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Resolving Bank Failures in Argentina

Recent Developments and Issues

Augusto de la Torre

When the international financial community finally develops core principles and minimum standards for resolving bank failures, Argentina's experience should serve as an important reference in identifying best practices.

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Summary findings

Policies and procedures to resolve bank failures have evolved significantly in Argentina since the introduction of currency convertibility in 1991 and particularly in reaction to the 1995 “tequila” crisis, which exposed the inadequacy of the bank exit framework in place then. De la Torre reviews the institutional changes introduced in Argentina in 1995 to handle bank failures more effectively, particularly the creation of the deposit guarantee scheme and the procedural framework for resolving bank failures, embedded in Article 35 of the Financial Institutions Law.

This framework enables the Central Bank to carve out the assets and “privileged” liabilities of the failing bank and transfer them to sound banks, thereby sending only a “residual” balance sheet to judicial liquidation. Subsequent refinements in the application of Article 35 procedures eventually led to current Argentine practice.

The author examines this practice in detail by considering the handling of the recent failure of Banco Almagro.

The author assesses a number of issues that arise from the Argentine model of bank failure resolution, taking into account both country-specific circumstances and more general concepts and concerns. He emphasizes the potential tradeoffs between reducing contagion risk, limiting moral hazard, and avoiding unnecessary destruction of asset value; the implications of priority-of-claims rules and least-cost criteria; the pros and cons of alternative organizational and institutional arrangements; and the need for legal security. Finally, he outlines two prototypical approaches to striking a balance between rules and discretion, an issue underlying much of the ongoing policy discussion on alternative bank exit frameworks.

This paper — a product of the Finance Cluster, Latin America and the Caribbean Region — is part of a larger effort in the region to document best practices in bank exit frameworks. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Marga O. De Loayza, room IS-112, telephone 202-473-8902, fax 202-522-2106, email address mdeloayza@worldbank.org. Policy Research Working Papers are also posted on the Web at www.worldbank.org/research/workingpapers. The author may be contacted at adelatorre@worldbank.org. March 2000. (31 pages)

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EXCHANGE RATE

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US\$1=ARG\$1

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Glossary of Acronyms

BANADE	Banco Nacional de Desarrollo (National Development Bank)
BCTF	Bank Capitalization Trust Fund
CAMEL	Capital, Assets, Management, Earnings, Liquidity
DGA	Deposit Guarantee Agency
FGD	Fondo de Garantía de Depósitos
SEDESA	Seguros de Depósitos Sociedad Anónima

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ARGENTINA: BANK FAILURE RESOLUTION

Recent Developments and Issues

*By Augusto de la Torre**

This paper was prepared to serve as an input to the Interagency Committee created to review Argentine bank failure resolution processes and bank governance issues. The Committee held its first meeting in Buenos Aires during March 29-30, 1999.¹

The paper is structured as follows. The first section reviews the evolution of bank failure resolution in Argentina since 1991. The second describes in some detail a recent case, that of Banco Almagro, as an illustration of the bank resolution model emerging in present day Argentina. The third and most extensive section reviews key general and Argentine-specific issues in bank failure resolution. The paper ends with some concluding remarks on the topic of rules versus discretion.

1. Background: From 1991 to the Present

Bank failure resolution policies and procedures have evolved significantly in Argentina since the introduction of Convertibility in 1991. This evolution has reflected a remarkable ability quickly to adapt –within the constraints imposed by Convertibility Law— the normative, organizational, and procedural frameworks to deal with bank failures in the midst of the stress caused by two adverse exogenous shocks: the major Tequila shock of 1995 and the relatively more benign financial turbulence unleashed since the second half of 1997 by the South East Asian and Russian crises. In adapting the bank failure resolution, the authorities have sought to strike an appropriate balance between the two objectives of averting contagion and limiting moral hazard.

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¹ The Interagency Committee is chaired by Central Bank Governor Pedro Pou and integrated by representatives from SEDESA, the banking associations, and the Economic Research and Bank Supervision department of the Central Bank. Robert Litan and Brian Quinn participated in the March 1999 meeting of the Committee as external advisors and I joined representing the World Bank. This paper was revised and updated in light of the discussions held during such meeting and the material provided for it by the Argentine Central Bank authorities.

