Pesification pre-programming	17,467	36.8%
Reprogrammed Time Deposits	30,000	63.2%
Boden Swap I - Jul-02	7,000	14.7%
Boden Swap II	880	1.9%
Anticipated devolution - Feb-03 (1)	600	1.3%
"Amparos" till Feb. 28th., 2003	5,348	11.3%
Other (4)	5,204	11.0%
Balance of Cedros as of Feb-03 (1)	10,968	23.1%
Freed: Apr. 4th to May 25th. (1)	5,334	11.2%
"Amparos" Feb. 3rd. to Jul.-03	1,086	2.3%
Balance of Cedros as of Jul-03 (1)	4,547	9.6%
Pending "Amparos" (1) \$2.80 = 1 us\$	2,885	6.1%
<i>(1) Estimated</i>		
<i>(2) Purchase of cars, houses, and repayment of loans</i>		

(Source: BCRA)

While restricted to the particular case of San Luis Province vs. Banco Nación, the ruling opened the way and created a precedent for other cases involving bank depositors, and it is expected to institutionalize the lower courts’ “amparo” decisions that prevailed throughout 2002. This has forced the government to arbitrate across-the-board measures, such as the one announced on March 20, 2003, involving a third scheme of voluntary lifting of freezes, by tranches, of the residual time deposits reprogrammed in the “corralón.”

The main characteristics of the ruling included:

- a) The pesification of deposits (but not of bank assets) was declared unconstitutional;
- b) The bank (not the State) has the responsibility to repay depositors;
- c) The ruling is not retroactive, and excludes previous payments that were made voluntarily or without reservation;
- d) The parties have 60 days to reach an agreement before the Court rules upon payment procedures;
- e) The timing, terms, and means of repayment (cash vs. bonds) is left unclear.

²⁹ San Luis Province vs. Banco Nación, March 5, 2003.

Nonetheless, on May 7, 2003 when the term of 60 days lapsed, the Court did not make a ruling in said regard, delaying the case’s final resolution until the new administration takes office.

The estimated impact of the ruling depends heavily upon the timeframe and scope of application of a subsequent extension of the ruling, as well as the results of the continuous extensions of swaps offered. At one extreme, under a narrow interpretation, the ruling could be restricted to those reprogrammed time deposits that were outstanding as of the date of the ruling (about A\$12.5 billion of original deposits denominated in CEDROS as of end the of March 2003). In the broadest possible interpretation, the ruling could affect the original stock of deposits that were pesified and subsequently reprogrammed (about A\$21.0 billion). The estimated impact to the banks (see Table I.3) or, alternatively, the government, if it compensates the banks, would range between US\$3.4 billion (narrow interpretation) and US\$5.6 billion (broader interpretation).

Estimated Impact of Re-Dollarization		
<i>A\$ mill.</i>	<i>Feb-03</i>	<i>Original</i>
Stock of Cedros	12,500	21,000
CER accrued	5,300	8,903
Total Bank Debt	17,800	29,903
Stock valued at 3.2	28,571	48,000
Difference to compensate	10,771	18,097
in US\$ millions	\$ 3,366	\$ 5,655

The Duhalde administration decided to delay the final decision. Decree 739/03 instituted another voluntary deposit-to-bond (BODEN) swap, subsequently extended to May 23, 2003 to lift the “corralón” by tranches of deposits.³⁰ Under the terms of this swap, banks are to pay back reprogrammed deposits in cash, at 1.4 per original US\$ plus CER, with the government compensating the difference as compared to the reference rate of 2.9792 Argentine pesos per US\$ through another 10 year US\$ – bond (BODEN 13).

Nonetheless, the new swap has created another asymmetry, this time in the manner in which depositors have been treated under the various swaps. Depositors who accepted the exchanges under Swaps I and II (Decreets 905/02 and 1836/02) recovered a lower amount of their original deposits (45% and 70%, respectively) than those who applied for the

³⁰ In three tranches, the first for deposits of up to A\$42,000 (37% of the total), the second for deposits of more than A\$42,000 but less than A\$100,000 (22%) , the third for deposits of over A\$100,000 (41%). Execution will be immediate for the first group and subject to the constitution of a previous 90 to 120 day time deposit for the other two. As of mid May 2003, we estimated that the extended swap was opted for in an amount of approximately A\$6 billion, reducing the reprogrammed deposits, without CER, to approximately A\$6 billion (A\$9.373 billion with CER).

extension under Decree 739/03 (about a 87%). This additional asymmetry is also being litigated through an “amparo” action before the Supreme Court.

All in all, the problems associated with the original deposit freeze seem to have been overcome, although the consequences for banks in terms of actual and potential losses have been unpredictable and high. In addition to pending compensation under “amparo” rulings, the freeze has been lifted on most deposits. This complicates banks’ liquidity management and exacerbates the real liquidity gap. It also makes it much more expensive (at free market rates) for banks to fund their long-term illiquid stockpile of public bonds, which only pay a 2% cash coupon.

F. Inordinate Public Sector Exposure

While the banks have begun to address their private-sector problem assets with different degrees of provisioning, rescheduling and write-offs, their exposure to the public sector is more complex. For the largest private sector and public banks, this exposure averages between 60% and 70% of their assets in their balance sheets (with Banco Galicia leading the pack).

Table I.4: Public Sector Exposure of the Banking System

	Dec. 2001	Dec. 2002
Government Risks / TA	23%	49%
Total Assets (TA)	123,735	190,218
Government Exposure (millions)	28,459	93,207
Public Bonds	5,769	15,891
Boden 2007		4,602
Boden 2012		29,557
Guaranteed Loans	12,657	18,345
Other	10,033	24,812
<i>Increases due to Pending Compensations:</i>		
Amparos		4,000
CER/CVS		4,600
Redollarization Narrow		10,771
Redollarization Broad		18,097
New Exposure Level (Narrow)		59%
Idem. Broad		63%

This level has risen for the banks since 2001. (See Table I.4) from 23% to close to 50% by the end of 2002 for the banking system as a whole. Delays in reaching an agreement with the IMF have hindered the banks’ ability to deal with the portion of public-sector debt that was renegotiated under international law. If further pending compensation to banks takes place for the losses resulting from the “amparos”, asymmetric indexation CER/CVS, and the latest re-dollarization ruling by the Supreme Court, then the overall exposure with the State could reach unsustainable levels (59% to 63% of total assets, depending on the scope of the re-dollarization, which is currently uncertain).

Current regulations allow the banks to account for their government assets (including BODENs received as compensation for the asymmetric pesification) **at face value**, with a risk weighting factor of zero for calculating their capital/asset ratio (CAR), as in the past. If, however, one believes that a significant “haircut” is possible with the restructuring of the external debt (as well as possible further “haircuts” on local currency public-sector obligations), the value of government assets and of equity would be considerably overstated.

It should also be noted that while the BODENs were meant to compensate the banks for losses and hence support equity, the payment is in the form of long-term paper, which is illiquid and provides an insufficient cash coupon (2%), does little to correct the banks’ flow losses. The BODENs are seen by many as an accounting mechanism that is serving to “stabilize” the banks’ balance sheets during a period of inordinately high losses. In addition, since BODENs - and other public paper likely to be used to pay for pending compensations from the “amparo” rulings and asymmetric indexation - yield CER and are mainly funded with new free deposits (at free market rates). As a result, banks are experiencing a negative carryover in the form of a negative interest spread. This has led to banks reporting losses in excess of A\$13 billion in 2002 and A\$2.4 billion in the first four months of 2003, being hurt by the negative carryover mentioned above and the “scissors” of rising and costly market deposits and declining private sector loans.

As discussed in the next section, such methods of accounting forbearance are likely to prevail for the foreseeable future. Indeed, there is little choice in the matter, given the scarcity of government and private resources to compensate the banks.

G. Regulatory Interference and Forbearance

Prior and in the course of the crisis, the progressive loss of independence of the BCRA and the Superintendency was increasingly evident. There were frequent changes in the top positions of BCRA (Presidency, Vice-Presidents, Directors, Superintendent and Vice-Superintendent) creating instability and lack of continuity. Moreover, the recent creation in May, by Decree 1262/03, of the Financial System Restructuring Unit (“*Unidad de Reestructuración del Sistema Financiero*” - URSF) could increase the risk of interference in the design and implementation of banking resolution decisions moving away from a least cost path.

In addition to the above, there is also a clear risk of excessive regulatory forbearance, as the new regulations issued during March and April, 2003 seem to indicate (see below for more recent measures). The degree of regulatory discretion in assessing bank solvency and viability that has been installed in the system further deteriorates the previous rigor that, until 2000, had been a cornerstone of banking regulation in Argentina. Regulatory forbearance per se, applied across-the board, will not resolve the situation. BCRA’s Comunicqué A 3918, for example, modified the loan classification and provisioning rules which, since 1998, have provided banks with progressively increasing forbearance in terms of classifying and provisioning the banks’ deteriorating loan portfolios. The modification is another “relaxation” in the previous rigor of bank regulatory accounting practices in Argentina. This could make it very difficult to identify the real condition of banks over the next two to three years.

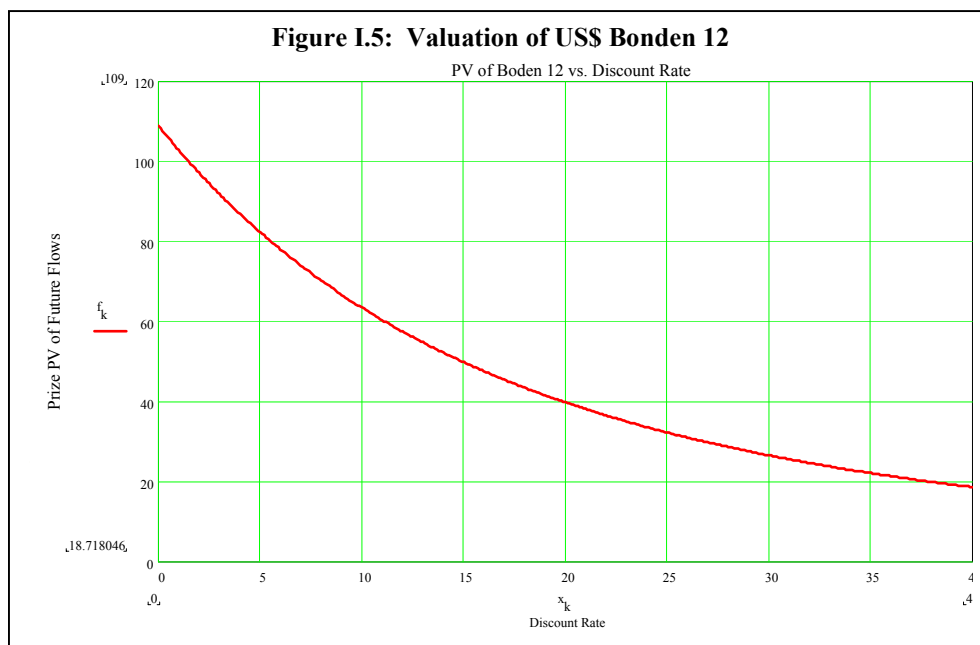
Communique A 3911 of the BCRA (March 28, 2003), for example, established new valuation rules and maximum credit-risk exposures for and with government entities. The scope of instruments subject to the new rules will be valued at cost, plus accrued income, or present value (PV), whichever is less. Compensation bonds are excluded, however, and the discount rates are below market and risk rates. The new methodology is voluntary for bonds and bills received as compensation (Decree 905/02 and subsequent —e.g. BODEN 12, received for asymmetric compensation, which trade today at a discount of about 47%). Further down-sliding is expected as more BODENs 13s are issued.