In 1991, at the beginning of the Convertibility Plan, Argentina had a bare-bones system of bank failure resolution: troubled banks unable to restore compliance with key prudential norms, particularly those associated with solvency and/or liquidity, would automatically see their license removed and go on to judicial liquidation.² Under such system –not unlike those existing today in many Latin American countries— there was neither an explicit deposit insurance scheme nor resolution procedures other than judicial liquidation, implying that, in the event of a bank failure, all deposits would immediately turn illiquid and value-impaired. Depositors would have to wait in line for a long time (months and even years) to have access to the liquidation proceeds. Given the protracted, legally assailable, and cumbersome nature of the judicial liquidation process, a sharp destruction of asset value would take place compared to their going concern value. Under these circumstances, depositors derived little consolation from their relatively high position in the priority of claims ladder –just below labor claims.

By featuring a clear risk of loss to depositors, this bare-bones system of bank resolution sought to minimize moral hazard –an objective that was gladly embraced in reaction to the huge Central Bank losses and runaway inflation that had resulted from previous episodes of banking crises and bailouts in Argentina. The system aimed at encouraging depositors to monitor the condition of banks and impose discipline on them, both by asking for higher interest rates when depositing in banks perceived to be riskier and by withdrawing deposits from banks perceived to be nonviable. This type of system was particularly stringent in the case of Argentina because of Convertibility, which severely limits the authorities' room to elude or significantly delay the liquidation of a troubled bank by keeping it afloat with Central Bank liquidity.³

The 1995 Tequila quickly made it plain that the bare-bones system was ill suited to manage bank failures –particularly in the case of large banks— while adequately limiting

² The Central Bank has the power to establish terms and conditions for rehabilitation plans (*planes de regularización y saneamiento*) under which troubled banks are given the opportunity to correct their problems so as to restore financial viability. Noncompliance with such plans is a cause for removal of the license and, hence, the beginning of judicial liquidation.

³ To be sure, under Argentine Convertibility there is a margin, equivalent to *at least* one-third of the money base, for Central Bank liquidity assistance to the banking system. The Central Bank can issue money to advance liquidity to banks inasmuch as disposable international reserves exceed money base. Furthermore, disposable reserves are defined to include dollar denominated (and internationally traded) bonds issued by the Republic of Argentina, provided that such bonds do not exceed one third of total disposable reserves.

contagion risk. At the outset of the Tequila, the system led to the liquidation of some banks. But it was soon observed that a resolution framework purely consisting of judicial liquidation was intensifying deposit runs, dangerously magnifying the erosion of confidence and propagating distress. Under such circumstances, the authorities introduced in the first half of 1995 three important institutional innovations directly relevant to bank failure resolution. Two of these innovations –the reforms to the Financial Institutions Law and the creation of a Deposit Guarantee Scheme— were meant to be permanent, i.e., to endure beyond the Tequila juncture. The third, consisting of the creation of a Bank Capitalization Trust Fund, was seen as a transitional crisis management tool, although its two-year life was subsequently extended until February 2000.

As regards the first innovation, the core reform of the Financial Institutions Law (No. 21.526) introduced in 1995 is embodied in Article 35 bis. This article empowers the Central Bank to carry out a no-frills, minimalist version of a “good bank/bad bank” resolution procedure, with the failing bank normally closed but *before* its liquidation proper. This procedure consists of: (i) separating from the liability side of the failing bank the privileged liabilities, namely, liabilities to labor, deposits of the public, and debts to the Central Bank; (ii) carving out assets from the asset side; and (ii) transferring the assets and liabilities thus separated to another existing financial institution, ensuring “equivalence” between the transferred assets and deposits. The procedure can be applied, at the sole discretion of the Central Bank, to a bank deemed to be nonviable and *prior to the removal of its license*,⁴ with the result that only the residual or “bad” bank (containing the assets and liabilities that were not separated and transferred) would go on to judicial liquidation.

This type of good bank/bad bank surgery is underpinned by a priority of claims queue for unsecured claims, according to which employees stand ahead of depositors, depositors before the Central Bank, and the Central Bank ahead of other claims on the failing bank. There is no room for bailing out bank shareholders under Article 35 bis; shareholders are always left in the residual bank. Additionally, the Central Bank is given in the Law what appears to be ample authority to eliminate or substantially dilute the

⁴ A bank may be deemed nonviable, and thus subject to the revocation of its license when, in the sole opinion of the Central Bank, its solvency and/or liquidity position is so weak that it cannot be restored to health via a rehabilitation plan (see Article 44 of Law No. 21.526).

property rights of shareholders, including by writing down their capital against identified losses and required increases in provisions, or by revoking their right to be in the banking business, even prior to the application of Article 35 bis.

Article 35 bis would seem to imply that claims with priority lower than that of the Central Bank *must* always stay in the residual ("bad") bank and await the results of the judicial liquidation. As a consequence, the good bank/bad bank separation provided for under this Article must normally be performed with the bank closed; for if it were open, non-depositor creditors would engineer a run to avoid the losses associated with being relegated to the residual bank.⁵

The second institutional innovation consisted in the creation of a Deposit Guarantee Scheme (*Sistema de Seguro de Garantía de los Depósitos Bancarios*) via Law No. 24.485. This scheme is composed of a *Fondo de Garantía de Depósitos* (FGD) and a corporation, the *Seguro de Depósitos Sociedad Anónima* (SEDESA), which administers the FDG. SEDESA offers a guarantee, per depositor, of up to US\$30,000, provided that the interest rate paid on such deposits does not exceed a certain level.⁶ The FGD is fed by mandatory contributions paid by the banking industry. The Central Bank has flexibility in setting the rate of contribution within a range –from a minimum of 0.015 percent to a maximum of 0.06 percent of average daily deposits— and may require the advanced payment of up to two years of contributions. Within the 0.015 to 0.06 percent range, the Central Bank may levy different assessments on different banks, according to their risk, as measured by the CAMEL ratings established by the Superintendency of Banks. The investment and uses of the FGD are governed by an Executive Committee made up by representatives from the contributing financial institutions; the Central Bank has one representative in such Committee, who lacks voting power but has veto power.

In the event of a bank failure, SEDESA could use FGD resources to pay guaranteed deposits in cash, in which case it has the special right to get payments from the liquidation before all non-guaranteed depositors. However, SEDESA is not confined to

⁵ More precisely, the procedure of Article 35 bis to create and transfer the "good" bank is applied while the failing bank is under a so-called *período de suspensión transitoria*, which suspends its operation. After this period, the license of the failing bank is removed and judicial liquidation of the residual ("bad") bank begins.

⁶ Not covered by the guarantee are also related-party deposits and deposits made by other financial institutions. (Inter-bank deposits are in effect not classified as "deposits", per generally accepted accounting principles for banking.)

the cash payout option when honoring the deposit guarantee. The Executive Committee may also authorize the use of FGD resources to inject capital into, or make a loan, including a non-reimbursable one, to: (i) a financial institution under a rehabilitation plan; (ii) a financial institution that purchases the assets and assumes the deposits of a bank that is under the Article 35 bis procedure; or (iii) a financial institution that buys a bank that is under a rehabilitation plan. Any of these three operations may be authorized if, in doing so, the direct cost to the FGD is lower than what it would be if the cash payout route were followed. Clearly, the second of these three alternatives to a cash payout of guaranteed deposits has the potential of enhancing significantly the flexibility of the sort of good bank/bad bank resolution procedure contemplated in Article 35 bis –a flexibility that has been often seized by the authorities.