The flow of funds for those exposures included under the regulation will be discounted: a) at an increasing rate (from 3% to 5% p.a.) during the next seven semesters; b) at 5% + 0.5 (market rate - 5%) in 2007; and c) at the market discount rate starting in January 2008. The market discount rate was about 35% in the first quarter of 2003, producing a large valuation gap of 32% (35% less 3% for 2003).

It is difficult to estimate the likely impact of the above-mentioned measures, but it seems clear that, compared to current market discount rates (of at least 35%) - or to more normalized discount rates (13.5%)³¹ - the current rates would require a protracted period before banks would have to adjust the book values (currently, close to 75% of face value) to market values (see attached graph). As the graph shows, at current market prices (47%), the implied discount rate (16.25%) is far greater than the discount rate set by the new regulations, which will keep the portfolio of government securities value in the books well above their economic value.

The valuation of the stream of flows on a US\$ BODEN 12 (see Figure and pro-forma vector of flows) is illustrative of the valuation gap underlying actual solvency (in addition to the banks' negative operational flows which are being financed with free deposits at market rates). Realistically, however, a large valuation gap (i.e.; price differences between book and market values) cannot be fully absorbed in the short term, but it will require possibly many years to be fully "digested". What is important is for government to quickly come to closure on its external debt obligations, re-establish the credibility of government commitment to all its obligations, and remove the courts as a "wild card" that can reverse public policies. This clearly will take some time, but markets will look for irreversibility of policy, equality of treatment, and transparency of rules.

³¹ Long US free risk rate of 5%, plus 850 bp., estimated as the average Argentina EMBI spread, given that current EMBI is at 5,599 bp.



PART II: Where do we Go from Here? Conclusions and Recommendations

A. Pre-Conditions for the Resolution of the Banking Crisis and the Restoration of Financial Intermediation in Argentina: Longer-term Structural Issues

In order to make sustained progress in resolving the 2001-2002 Argentinean banking crisis, certain pre-conditions must be met over time. Such pre-conditions, in view of the nature of the crisis - which exceeded, by far, the scope of the financial system *per se* - demand that Argentina rebuild some of its economic, legal, judicial, and institutional foundations, in order to restore the banks' financial viability and rebuild trust in financial contracts, which is essential for the functioning of a market economy. Without that, banks will not be able to operate normally, depositors will not be willing to put their savings in the banks again, investors will not be willing to contribute additional resources, and borrowers will not receive financing - beyond restricted short-term consumer credit and working capital at high real interest rates.

Actions in the areas mentioned above include the adoption of a set of measures discussed in Sections B, C, and D below. It would be unrealistic to expect all these actions to be in place within a short-term horizon, but a sense of purpose and direction must be maintained throughout to restore financial intermediation in Argentina.

We consider the following actions indispensable to restore the health of Argentina's banking system. These are in fact pre-conditions or, at a minimum, are measures that should be taken simultaneously with other specific banking policies:

- **Restore Fiscal Viability.** The necessary rebuilding of the banking system requires actions, as a first, *sine qua non*, condition, directed at restoring the government's fiscal viability. Bank analysts have correctly pointed out that "Despite all the turmoil from the default, it is difficult to escape the conclusion that the core of any solution is a fiscal program based on living within one's means."³² Efforts to restore fiscal solvency require measures to increase the government's primary surplus beyond present levels. These efforts are also dependent upon: (i) restoring the country's rate of economic growth, based on a more open economy, able to reduce politically unsustainable high rates of unemployment and poverty; (ii) controlling expenditures at the federal and provincial levels, and (iii) renegotiating the government's external and domestic debt, so as to achieve a sustainable debt to GDP ratio.

The interrelationship among all the above-mentioned elements is particularly evident in the banking sector. Banks are insolvent due to inordinately high exposures to defaulted federal and provincial government debts, amounting to **over 50% of total bank assets**,³³ once all the "compensations" for the various imbalances introduced by the government in the past year and a half are paid. This huge banking system exposure to public sector risk takes the form of long-term bonds, which largely accrue interest at rates that do not allow banks to recover their costs, creating an unsustainable balance sheet mismatch in terms of maturities, currencies, returns, and cash flows. Moreover, given today's low expected service, in cash terms, vis-à-vis the massive amount of government paper, the value of these assets is well below par (book value), which results in a serious capital impairment for the banking system. In other words, the value of a financial investment today is only the discounted present value of the expected future payments promised to the investor. Until this imbalance is dealt with for the public sector as whole, bank solvency and viability in terms of cash flows will continue to be major issues, as discussed below. The banks' equity problem is compounded by the poor quality of private sector assets.

- **Restore Legal and Judicial Certainty.** The termination of the Convertibility Law and the decisions taken to handle the crisis and allocate losses to the different parties, resulted in major violations of property rights and private contracts, adversely affecting the credibility of the legal and judicial process and inflicting long-term institutional damage. While the Supreme Court has started to reverse some of the violations to property rights, these remedies are coming rather late in time in relation to the original measures adopted. While the courts are moving in the right direction, they inevitably cause additional uncertainty and losses for the banks in the short-term. "Justice delayed is justice denied." The Judicial system must find ways to respond more expeditiously.

³² Morgan Stanley, "Argentina: As Bad as it Gets?," Weekly Highlight, Latin America Economics, November 25, 2002, page 5.

³³ Government paper as a percentage of total bank assets is much higher in Argentina than has been seen in other recent system crises in the region (Mexico) due to the severity of the crisis and the prolonged recession which preceded it (almost four years of anemic growth). During the downward phase of the business cycle, banks retrenched and recovered their loans to the private sector, often creating a "credit crunch" and exacerbating the contraction of output.

Prompter remedies and enforcement of the measures foreseen in the law are critical to restore financial intermediation since banking is entirely based on a set of enforceable contractual agreements among private parties.

- **Achieve Better Coordination and Trust among the Three Branches of Government.** Throughout the crisis the executive, legislative, and judicial branches have largely worked at cross-purposes. The Supreme Court’s declaration of unconstitutionality of the deposit freeze (“corralito”) was well received but came with a long delay creating enormous uncertainty during the interim period and overburdened the lower courts with thousands of injunctions, while increasing the costs to depositors. To provide predictability regarding the “rules of the game”, in particular the protection of property rights, is absolutely critical to restore confidence.
- **Restore the Credibility of Key Institutions.** In the financial sector per se it is important in our view to restore the autonomy of both the Central Bank and the Superintendency of Banks. In both cases such autonomy could be raised to the constitutional level in order to provide additional, although never invulnerable, protection. There are several successful precedents in the region (Chile and Colombia come to mind). The autonomy of the Central Bank could include a mechanism to grant a fixed-term to BCRA Directors, raise their eligibility requirements, and provide guarantees that not all of them will be replaced during the term of the President of the Republic.

Finally, the granting of legal protection to bank supervisors in discharging their official duties is critical in our view. The lack of such protection in some cases has led to paralysis and sub-optimal decisions for intervening and liquidating banks, as well as to numerous superfluous processes against the most senior staff of the SBFI.

B. Short-Term Policies (CY03): The Long List of Unresolved Issues

It will take a very long time for the banking system to cure its wounds and restore public confidence in banks. However, unless this task is undertaken, the banks will not be able to again play a positive role in providing real credit to the private sector in support of faster economic growth. Beyond moving in the direction indicated in Section A above, which, in our view, outlines some of the preconditions for the operability of the financial system, the new administration will need to tackle the following **short-term priorities**:

- **Advance, in a more timely fashion, in resolving the multiple pending issues affecting the health of the banking system, which are admittedly difficult and fiscally costly.** Government policy created huge imbalances in terms of stocks and flows for the banking system. The “remedial” measures to compensate banks have only been partially implemented, almost one and a half years since the start of the crisis. Consequently it is imperative to:
 - a. **Finalize the issuance of bonds, in pesos and dollars, to cover the losses resulting from the asymmetric pesification (“compensation bonds”) and the expropriation of the banks’ foreign exchange positions (“hedging bonds”).** Initially the compensation bonds were issued using provisional

estimates made by the banks themselves, which led to the explicit recognition (though not delivery) of between 75 and 85% of the total estimated compensation. The bonds remaining to be issued (15-25%) were subject to the finalization of the supervision of each bank by the SBIF prior to the final settlement of the balances to be compensated. This process has yet to be completed. Inspections should be concluded as soon as possible. When the delay is attributable to the SBIF and there are grounds to increase the compensation due, the government should retroactively recognize the interest on the bonds. Upon completion, the total bonds issued would amount to some A\$30 billion of which 70% and 30% are, respectively, “compensation bonds” for the asymmetric pesification and “hedging bonds” for the loss of the banks’ foreign exchange positions.

- b. **Finalize the deposit-for-bond swaps** (Swap I and Swap II) authorized by the Ministry of Finance in 2002, and **regulate the use of reprogrammed deposits (CEDROS) and government bonds (BODEN) to repay bank loans**, ensuring that the pricing of bonds to repay bank loans closely follows market prices, so as not to inflict additional losses upon the banks.
- **Finalize all pending “compensations.”** Looking forward, the most difficult and pressing issues involved in quantifying and compensating losses involve executing three pending “compensations,” without forcing further bank lending as conditionality for its execution:
 - a. **Banks’ losses resulting from the asymmetric indexation of assets (using the Variable Wage Coefficient - “*Coficiente de Variación Salarial*,” CVS) and liabilities (using the Reference Stabilization Coefficient - “*Coficiente de Estabilización de Referencia*,” CER),** where one of the indices - the CER- rises faster than the other - the CVS-. The Argentine Bankers’ Association (ABA) estimates that the losses from this differential for all banks considered together amount to as much as A\$4.6 billion.
 - b. **Banks’ losses from the court approved “amparos”** (i.e.; the payment of frozen, originally dollar-denominated deposits at the dollar/peso market rate, which as of March was A\$3.2 to the dollar, versus the CER and yield-adjusted dollar/peso rate mandated by the government when the dollar deposits were forcibly converted to pesos. This results in a loss for the bank, per dollar of deposit, at the time of more than one peso, since as of March the adjusted conversion rate was approximately A\$2.04 to the dollar.³⁴ ABA estimates these losses at A\$4 billion.
 - c. **Banks’ losses from the re-dollarization of deposits.** The losses for the banks which will eventually result from the re-dollarization of deposits mandated by the recent Supreme Court decision are still uncertain. Indeed, no specific decision has been handed down by the Supreme Court beyond the precedent

³⁴ Mathematically, $A\$2.04 = A\$1.4 (1+CER)(1+r)$ where $r = 2\%$, resulting in a loss for the bank of over one peso times the value of deposits which left the system (“goteo” or “leaks of deposits from the “corralón”).

established under the case of the Province of San Luis versus Banco Nación. Market estimates indicate a price tag as high as A\$11 billion (or US\$ 3.4 billion) depending upon the scope of deposits covered and the method used to pay the compensation.³⁵

- d. The losses from these three additional asymmetries are particularly worrisome because of: (i) their intrinsic technical complexity; (ii) potential further delays if these three pending issues are left for the new Administration to resolve; (iii) additional uncertainties over the adequacy of the banks' liquidity, (iv) potential further deterioration of the banks' financial margin, owing to a negative direct impact on the banks' spread, as deposits are transferred from a lower cost category (CER) to deposits at market rates, as well as the impact this would have in raising the banks' costly precautionary demand for additional liquidity, and, last but not least, (v) potential further deterioration in the market price of government paper as its supply increases (see discussion below on "valuation issues").
- **Resolution of the issue of BCRA's Rediscounts.** There has been a prolonged discussion of the pros and cons of allowing the netting of BCRA rediscounts granted as the lender of last resort for banks to handle deposit withdrawals in the first half of 2002 stemming from the "amparos" and other "leakages" from the "corralito" and "corralón." Over 80% of such liquidity went to four banks (Nación, Provincia, Galicia, and Francés), being particularly concentrated in the first three. An unconditional netting would amount to an unwarranted bailout of these banks and a transfer of A\$20 billion in government paper to the BCRA. Beyond the inequity and bias of a decision favoring mainly the public banks, this introduces a distortion of market competition (to the extent that banks that repaid or did not access the LOLR facility were doing the funding at market rates). This approach also creates additional moral hazard³⁶ and amounts to a credit to the government in excess of legal limits.³⁷ In any event, a satisfactory solution for both parties should be implemented soon, but not automatically.³⁸ While undeniably providing some relief, such mechanisms (netting and matching) would fail to overcome, *per se*, some of the banks' fundamental imbalances, and should not be used to induce public banks to lend. The recently issued rules for accessing the forward-looking LOLR facility are reasonable, as they correct prior discriminatory treatment towards foreign banks.

³⁵ See Guillermo Mondino et. Al., "After the Supreme Court Ruling: And Now What?," Latin Source: Argentina Market Brief; March 5, 2003.

³⁶ The pricing of such LOLR facilities was at below market rates (4/5 of the LEBAC rate, which was lately raised to 6/5 of such rate). In theory, such facilities should be offered at penalty rates (above market rates) and only to solvent banks pledging good collateral. It should be noted that indexation to the LEBAC rate exposes the banks potentially large interest rate risks.

³⁷ Given some of these drawbacks, at the time this paper was written, the authorities were discussing the advantages of moving to a **matching** scheme, aimed at reducing both the term-transformation risk and the asymmetry of costs (cost of rediscounts versus yield of government paper, CER + 2). The latter proposal seems reasonable in terms of reducing the duration gap, but seems inadequate if it focuses on taking from banks the few government bonds that offer a cash payment ("guaranteed loans"), which would further aggravate the banks' cash-flow problem.

³⁸ In fact it gives significant leverage to the authorities to press for the reform of the public banks and to enforce compliance with the rehabilitation plans.

- **Restoring the timeliness, reliability and comparability of banks’ financial statements.** The crisis resulted in delayed financial reporting and lack of full disclosure for most banks. The BCRA has not provided sufficient guidance, and banks are classifying at will a number of transactions in their books, making it very difficult to compare and consolidate their accounts. The changing accounting rules and regulatory forbearance mask the true financial condition of the banking system.
- **Flexibility in the application of supervisory norms, without abandoning key prudential principles.** The SBIF should help restore the “fair value” of the banks as reflected in their accounts, by maintaining transparent, sound rules for classifying and provisioning banks’ risk-exposures per international standards. Accordingly, regulatory forbearance should be limited only to viable banks, disclosed in the notes to their financial statements, conditioned to strict holding actions, with a reasonable, pre-determined timetable for provisioning the stock of losses. The netting or matching of BCRA rediscounts against government liabilities should be conditioned to approval and effective implementation of adjustment plans, which must focus on minimizing and eliminating operational cash-flow losses.
- **Addressing pre-crisis observed weaknesses,** with specific measures to limit the future exposure of banks to public-sector risks. The weight of public-sector exposures for calculating the capital-asset ratio (CAR) cannot continue to be zero. Moreover, appropriate provisioning for foreign exchange loans to borrowers who are unable to generate foreign currency revenues should be made mandatory.
- **Paying attention to the entry of new banks and bankers.** The departure of some foreign banks (ex.; Scotiabank and Credit Agricole) has opened room for the expansion of locally-controlled banks and the entrance into banking of new industrial/financial Argentinean groups. The SBIF must raise the bar to maintain tough “fit and proper tests” as part of the licensing requirements. At a time of excess capacity in the banking industry, minimum capital requirements should be raised to encourage consolidation.

C. Where does All this Leave the Banking System?: Solvency and Liquidity

Unless the list of pending issues is satisfactorily resolved, it is not feasible to assess the actual financial and operational condition of the banking system or of individual banks in terms of solvency and liquidity.

This situation is all the more serious, given that there is literally no significant, profitable banking business left (except for the provision of payment, trade, credit card, and foreign exchange services). This state of affairs has resulted from the contraction of economic activity, the large excess capacity in the banking system, the negative profitability of business (as banks maintain costly excess liquidity to face an uncertain future due to the “amparo” judgments and the possible losses from re-dollarization), and the absence of creditworthy borrowers.

Even if all pending compensations were paid, most, if not all, large banks would be technically insolvent due to their inordinately high exposure to defaulted federal and provincial governments as well as poor private sector asset quality (mainly the corporate sector). In addition to the stock of accounting losses - which would always be a function of the degree of regulatory forbearance granted under current or modified local regulatory accounting practices - the crisis, and the policies followed since the Convertibility Law was abandoned, have created significant balance sheet mismatches. **Looking forward, these mismatches lead to huge operational cash-flow losses and additional capital impairment that need to be tackled and contained urgently, otherwise, lending will not resume on a sustainable basis. Thus, while insolvent banks may continue to function provided that they maintain acceptable liquidity levels, the greatest urgency is to “stop the bleeding” from mismatches that have a negative cash-flow impact. The problem banks are concentrated among the public and largest private commercial banks.**

The most serious financial mismatch results from an inordinate volume of long-term, low-yield, interest-accruing government assets, which represented approximately half of total bank assets at the end of 2002.³⁹ Once the pending compensations are paid, taking into account the LEBACs and the high (25%), practically unremunerated reserve requirements, this share rises to nearly 60%. Such government assets are funded by an excessively large proportion of very short-term deposits at market rates, making the operational structure of the banking system unsustainable.⁴⁰

In order to assess the extent of problems for the banking system as a whole in a simple but, hopefully, sound framework, the following section presents a “snapshot” of the system’s balance sheet, divided into three “books” by “type of currency.”⁴¹

- (i) The first “book” is part of the (old) balance sheet denominated in nominal Argentinean pesos (col. 2),
- (ii) The second “book” (col. 3) represents the amounts adjusted by various indices; and
- (iii) The third “book” (col. 4) shows the dollar-denominated or dollar-indexed accounts (col. 4).

³⁹ It is important to undertake a careful analysis for the larger banks and for various groups of banks, since, among other things, we observe the paradox that some of the strongest banks up to 2001 are today in worse financial shape than the rest. The latter is explained in part by two main factors: (i) the former retained more term deposits and, as a result, faced larger losses from still uncompensated “amparos”; and (ii) the former had more FX net assets which have been “compensated” by BODENs worsening the maturity and profitability mismatch.

⁴⁰ Given that the final financial statements for the close of the year 2002 were still not available at the time we wrote this paper, the rates and spreads are estimates, which vary among individual banks.

⁴¹ We acknowledge Nicolas Dujovne’s contribution to this hopefully clearer presentation of the banking system’s balance sheet.

Table II.1: Argentina's Banking System: Snapshot as of December 2002

Banking System Balance Sheet & Market Rates	Estimated Balance Sheet - % on Table Assets and AS mill.						Estimated Rates & Spreads					
	AS Nominal	AS Indexed	US\$	Total	AS Nom.	AS Indx.	US\$	Total				
Cash & Banks	1%	1,686	0%	-	2%	3,312	3%	4,998	1.50%	0.00%	1.50%	1.50%
BCRA Reserve Required	5%	10,349	0%	-	1%	1,014	6%	11,363	1.50%	0.00%	1.50%	1.50%
LEBAC	2%	4,343	0%	-	0%	-	2%	4,343	30.00%	0.00%	1.50%	30.00%
Retail Loans	2%	4,403	7%	13,406	0%	-	9%	17,809	32.50%	17.29%	0.00%	39.59%
Corporate Loans	6%	11,518	2%	3,405	2%	4,581	10%	19,504	36.90%	4.60%	9.20%	28.59%
O.N. (external)	0%	-	0%	-	0%	-	0%	-	0.00%	0.00%	0.00%	-
Government	3%	6,090	25%	47,717	19%	36,697	48%	90,504	15.00%	24.66%	1.50%	14.62%
Bonds	3%	6,090	0%	-	4%	7,836	7%	13,926	15.00%	2.00%	1.50%	1.50%
Public Loans	0%	-	13%	24,426	0%	-	13%	24,426	15.00%	4.00%	0.00%	25.84%
Provincial Loans	0%	-	11%	19,809	0%	-	11%	19,809	0.00%	2.00%	0.00%	23.42%
Compensation Bond	0%	-	2%	3,482	15%	28,861	17%	32,343	0.00%	2.00%	1.50%	3.86%
Pending Compensations	0%	-	0%	-	0%	-	0%	-	0.00%	0.00%	0.00%	-
Non-Int. Earning Assets	7%	13,190	6%	10,454	9%	16,294	21%	39,938	0.00%	0.00%	0.00%	0.00%
Total Assets	27%	51,579	40%	74,982	33%	61,898	100%	188,459	21.04%	28.35%	2.27%	18.45%
Reference Rates (Lebac)	8.0%	Free rate	21%	CER	1.5%	Libor	3.2	1 us\$	80.00%	4/5 Lebac	NPL	30.00%
Transactional Accounts	16%	29,737	0%	-	0%	-	16%	29,737	1.50%	0.00%	0.00%	1.50%
New Time Deposits	9%	17,346	0%	-	0%	-	9%	17,346	23.80%	0.00%	1.00%	23.80%
Public Sector	0%	-	3%	4,916	0%	-	3%	4,916	1.50%	2.00%	0.00%	23.42%
Reprogrammed CEDROS	0%	-	8%	15,990	0%	-	8%	15,990	0.00%	2.00%	0.00%	23.42%
Other Deposits	4%	7,679	0%	-	2%	2,928	6%	10,607	23.80%	0.00%	1.50%	17.64%
BCRA Rediscounts	11%	20,370	0%	-	0%	-	11%	20,370	22.00%	0.00%	0.00%	22.00%
BCRA Advances (Boden)	0%	-	2%	4,395	0%	-	2%	4,395	0.00%	2.00%	0.00%	23.42%
O.N & LoC External	0%	-	0%	-	25%	47,606	25%	47,606	0.00%	0.00%	5.00%	5.00%
Non-Interest Bearing Liab.	10%	18,168	0%	-	0%	-	10%	18,168	0.00%	0.00%	0.00%	0.00%
Total Liabilities	50%	93,300	13%	25,301	27%	50,534	90%	169,135	14.49%	23.42%	4.80%	12.74%
Net Worth	-22%	(41,721)	26%	49,681	6%	11,364	10%	19,324	6.56%	4.93%	-2.52%	5.71%
Mismatched Books	<i>Short</i>		<i>Long</i>		<i>Slight Long</i>				<i>Spreads</i>		<i>% TA</i>	
Interest Income	<i>Accrued CER included</i>						27,406				14.5%	
Interest Expense	<i>Accrued CER included</i>						19,233				10.2%	
Net Interest Margin (NIM)	<i>Accrued NIM including CER and capitalized interest</i>						8,173				4.3%	
Less: Net CER	<i>CER*(IEA-IBL)+ Residual NPL at Accruing Rate</i>						11,612				6.2%	
Net Cash Interest Margin	<i>Deducted CER and estimate of capitalized interest</i>						(3,439)				-1.8%	
Net Fee Income on TA	1.8% <i>Estimate on Total Assets (TA)</i>						3,298				1.8%	
Oper. Expenses	4.0% <i>Estimate on Total Assets (TA)</i>						(7,538)				-4.0%	
Cash Pre-Provision Profits	<i>(Before Subsidies, "Amparos", and Compensations)</i>						(7,679)		<i>("Corralon" in Place)</i>		-4.1%	

Since all accounts are expressed in nominal pesos, they add up to the total balance sheet of the system as of December 31, 2002 (col. 5). The rest of the table includes “representative” interest rates and spreads for an “average system bank.”

- The **peso “book”** shows total assets of A\$51.6 billion versus total liabilities that are almost twice as large (A\$93.3 billion), yielding a net negative worth of A\$41.7 billion. This reflects the relative importance of the transaction accounts (freed from the “corralito”), the large value of BCRA rediscounts, and the refinancing of cash-flow losses (A\$7.7 billion) at market rates, compared with anemic commercial activities (loans).
- The **indexed “book”** (col. 3) shows a large surplus of assets (A\$75 billion) over liabilities (A\$25 billion), reflecting the large exposure of the banking system to the government (acquired prior to the crisis and the compensations paid as of December 2002). The net liabilities (A\$41.7 billion) in free-peso (assets of A\$51.5 billion less liabilities of A\$93.3 billion) of the “first book” (col. 2) finances most of the net long position (A\$49 billion) of indexed (long-term) assets of the “second book” (col. 3). The core of this illiquid net long-indexed position is

composed of government exposures linked to the CER (A\$48 billion). Accordingly, banks are financing long-term government assets at short-term free market rates, yet those government assets do not produce a comparable cash flow income. The resulting negative carry-over is financed by deposits at free market rates (A\$7.7 billion), as indicated above.

This indexed “book” is the major source of cash flow operational losses, since it has a negative cash spread. While the nominal differential between the average interest income (28.4%) and expense (23.4%) is positive (4.93%), it is financed by the free-peso liabilities (A\$41 billion) of the first book at an average cost of 14.49%, with a much higher marginal cost of 23.8%. This mismatch tends to grow and become explosive, because the shift of deposits —from CER-linked deposits in the “corralón” to deposits at free market rates— exacerbates the negative net income of both books. Such a mismatch increased once the “corralón” disappeared. Hence, besides the liquidity risk of lifting the “corralón,” the unmatched spreads in the two “books” would likely worsen the operational losses. It is unlikely, at least in the short-run that this gap will be “corrected” by a growing portfolio of commercial loans at positive spreads.

- The **dollar “book”** is stronger than the other two in terms of balances, but not in terms of flows due to costly external debts (negotiable obligations or ONs). Albeit, it has a negative spread of 2.25%, as well as a negative short-term profile (long-term government bonds funded with short-term foreign liabilities).

Assuming various plausible rates of interest and spreads, banks end up with a negative net-cash interest margin of –1.8%. Adding fee income and subtracting operational expenses, this yields pre-provision losses at a rate of 4.1% of total assets, implying some **A\$7.7 billion in projected losses for a full year** (which is not out of line with the annualized losses observed during the first four months of 2003 mentioned above), which must be refinanced with new deposits at market rates. Unless this fundamental unbalance is resolved, the problem will worsen.

Moreover, with negative operational cash flow losses, banks are unable to provision for problem loans and the huge implicit losses from their exposures to government paper (both old and new). Although such provisioning could be achieved from an accounting point of view, if regulatory forbearance continues, such an approach will not contribute to restoring solvency.

Banks are in our estimates losing money on a cash basis, losses which are being mitigated by reducing the cost of the stock of BCRA rediscounts (from penalty rates above market rates, to 80% of short term LEBACs, in May at about 8% p.a.). The cost of BCRA rediscounts at 6.40% p.a. contributes to the reduction the negative operational cash-flow losses from A\$7.7 billion to about half that figure. (See below).

However, this strategy is, in our view, very risky. It allows the largest banks to “burn” new deposits at high (marginal) market rates in order to cover their negative operational cash flows. Furthermore, it fails to impose holding actions directed at reducing the banks’ operational losses – forcing their adjustment through aggressively reducing their costs -

working-out non-performing corporate loans, and ensuring their prompt recapitalization (the stock of losses still exceeds the banks' accounting net worth).

Results after Adopting Across-the-Board Additional Policy Measures

The policy measures being considered include the following:

- (i) Transferring BCRA rediscounts from the “peso book” to the “indexed book,” changing its cost from a LEBAC reference rate to (CER + 3.5). This will allow banks to accrue interest expenses, while at the same time mitigating the “mismatch” of this cost against the accruals from government paper (CER+2). In terms of the maturity mismatch, the authorities are considering requiring banks to amortize the rediscounts in 5 to 6 years, while the government paper matures in a longer period;
- (ii) Paying the “compensations” for the “amparos”, as well as for the differential between the two indexes used for adjusting assets and liabilities (CVS vs. CER);
- (iii) Renegotiating the banks' external debts (ON/Lines of credit) to benefit from lower interest rates (from 5% to a very optimistic 1.5%),⁴² and
- (iv) The (gradual) dismantling of the “corralón” over 6 months.

The above measures would mitigate, but not resolve, the losses from the negative cash flow resulting from all the mismatches faced by the banks, **leaving estimated cash flow losses for the system in 2003 of about A\$2.4 billion**. Serious bank restructuring requires restoring solvency and, above all, viability in cash flow terms.

⁴² Ex-post some of most favorable rates have fluctuated between 3-6% (Banco Hipotecario). Other banks have renegotiated at higher rates. The result is that the cash-flow losses going forward might be underestimated.

Table II.2: Results after Adoption of Pending Policy Measures

Matched Compensated Liberating Corralon	Estimated Balance Sheet - % on TA and AS mill.						Estimated Rates & Spreads					
	AS Nominal	AS Indexed	US\$	Total	AS Nom.	AS Indx.	US\$	Total				
Cash & Banks	1%	1,686	0%	-	2%	3,312	3%	4,998	1.50%	0.00%	1.50%	1.50%
BCRA Reserve Required	5%	10,349	0%	-	1%	1,014	6%	11,363	1.50%	0.00%	1.50%	1.50%
Lebac	1%	2,452	0%	-	0%	-	1%	2,452	30.00%	0.00%	1.50%	30.00%
Retail Loans	2%	4,403	7%	13,406	0%	-	9%	17,809	32.50%	17.29%	0.00%	39.59%
Corporate Loans	6%	11,518	2%	3,405	2%	4,581	10%	19,504	36.90%	4.60%	9.20%	28.59%
O.N.	0%	-	0%	-	0%	-	0%	-	0.00%	0.00%	0.00%	-
Government	3%	6,090	27%	50,717	23%	42,697	53%	99,504	15.00%	24.59%	1.50%	14.09%
Bonds	3%	6,090	0%	-	4%	7,836	7%	13,926	15.00%	2.00%	1.50%	1.50%
Public Loans	0%	-	13%	24,426	0%	-	13%	24,426	15.00%	4.00%	0.00%	25.84%
Provincial Loans	0%	-	11%	19,809	0%	-	11%	19,809	0.00%	2.00%	0.00%	23.42%
Compensation Bond	0%	-	2%	3,482	15%	28,861	17%	32,343	0.00%	2.00%	1.50%	3.86%
Pending Compensations	0%	-	2%	3,000	3%	6,000	5%	9,000	0.00%	2.00%	1.50%	8.81%
Non-Int. Earning Assets	7%	13,190	4%	7,454	5%	10,294	16%	30,938	0.00%	0.00%	0.00%	0.00%
Total Assets	26%	49,688	40%	74,982	33%	61,898	99%	186,568	20.58%	28.13%	2.18%	17.75%
<i>Reference Rates (Lebac)</i>	<i>8.0%</i>	<i>Free rate</i>	<i>21%</i>	<i>CER</i>	<i>1.5%</i>	<i>Libor</i>	<i>3.2</i>	<i>1 us\$</i>	<i>80.00%</i>	<i>4/5 Lebac</i>	<i>NPL</i>	<i>30.00%</i>
Transactional Accounts	17%	31,493	0%	-	0%	-	17%	31,493	1.50%	0.00%	0.00%	1.50%
New Time Deposits	12%	21,803	0%	-	0%	-	12%	21,803	23.80%	0.00%	1.00%	23.80%
Public Sector	0%	-	3%	4,916	0%	-	3%	4,916	1.50%	2.00%	0.00%	23.42%
Reprogrammed CEDROs	0%	-	4%	7,886	0%	-	4%	7,886	0.00%	2.00%	0.00%	23.42%
Other Deposits	1%	2,388	0%	-	2%	2,928	3%	5,316	23.80%	0.00%	1.50%	11.52%
BCRA Rediscount	0%	-	11%	20,370	0%	-	11%	20,370	6.40%	3.50%	0.00%	25.24%
BCRA Advance (Boden)	0%	-	2%	4,395	0%	-	2%	4,395	0.00%	2.00%	0.00%	23.42%
O.N & LoC External	0%	-	0%	-	25%	47,606	25%	47,606	0.00%	0.00%	1.50%	1.50%
Non-Interest Bearing Liab.	10%	18,168	0%	-	0%	-	10%	18,168	0.00%	0.00%	0.00%	0.00%
Total Liabilities	39%	73,852	20%	37,567	27%	50,534	86%	161,953	11.19%	24.40%	1.50%	11.24%
Net Worth	-13%	(24,164)	20%	37,415	6%	11,364	13%	24,615	9.39%	3.72%	0.68%	6.52%
Mismatched Currency Books	<i>Short</i>		<i>Long</i>		<i>Slight Long</i>		<i>Spreads</i>			<i>% TA</i>		
Interest Income	<i>Accrued CER included</i>									27,631	14.7%	
Interest Expense	<i>Accrued CER included</i>									16,155	8.6%	
Net Interest Margin (NIM)	<i>Accrued NIM including CER and capitalized interest</i>									11,476	6.1%	
Less: Net CER	<i>CER*(IEA-IBL)+ Residual NPL at Accruing Rate</i>									9,666	5.2%	
Net Cash Interest Margin	<i>Deducted CER and estimate of capitalized interest</i>									1,810	1.0%	
Net Fee Income on TA	<i>1.8% Estimate on Total Assets (TA)</i>									3,265	1.7%	
Opex	<i>4.0% Estimate on Total Assets (TA)</i>									(7,463)	-4.0%	
Cash Pre-Provision Profits	<i>(Matched, Compensated, ON Renegotiated)</i>									(2,388)	-1.3%	
											<i>("Corralon" Defrost)</i>	

From the two “snapshots” of the banking system (i.e.; the system as of December 2002, Table II.1, and the simulation of the likely condition of the system after adoption of the four policy measures mentioned above, Table II.2), **the conclusion that emerges is that the system has not been able to attain equilibrium and halt its negative cash-flow losses (although the losses would fall from an estimated A\$7.7 billion to A\$2.4 billion per year and to about A\$4.4 billion once all deposits are freed for a full year).** The problem will not go away until the government’s fiscal solvency is restored, at least in part, thereby enabling the government to provide larger cash payments to banks, or, alternatively, unless the banking system generates about A\$40 billion in new businesses - with a net spread of 6% - or a combination of these two measures, accompanied by a rationalization of the banks’ structure and drastic cost reductions.

Although this analysis is rather technical, it helps to stimulate a policy dialogue regarding certain likely stylized scenarios for the system, focusing the attention of the authorities on **two key elements**:

- (i) the urgency of adjusting the system’s structure and of reducing excess capacity and infrastructure and operating costs; and
- (ii) the need to bring more cash into the system in order for banks to be able to restore their financial viability on a cash-flow basis (partially from higher payments from the government and other external sources – see summary table of possible scenarios below). Moreover, there is a need to repeat this analysis, using all the information at the disposal of the SBIF for the major banks individually. Such a process will evidence that each group of banks (public, Galicia, foreign, and other domestic private banks) must be dealt with very differently. This important exercise of individual, in-depth, diagnostics has been delayed for too long. The SBIF has the technical capacity and the modeling tools to undertake this analysis. The constraints will be more on the willingness to implement the necessary adjustment, particularly in the segment of the public banks.

Table II.3: Summary Scenarios

Scenarios	Accrued NIM	Cash NIM	Accrued CER*	OCF	OCF/Accruals CER
1	8,173	(3,439)	10,021	(7,679)	76%
2	12,343	731	10,021	(3,509)	35%
3	9,488	1,524	10,651	(2,717)	25%
4	11,674	3,710	10,651	(530)	5%
5	11,476	1,810	10,651	(2,388)	22%
6	11,054	(268)	10,651	(4,424)	41%

1 – Based on the 2002 balance sheet. BCRA rediscounts are calculated at free-peso market rates (22%).
 2 – BCRA rediscount is subsidized at 80% current short-term LEBAC rates (8%), or p.a. 6.40% .
 3 – Rediscount matched to (CER+3.50), compensating losses for CER/CVS (3 bill. ARP) and amparo judgments (6 bill. ARP).
 4 - External credit lines and ON in US\$ are renegotiated to LIBOR 1.5% from the current average 5% cost in US\$
 5 - Freeze is lifted on reprogrammed deposits (1/3 in April, 1/3 in June, and 1/3 in September)
 6 – Same as Scenario 5, but with all freezes lifted on reprogrammed deposit for a full year (23% leave the banking system)
 NIM = Net Interest Margin *Non-cash accrued CER in one year corresponding to government exposures
 OCF = Operational Cash Flow (Pre-Provision-Cash-Profits) = Cash NIM + Net Fee Income – Operational Expense
 Cash NIM = Accrued NIM less Net CER, less income suspended on non-performing loans (NPL).

Estimated Solvency

In spite of the difficulties entailed in determining the overall solvency of the banking system, the losses discussed above are a direct consequence of the lack of true economic capital and profitable business for the system as a whole.

Table II.4: Banking System’s Estimated Insolvency in Stock Terms

<i>Redolarized Deposits Compensated</i>	to Banks	to Depositors
<i>Scope of Redolarization</i>	<i>Narrow</i>	<i>Narrow</i>
<i>Approximate Estimations as of</i>	20-Mar-03	20-Mar-03
<i>FX Rate 1 us\$: AS</i>	<i>1:3:2</i>	<i>1:3:2</i>
Total estimated Economic Loss	(71,660)	(66,274)
Reported Net Worth as of Dec. 2002	26,900	26,900
Asymmetric Pesification	(33,000)	(33,000)
Loss in Private Loans (AS 37,313 mill.)	(11,194)	(11,194)
Loss in Public Exposure (AS 58,161 mill.)	(29,081)	(29,081)
Loss in Amparos (SEFyC’s estimate)	(6,000)	(6,000)
Redolarization (SEFyC’s estimate)	(10,771)	-
Asymmetric Indexation (SEFyC’s estimate)	(3,000)	(3,000)
Restructuring /Downsizing Costs (<i>estimate</i>)	(5,000)	(5,000)
Adjusted Accounting Newt Worth (ANW)	(71,146)	(60,374)
Accounting Value of Compensation	52,771	42,000
Economic Value of Compensation ECV	26,386	21,000
ANW + Economic Compensation Value	(44,760)	(39,374)
Net Worth without adjusting compensation	(18,374)	(18,374)
Minimum Annual Estimated Operatinal Loss	(4,400)	(4,400)
Discount on Public Debt	50%	50%
Discount on Private Debt	30%	30%

In pure stock terms, without adjusting the economic value of the compensation bonds received from the government, the system would show an estimated deficit of about A\$18 billion, due to unrecognized losses in both private and public credit exposures (A\$37 billion, and A\$58 billion, respectively), in addition to contingent cost-reduction expenses, which we estimate at A\$5 billion for the system as a whole.

This estimation does not consider the new contingency emanating from the recent redollarization of deposits. Neither does it include any adjustment on the value of the compensating bonds (asymmetric pesification and indexation, “amparos,” and redollarization). In this case, the deficiency of economic capital will range between A\$39 billion and A\$44 billion, depending on whether the compensation for the redollarization is given to depositors or to the banks.

The Holding Pattern: Business Plans and Resolution Strategy

It should be clear by now that if the planned measures are executed (matching BCRA’s rediscounts to CER assets, and lifting of the restrictions of the “corralón”), the banking system (especially the larger loss-making banks) will not recover its solvency and pre-provision earning capacity (in cash flow terms). Furthermore, depositors will not immediately trust banks to intermedate their savings (except when their “greed” exceeds their “fear”) – although transactional deposits will continue to grow with the recovery of GDP- and it is unlikely that banks will grant new credit to the economy for at least four reasons: (i) fear of locking liquid funds in the event of further runs on the banks; (ii) lack of cash and capital resources; (ii) lack of creditworthy clients; (iv) absence of an enabling legal and judicial framework that provides reasonable protection to lenders. The contraction of real credit to the private sector is likely to continue for several more years as observed in other major systemic crisis in the region, particularly in Mexico.

Accordingly, the authorities need to adopt a comprehensive strategy and operational plan to work out the more pressing problems affecting the banking system. That strategy must

be multipurpose and realistic. However, so far, as the crisis evolved in slow motion, the solutions have been also slow to come.

To restore solvency, in flow and stock terms, it will be necessary, therefore, to move from compensation of the stock of losses in accounting terms (with more government paper), to a strategy for implementing, over time, measures aimed at quickly reaching a break-even point, in cash terms, for the system as a whole, while giving priority to the financial condition of the largest banks. In other words, the financial solution must follow the accounting “solution” to restore financial viability and intermediation. **As we indicated it in other crisis cases (Mexico) the “least cash solution is not the least cost solution” for the economy as a whole or for the government.**

The likely **viability** of the largest banks should be determined without further delay, conducting the necessary strategic and financial diagnostics - for private and public banks - **in the context of a significantly smaller banking system** because, simply stated, “there are not enough profitable business opportunities” for all of them. In addition, the authorities should design and implement a more systematic and robust “holding pattern” strategy, bridging the gap between today’s difficulties and the “promised land,” provided that bank shareholders show their willingness to restore the financial health of their banks and are willing to commit additional financial resources in order to restore solvency and profitability over time. Non-viable banks should be resolved without further delay.

The “holding pattern” strategy is crucial, since the resolution process to restore viability will be protracted. First, it is critical to make progress in the evaluation of measures required to restore viability. The SBIF needs to obtain a commitment from the Ministry of Economy – validated by Congress- in order to finalize all the pending “compensations” discussed above. Once this is resolved, the second priority is to get a commitment from shareholders and bank managers for adopting measures aimed at minimizing and reversing the flow of losses. In most instances a painful and merciless downsizing will be required.⁴³ Third, when viability cannot be restored, the SBIF should proceed to close the bank. As for public banks, they simply cannot be kept open forever at the expense of the overall efficiency of financial intermediation and at the expense of the taxpayer. Public banks should adjust sooner rather than later.

With these objectives in mind, the following steps should be followed:

- The authorities should accelerate the request for banks to prepare business plans that realistically consider the current operational environment and include **measures to identify, control, and minimize the sources of losses**. The templates to request such plans are ready. Nonetheless, a decision to request and supervise these measures and the parameters for establishing financial viability have not yet been adopted.

⁴³ This process seems to be well advanced in some private banks. Banco Francés, Banco Galicia, and Banco Río reduced their number of branches by 15 to 23%, for a combined reduction of approximately 180 branches in 2002. These banks have also reduced their staff by 18 to 30%, for a combined reduction of 4,236 employees. The public banks have yet to start making this adjustment.

- Information and assumptions used for those business plans should be **independently and thoroughly validated**, including management estimates of business volumes and associated future spreads and costs. Moreover, based on the plans and their alternative scenarios, the **authorities must once and for all decide** which banks can survive - and under which circumstances and assumptions - and which banks must be closed and resolved. Specific plans must be developed for interim cost reduction, asset divestiture, and fresh paid-in capital in liquid funds.
- Based on the business plans and the result of their analysis, banks should be given a fixed predetermined term (maximum, for example, of seven years) to amortize every year at least 1/7th of the difference between the book and market value of all their public-debt exposures, valued by applying the best international accounting standards, including provisions to mitigate unwarranted regulatory arbitrage.
- SBIF supervisors should be left to independently determine the rules and criteria for approving rehabilitation plans. These rules and criteria need to be anchored into benchmarks extracted from the business plans, and include a system of specific regulatory incentives and penalties to enforce such plans and contracts. Such efforts must be complemented with a renewal of the cycle of on-site intensive examinations, which have been suspended for more than two years.

With minimal variations, the “holding pattern” strategy recommended above should be uniformly applied to both large private and public banks, whether local or foreign, with the authorities ready to take over any foreign or local bank - *pro tempore* (through an appropriate legal mechanism and operational vehicle) - whose owners declare themselves unable or unwilling to comply with the conditions of the rehabilitation plan.

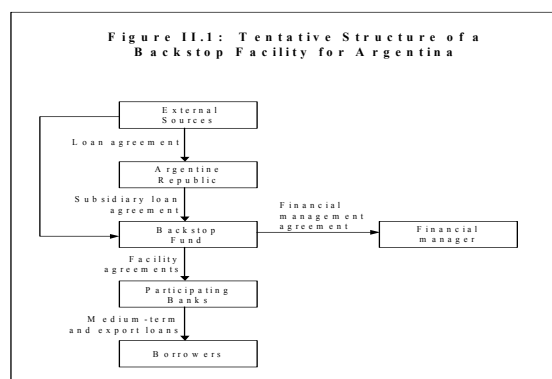
Loss Absorption, Interim Financial Swap Arrangements, and Exit Mechanisms

Under almost any scenario, given the tight fiscal constraints created by the fiscal crisis of the State, it is, in our view, clear that a faster restoration of the banks’ solvency and viability in cash-flow terms requires external assistance. This is critical in order to give some liquidity to the large holdings of Argentine peso-indexed government paper held by the banking system (A\$43 billion, equivalent to 53% of total assets as of end-2002, and rising).

Unless there is a resolution to the financial mismatches (i.e.; about 40% of long-term assets accruing CER, with the banks facing a negative spread on their dollar “book”) that are plaguing the largest banks, then the banks’ pre-provision capacity will remain dependent on the actual value and liquidity of their exposures to the State.

Lack of external assistance would prolong the observed imbalances, including the banks’ insolvency. One idea to explore is the design of a fully funded special purpose vehicle (SPV) to facilitate and speed the banks’ restoration of their viability. The support that the SPV could provide would be conditioned to the adoption of holding actions aimed at cost reduction, and to the willingness of shareholders to contribute fresh capital. One possibility would be for the SPV to swap long-term CER-indexed government payments for shorter term cash-paying coupons in Argentine pesos, to be provided through the

SPV. Although a number of concerns would need to be studied, including terms and conditions, valuation, accessibility requirements, etc., it would be desirable to look for external resources to develop a detailed design for an SPV and fund, on a revolving basis, such facility (see Chart). This would expedite the restoration of the banks' intermediation function in support of a recovery of the export sector, and other productive sectors of the economy. It should be mentioned that in less traumatic banking crises in the region, real credit to the private sector fell in a very pronounced way and for a number of years (ex., Mexico), affecting the speed and nature of the economic recovery, in particular the mix between exports and the recovery of the domestic demand, as well as the distribution of credit among large and small borrowers. Usually with the first being able to tap external sources.



The vehicle will need to be funded to swap a portion of the accrued interest income of the government exposures into cash payments in Argentine pesos for a number of years, subject to an appropriate alignment of incentives, including swap-back obligations.

This is not an entirely new idea. Professor Allan Meltzer mentioned in an interview to an Argentinean newspaper the need for external financial support to facilitate the swap of Argentina's external debt at a proportion of its nominal value, as a pre-condition to initiate the restoration of the viability of the banking system.⁴⁴

D. Medium-Term Policies (CY04): The Need to Deepen Reforms and Restructure Argentina's Debts

- **Address the Restructuring of the External and Domestic Public Debt.** The government's handling of the crisis allocated benefits (to borrowers in dollars) and losses (initially to depositors, banks and other domestic and foreign creditors, losses then partially assumed by the public sector) resulting from the devaluation to the different parties. Losers were then "compensated" by the government through various debt instruments. As a result, public finances amassed additional debts. As the claims against the government continue to increase, their value will continue to decline, self-defeating the purpose of assisting the battered banking system. If the government paper were marked-to-market, the banking system

⁴⁴ See interview in La Nación of March 16, Section 2, page 7.

would be deeply insolvent.⁴⁵ For this reason, not only is the fate of public finances critical for recovering the solvency of the banks, but beyond that, there is an urgent need to skillfully reschedule and manage such debts. Here, the critical issues fall into two broad categories: (i) There is a need for strategies on how and when to renegotiate Argentina's foreign debt, with an understanding of how this process and future outcomes will impact the government's domestic debt, including its debt with the banking system. From the recently announced government debt restructuring plan in Dubai, BODENS are excluded from any restructuring (as well as bonds issued prior to the cutoff date of December 2001), including the guaranteed loans; and (ii) even if the renegotiations progresses well and leads to sustainable debt dynamics, it will be essential to adopt a number of "financial engineering" mechanisms to assist banks, because their operational cash flows continue to be highly negative. This includes granting banks the option to swap some of their longer term debts for shorter-term maturities in order to reduce term-transformation (maturity) risks and mitigate those unabated operational losses, without financing them with fresh short term deposits.

Certainly the two questions above are not independent of one another, since the degree of bank insolvency is also linked to the option of placing a "floor" on the price of government debts. This latter measure will require an adequate primary surplus and possibly significant "haircuts" to bondholders. Moreover, it will also require external resources (another Brady Bond Plan?) to allow these defaulted assets to be traded⁴⁶, while gradually regaining some access to external voluntary financing. Given the "time inconsistency" problem which could result from the different (slower) pace at which the renegotiation of the public debt will take place, one idea worth exploring is to "carve out" banks' debts in such a way that it will not stop banks from swapping their debts for shorter-term paper.

- **Address the Restructuring of the External and Domestic Private Debts.** Financial debts are heavily concentrated in Argentina in the largest 500 companies (93%). Moreover, 50% of these debts are held by the top 80 companies alone. The second characteristic of these debts (originally about US\$60 billion) is that they had short-term maturities (with 52% of the year-end 2001 debts maturing in 2002). The third characteristic is that the debts of the 80 largest companies were denominated in US dollars and held by foreign creditors (76%). This means that these companies did not receive benefits from the bailout

⁴⁵ The valuation of claims against the government is a very complex issue, since they are not homogeneous in terms of maturities (BODEN 2007 and 2012, etc.), currencies (pesos and US dollars), or sources of repayment and marketability (ex., "guaranteed loans," not traded, with an earmarked source of revenue - transaction tax - to service them in cash). Technically, we could opt for the FAS 114 principle or take the market value of paper traded in the market, or simply take the present value of the expected forward-looking cash flows. Applying these methodologies, it is likely that government exposures will attract a high discount to their face value, as the use of an appropriate discount rates will suggest in Figure I.5 (page 23). In all events, this results in a major loss for creditors and a serious capital impairment for the banks.

⁴⁶ In addition to mismatched operational flows (current losses in flow terms), banks also have mismatched balance sheet flows, as they carry these long term illiquid bonds in their books funded with short term and sight deposits. Without a spectacular combined recovery in the depth and liquidity of the local bond market, in fresh lending, and in re-flow of the deposits that run-off over the last two years, the lack of alternative funding sources keep banks far from reaching operational break-even, perpetuating the current situation. Moreover, BODENS would likely need substantial rollover at maturity.

granted by local banks through the pesification of dollar loans at the rate of 1:1. In other words, the bulk of the fiscal cost of these measures (asymmetric pesification) was channeled to possibly less viable local companies.

To address the additional threat to banks' viability represented by an increase in non-performing commercial loans, the government must take the lead in developing the rules of the game for effective asset resolution, leaving to the parties, borrowers and creditors, the actual formal and informal working out of terms and conditions. Such an enabling environment needs to be strengthened in Argentina.⁴⁷ The Superintendency of Banks should encourage banks to determine the reasons for the impairment of their commercial loans, and the need (or lack thereof) for financial or economic analysis of the viability of their clients, thus fostering an environment conducive to avoiding unnecessary destruction of value, from the economic and supervisory points of view.

- The long-term commitment of foreign banks to Argentina could still be at risk. Banks are on a “holding pattern,” waiting to see the economic policies adopted by the incoming administration. It is important to give clear signals about the kind of financial system Argentina wants and to take measures consistent with that, hopefully market-friendly, view.

Legal & Regulatory Reforms

Looking forward to the mid-term, once the resolution of the solvency crisis has made substantial progress, it will be important to adjust the legal and regulatory framework of Argentina applicable to banks and other non-bank financial intermediaries. The focus of such reforms would need to consider that, as determined in previous assessments, except for the lack of a mechanism for systemic crisis resolution and protection against threats to the autonomy of the BCRA and the SBIF, there was – under the rules imposed for their operation - no major flaw in the pre-crisis prudential regulatory framework in place.⁴⁸

Amendments to the BCRA Charter and to the Banking Law (beyond Article 35 bis) should be considered, in order to harmonize the legal regime to a post-Convertibility Law framework. Such a reform should prioritize the independence and operational autonomy of the BCRA and the SBIF vis-à-vis the government, while also granting legal protection to bank supervisors. Unless these two principles are reaffirmed, banking supervision would remain subordinated to non-prudential objectives and deprived of real capacity to enforce sound banking principles. In addition, the frameworks for failure resolution and deposit insurance need to be revised, considering the lessons of these recent years in dealing with the current crisis. Accordingly, the review could consider the following aspects:

⁴⁷ The World Bank has provided assistance in the area of bankruptcy legislation and voluntary, out of court debt rescheduling mechanisms.

⁴⁸ Note that the Argentinean banks were not allowed to invest in FX assets (“Norma OPRAC 1”) - beyond the placement of the minimum liquidity requirements (RML) abroad – hence they were unable to protect themselves (hedge) any expected depreciation of the peso in the event of a fracture of the Convertibility Law. On the other hand the broader adoption of hedges could have led to a “self-fulfilling prophesy” contrary to the fixed parity policy.

- Whether banking supervision has been able to function properly as part of the BCRA, and whether the current institutional and political crisis would have resulted in the same loss of independence of the supervisors, even if supervision had been delegated to a separate agency outside the central bank.
- Whether the structure of the current and future financial industry would justify combining various supervisors into a sole agency (similar to the British FSA model), or whether the benefits of such consolidation would be better served by strengthening the present framework for regulating financial conglomerates, including group structures (holding companies) with explicit lead supervisor designation;
- Whether the current processes to deal with problem and failed banks (regularization plans and Article 35 mechanisms) are adequate to resolve large complex banking organizations and serve as a mechanism to deal with systemic problems.

In addition, the reform should aim at improving prudential regulations with a view towards adjusting the current framework and introducing more market discipline and incentives-based governance responsibilities, including but not necessarily limited to:

- Reforming regulatory capital requirements, adapting them to the BIS new standards, considering relevant, objective measurements of inherent risk under sovereign and sub-sovereign exposures (which were at the root of the current crisis). This should include powers for the Superintendency to increase the minimum capital for individual institutions, based on the degree of adherence to enforceable best standards of financial and business practices. Such an approach is crucial to ensure adequate governance and discipline of major public banks and newly emerging local bankers, and to ensure that their boards and managers are actually held accountable for their decisions.
- Reforming the framework for setting lending limits, linked to capital consumption, in order to penalize excessive risk concentrations by segments and sectors. This would include the establishment of a maximum ceiling for sovereign and sub-sovereign exposures, as well as covering un-hedged foreign exchange exposures – the two major drawbacks which brought the banking system down.

Other longer-term reforms: Phasing out of the distorting transaction tax and a review of the role of SEDESA and, more broadly, of the deposit insurance system will also be advisable.

E. Conclusion

Following the quote from *The Economist*⁴⁹ at the beginning of this paper, the authors of the Survey of Global Finance indicate that “ *Banks have proved themselves to be the most hazardous economic institutions known to man. Breakdowns in banking lie at the center of most financial crises. And banks are usually effective at spreading financial distress, once it starts, from one place to another. It is tempting to conclude that banks should simply be abolished. Unfortunately, that is unlikely to be possible. Banks seem to be necessary*”. After that sobering thought, the task now is, through closer cooperation among all stakeholders, to aim for the rebuilding of the Argentinean banking system with some sense of urgency, in support of the growth and poverty reduction strategies of the new administration.

⁴⁹ *The Economist*, “ A Cruel Sea of Capital: A Survey of Global Finance”, May 3, 2003, page 11.

Annex I: Latest Developments: Two Years After the “Corralito”

The impact of the events described in this working paper were unquestionably very damaging for financial intermediaries in Argentina, as the more recent data demonstrates⁵⁰. Whereas the combination of: (i) the measures taken by the authorities in partially resolving the “compensations”; (ii) the relative restoration of confidence in the banking system; (iii) the rapid recovery of the economy in 2003 from a low level; and (iv) the stability of the macroeconomic aggregates, particularly the control over the inflation rate and the rapid decline of interest rates, have all had a positive effect on the financial condition of the banks, decelerating, not reversing, the negative trend resulting from their severe insolvency and negative operational cash flow. The banks’ pre-provision profits and operational cash flow continue to be highly negative, specially among large public and foreign banks.

Moreover, the external debt restructuring and the “compensation” by the government to the banks have barely advanced. As a result, the underlying, fundamental, problems faced by the system have not yet been addressed, but they have been mitigated by the expansionary fiscal and monetary policies being followed, as well as by the adoption of increasing regulatory laxity.⁵¹ Two years after the financial crisis, the reconstruction of the banking system awaits its resolution.

Pre-Provision and Cash Flow Profits

The pre-provision losses accumulated by the system (net operating margin before net provisioning in accounting terms), as of September, 2003, amounted to A\$3,747 millions (net income loss of A\$5,042 millions, after provisions of A\$1,779 millions and other items). The underlying operational cash flow losses, after netting accrued interest income and expenses linked to the difference between the CER and the CVS, were much higher at A\$7,459 millions (since the net CER/ CVS income is accrued but not earned in cash, invested mostly in long term illiquid government paper and non-performing corporate loans rated, most likely, at pass grades).

With the considerable drop in interest rates engineered by the BCRA, the trend both of pre-provisions and operational cash flow (OCF) losses has considerably diminished. As of end-September, 2003, based on the OCF reported in IIQ03 (A\$854 mill.), the annualized trend of OCF losses could be running at A\$3,416 millions per year (a perpetuity of present value of around A\$43,000 mill., at an 8% nominal A\$ rate, or US\$14,333 mill., at A\$3 per US\$).

⁵⁰ Based on the most recent data made public as of September 2003, this Annex provides support to our thesis in the body of the Policy Research Working Paper, dated June 2003, that measures adopted so far have not restored bank solvency in stock and flow terms –both balance sheet and operational-- including the fact that the stabilization of liquidity does not originate in a recovery of confidence by depositors, and bankers as well, that the crisis has been resolved.

⁵¹ Fernández Medrano, Luciano Laspina, and Guillermo Mondino, “Squeezing the Toothpaste Tube”, Latin Source, December 4, 2003.

Profit (Loss, millions of A\$)	2002	1Q03	2Q03	3Q03	Sep. 2003
Pre-Provision	7,554	(1,818)	(1,716)	(213)	(3,743)
Operational Flows	(25,747)	(4,125)	(2,480)	(854)	(7,459)
Annualized OCF	(25,747)	(16,500)	(9,920)	(3,416)	(9,945)
Net Income	(19,251)	(1,873)	(2,198)	(971)	(5,042)

Source BCRA, ABPRA, own calculations. OCF = operational cash flow.

The worst portion of the accumulated operational losses incurred in 2003 is concentrated in the large public (44%) and foreign banks (31%). Private local banks represent only 25% of the operational A\$7,450 millions losses. Albeit, they seem to have reached a break even point as of IIIQ03.

Bank Groups	1Q03	2Q03	3Q03	Sep. 2003
Public	(1,685)	(1,030)	(541)	(3,256)
Foreign	(1,158)	(770)	(354)	(2,282)
Private Local	(1,282)	(680)	41	(1,921)
Total System	(4,125)	(2,480)	(854)	(7,450)

Operational cash flows, in millions of A\$. Source BCRA, ABPRA, own calculations

The underlying issue remains one of excess capacity in the system, as well as one of economic insolvency (compensations, pending and accomplished, are only accounting entries and a means of providing temporary regulatory forbearance). The present depressed levels of bankable business, and the mismatches in the banks' balance sheet structure - in terms of stocks and flows - renders the system prone to self depletion of its capital base. Because losses have not been reversed and they continue to consume valuable financial resources (whilst old run-off deposits keep off the system, shy to return – see deposit section below).

In one word, as operational expenses still exceed gross income, banks cannot –even in accounting terms - cover their total costs which, in cash terms, (net of CER/ CVS accounting income accrued) result into even larger flow losses. The residual losses (A\$3,416 p.a., as of IQ03) may not be easily resolved without eliminating the existing excess of operational structure (compressing inorganically operational expenses by consolidating banks, closing branches and reducing redundant staff), and possibly recapitalizing the banks with real fresh funds in cash, not illiquid government paper.

In spite of the measures adopted by the banks (mostly foreign) in closing branches and reducing staff, coverage of operational expenses with net fee income has not improved, whilst the negative net interest income renders unviable the operations of the banks in its present form (to the extent that (Operational expenses / Gross Income) exceeds 100%).

Total Banking System	2002	1Q03	2Q03	3Q03	Sep. 2003
Operational Expenses	(9,668)	(1,936)	(1,968)	(1,864)	(5,768)
Net Fees / Opex	39.1%	38.9%	39.5%	41.6%	40.0%
Opex / Gross Income (In millions of A\$.)	56.1%	1,640.7%	781.0%	112.9%	285.4%
Of which: Public Banks	61.2%	(540.7%)	4,053.3%	129.0%	492.9%
Foreign Banks	55.1%	250.9%	363.4%	141.5%	220.7%
Private Local Banks	53.5%	(415.1%)	10,340.0%	75.0%	274.0%

Source BCRA, ABPRA, own calculations

Negative Opex/Gross Income denotes negative Gross income. Opex/Gross income > 0 = Negative Pre-Provision Profit.

Compensations

Compensations have not been enough to fairly retribute banks for the policy inflicted losses. The compensation for the asymmetric “pesification” has not been finalized yet. Compensations for asymmetric indexation and “amparos” have not been implemented.

As of end-September, 2003, a total of A\$28,076 millions of bonds represent the overall envelop due by the government to compensate banks for the losses inflicted in the asymmetric “pesification”. Of this amount, about 50% (A\$14,007 mill., of which about 89% in US\$ BODEN 2012) are still pending review by the Superintendency of Banks. Entitled banks have only an accounting entry (IOU) representing this claim on the government. Moreover, regarding the A\$14,069 mill., of bonds already issued, these are not freely available to banks, with their use fully limited by BCRA regulations.

Law 25,976 of November 14th, finally approved the compensation by the Government of the losses generated by the asymmetric indexation to CER/CVS of specific classes of loans. The Law empowers Government to issue up to A\$2,800 millions of BODEN 2013 for such purpose, tough, the necessary decree to apply such legal provision has not been issued yet. Regardless of the delay, a major related pending constraint to make effective this compensation is the provision by Article 6 of that Law. Under this provision, the Executive will make the compensation conditional to the increase by each bank of its credits to the private sector.⁵²

Finally, and since the Supreme Court has not issued yet its ruling on the constitutionality of the “pesification”, the Government has not yet decided on the compensations for the cash flow losses in pesos resulting from the “amparos”. Accordingly, the BCRA has instructed banks to accrue A\$6,182 millions of losses generated by the “amparos”, and proceed to amortize them over the next 60 months.

As of end-September, 2003, the net worth registered in the banks’ books was A\$21,709 millions. net of the “amparos” losses, the residual net worth (A\$15,527 millions), would

⁵² Apparently banks can receive A\$1 of a compensatory bond for each A\$1 of new credit granted. According to press reports the bonds have a 10 year tenor, amortized in 16 equal installments paid every six months (or 6.25% of the bonds issued), starting in April, 2006. The bonds would yield an adjustment over their nominal balance equivalent to the average cost of deposits determined by the BCRA.

amount to about twice the annualized net losses disclosed by the system (A\$6,722 millions) as of that date.

Further to these outstanding issues, the BCRA has recently (12/04/2003) relaxed, once more, several prudential regulations in an attempt to engineer a recovery of banking credit to the private sector. These measures of regulatory forbearance contribute to obscure the solvency condition of banks, and include increases in: a) the range of eligible collateral; b) the loanable amount to adversely classified borrowers; c) the term (by 18 months) applicable for compensating loss provisioning with mortgages; d) the term (by 12 months) to exceed the limit of participation in companies in debt restructuring transactions.

Deposit and Loan Behavior

Since September, 2002, deposits have grown A\$13,460 millions, or a nominal 17.7%. Whilst clearly recovering from the prior negative trend up to IIIQ02, the increase in deposits experienced in 2003 closely follows the expansion of the monetary base. Since December 2002, deposits increased 19.1% in nominal terms (A\$14,300 mill.). Whereas, in the same period, BCRA bought about one third of the surplus of the external trade balance (US\$12,593 mill.), for a total official intervention of A\$11,356 mill. Clearly, the deposits that run-off the system are not coming back, as confidence still needs to recover, in spite of the high levels of nominal liquidity in the system (about 29% of total deposits).

The evolution of loans mirror that of the bank's liquidity (up A\$7,735 mill.), deposits (up A\$14,300 mill.) and the operational cash flow losses of banks (about A\$7,500 mill., since December 2002, after deducting net accrued interest earnings and expenses linked to CER/CVS, versus A\$3,747 mill., of pre-provision profits).

At the end of September 2003, private loans are stuck at A\$22,971 mill., or down A\$3,714 mill., since last December. Long term loans to finance new investment and house mortgages have practically disappeared. Instead, some timid recovery is starting in short term self liquidating corporate loans, credit card and personal loans.

Nominal interest rates observed in the market, both on loans and deposits, have declined substantially: from a range of 39%-69% (commercial and personal loans, respectively) to 26%-49% now, with the implicit average rate decreasing from 41% to 13% (averages for 2002 and 2003/09); whilst the latter, from the highest levels of 2002 of 30%-40% to 4.4% in the IIIQ03, with the implicit average rate, for the same period, dropping from 27.1% to 7.4%.

Since interest on loans and government exposures (net of CER) plus net fee income are insufficient to cover operational expenses, banks refrain from granting new loans in order to conserve liquidity and finance their operational cash flow losses. Unless the balance is restored in the banks' flows, and with that their solvency in net present economic terms, lending will not recover, in spite of all the regulatory forbearance granted.

REFERENCES

- Abdel-Montaal, Karin and Leland Wei, November 25, 2002, “*Argentina: As bad as it Gets ?*”, Morgan Stanley, Equity Research Latin America.
- Anidjar, Martin, May 2 , 2002, “*New Provincial Accord May Buy Time*”, JP Morgan Emerging Market Research.
- Anidjar, Martin, September 16, 2002, “*Argentina: Deposit Restructuring II: negative for Debt, Neutral for FX*”, JP Morgan Emerging Market Research.
- Anidjar, Martin, November 2002, “*Argentina: Opening the “Corralito” and the Outlook for the peso—Keep Matches Away*”, JP Morgan Emerging Market Research.
- Arranz, Juan y M. Devoto, June 4, 2002, “*Are new BODEN Bonds Excluded from the Upcoming Debt Restructuring?*”, BSCH Latin American Daily Perspectives.
- Arranz, Juan, July 26, 2002, “*Federal Government to Absorb Dollar Denominated Provincial Debts with Banks*”, BSCH Latin American Daily Perspectives.
- Bayliss, Jonathan, March 15, 2002, “*Argentina: pesification of Domestic Debt and Implications of the Unwind of the Domestic Swap*” JP Morgan Emerging Market Research.
- Blejer, Mario I., “Financial Crisis and Monetary Policy in Argentina”, presentation delivered at the World Bank, Washington D.C., 2002.
- Cline, William R., “Restoring Economic Growth in Argentina”, Center for Global Development and Institute for International Economics, Draft , April 8, 2003.
- Del Casino, Jeanne, and Vicent Truglia, January 2002, “*Argentine banks Face Insolvency*”, Moody’s Investors Service.
- Del Casino, Jeanne, and M. Celina Vansetti, December 2002, “*Argentina Banking System Outlook*”, Moody’s Investors Service.
- Del Casino, Jeanne, and Mauro Leos, January 2003, “*Argentina: Banking and Sovereign Outlooks for 2003*”, Moody’s Investors Service Special Comment.
- Del Casino, Jeanne, and M. Celina Vansetti, April 2003, “*President Decree Phasing out Freeze on Rescheduled Deposits Should not Significantly Affect Bank Liquidity*”, Moody’s Investors Service.
- Dujovne, Nicolas, “Medidas para Recuperar la Solvencia del Sistema”, *Ambito Financiero*, January 7, 2003.
- Fundacion Capital, July 15, 2002, “*Interrogantes sobre el Canje de Depósitos: Compulsividad vs. Soluciones de Mercado*”, Síntesis Economica Financiera Semanal.

- IERAL, March 5, 2003, “*Redolarizacion: Se Abrio una Caja de Pandora*”, Informe de Coyuntura Semanal.
- Joint Economic Committee, US Congress, “*Argentina’s Economic Crisis: Causes and Cures*”, Washington D.C., June 2003.
- JP Morgan, “*Argentina: Pesification of Domestic Debt and Implications of the Unwinding of the Domestic Swap*”, Emerging Markets Research, May 15, 2002.
- JP Morgan, , “*The Political Outlook Holds the Key*”, Emerging Markets Research, February 6, 2003.
- JP Morgan “*Impact of Deposit Re-dollarization on Debt prices and the peso*”, Emerging Markets Research, March 3, 2003,.
- Miles, Victoria, January 23, 2002, “*Argentina: Latest Pesification Measures Help Banking Sector, But At What Price*”, JP Morgan Emerging Market Research.
- Miles, Victoria, April 26, 2002, “*Argentine banking Sector Update*”, JP Morgan Emerging Market Research.
- Miles, Victoria, May 6, 2002, “*Argentine Banks: Implications of the Latest Bonex Proposals for Bank Bondholders*”, JP Morgan Emerging Market Research.
- Mondino, Guillermo, Esteban Fernández Medrano and Luciano Laspina, March 5, 2003, “*After the Supreme Court Ruling: And Now What ?*”, Latin Source
- Mondino Guillermo, et al., “*Squeezing the Toothpaste Tube*”, Latin Source, December 4, 2003.
- Morgan Stanley, December 24, 2001, “*Argentina: A terrible story but should it mater ?*”, Equity Research Latin America.
- Morgan Stanley, April 25, 2002, “*Argentina: back to the Tipping Points ?*”, Equity Research Latin America.
- Morgan Stanley, May 28, 2002, “*Argentina: Three Scenarios*”, Equity Research Latin America.
- Mussa, Michael, “*Argentina and the Fund: From Triumph to Tragedy*”, Institute for International Economics, March 25, 2002
- Oxford Analytica Brief, June 7, 2002, “*Bank Stabilization Efforts*”.
- Oxford Analytica Brief, March 7, 2003, “*Banking Blow*”.

Perry, Guillermo and Luis Servén, May 2002, “*Argentina What Went Wrong*”, Mimeo, Chief Economist Office, Latin America and the Caribbean Region, World Bank. May, 2002.

Pou, Pedro, “Los cambios necesarios hoy en el sistema financiero argentino”, *Ambito Financiero*, January 16, 2002.

SANTANDER, Fixed Income & Economics Daily, several issues.

Salomon, Smith Barney, “Argentine Banking System”, November 12, 2001.

Standard & Poor’s, February 5, 2003, “*Argentina Banks Partially Release Frozen Deposits*”, Rating Direct Research.

Saxton, Jim, Vice-Chairman, June 2003, “*Argentina’s Economic Crisis: Causes and Cures*”, Joint Economic Committee United States Congress.

Sturzenegger, Federico, “Default Episodes in the 90s: Factbook and Preliminary Lessons”, Business School, Universidad Torcuato di Tella, June, 2002.

Thomsen, Federico, May 2002, “*The Politics Behind the Crisis*”, ING Financial Markets.

Titarchuk, Anna and Martin Anidjar, October 17, 2002, “*Argentina: New Restructured Local Debt – Bodens*”, JP Morgan Emerging Markets Research.

Werning, Vladimir, April 26, 2002, “*Argentina must decide how to end monetary overhang soon!*”, JP Morgan Emerging Market Research (several issues).