The third innovation introduced in the first half of 1995 was the creation, by Decree 445/95, of a Bank Capitalization Trust Fund (*Fondo Fiduciario de Capitalización Bancaria*). This Trust Fund has been fed mainly by budgetary transfers financed via a special bond issue (the *Bono Argentina 1998*) as well as the proceeds from loans granted by multilateral organizations, including by the World Bank under the 1995 Argentina Bank Reform Loan. The Trust Fund was designed to strengthen the hand of the authorities in dealing with the banking system turmoil created by the Tequila. According to the decree, the Trust Fund is empowered to inject capital into financial institutions directly, including by making loans convertible into equity, or indirectly, by buying the illiquid assets of distressed financial entities. In practice, the Trust Fund has utilized only two instruments in assisting financial institutions: a long term collateralized loan; and a noncollateralized subordinated loan, convertible into a negotiable obligation. The authorities have used the Trust Fund to foster consolidation in the banking system, via assisted bank mergers, acquisitions, and capitalization.⁷ Where these transactions turned out to be nonviable, the Trust Fund has absorbed losses, thereby facilitating the construction of the “good” bank under Article 35 bis procedures.

⁷ The Bank Capitalization Trust Fund (BCTF) disbursed a total of US\$767 million to facilitate acquisitions, mergers, and restructuring of private banks whose pre-Tequila assets totaled US\$14.6 billion. At present, the BCTF is not active and virtually has no funds. For an in depth assessment of the role played by the BCTF in the consolidation process of the Argentine banking industry see Implementation Completion Report – Argentina: Provincial Bank Privatization (Loan 3878-AR) and Bank Reform Loan (Loan 3926-AR), Report No. 61733, June 30, 1999, The World Bank.

Taken jointly, the three institutional innovations mentioned above contributed to preventing what could have otherwise been a banking system meltdown unleashed by the Tequila. The increase in moral hazard that may have resulted from the bailout of large depositors that these innovations afforded in some cases, can be rightly considered to have been a small price paid in order to limit contagion risk under the turbulent financial environment unleashed by the Tequila. Moreover, a systemic crisis was avoided with very little use of public sector resources, particularly when compared to international experiences. In part due to these institutional innovations, since 1995 the authorities have broadly succeeded in promoting an orderly process of consolidation and strengthening of the banking system,⁸ with striking results.⁹

In the period July 1995 to April 1999 the Argentine authorities resolved 18 failures of financial intermediaries using the powers under Article 35 bis (Table 1). The liabilities of the resolved institutions added to around US\$5 billion, with the median size bank in the group featuring liabilities of around US\$210 million and the largest case (Banco Mayo) with liabilities for some US\$1.3 billion. In 12 of these 18 cases, SEDESA resources were used to facilitate the execution of Article 35 bis procedure –essentially by completing the asset side of the “good” bank— for a sum total of around US\$750 million, equivalent to nearly 20 percent of the liabilities separated and transferred under Art. 35 bis procedures. The Capitalization Trust Fund provided, to the same end, a total of US\$382 million, which were distributed over 10 cases.

⁸ To be sure, other factors have played a major role in the system’s consolidation and strengthening. These factors include: a marked improvement in prudential oversight and its enforcement; the enhancement of market monitoring via, for instance, improved accounting and disclosure standards and the requirement that banks issue subordinated debt on a regular basis; the privatization of public sector banks; the full opening of the banking sector to foreign capital; tougher-than-Basle capital requirements; and stringent liquidity requirements. For details see Argentina: Financial Sector Review, Report No. 17864-AR, September 28, 1998, The World Bank.

⁹ The number of financial institutions in the Argentine system fell from 205 at end-1994 to around 130 at end-1998. Over the same period, the number of foreign-owned banks rose from 30 to 42, with their share in the system’s deposits increasing from 16 percent to about 55 percent. In respect of publicly owned banks, BANADE, the former development bank, was closed, and 15 provincial banks were privatized.

Table 1
Summary of Bank Failure Resolution Cases: July 1995 – April 1999
(In millions of pesos, unless otherwise specified)

Date	Failed Financial Institution	Acquiring Institution	Assets Separated & Transferred	Liabilities Separated & Transferred	Total Liabilities	Deposits Separated & Transferred	Deposits Assumed by Acquiring Institution	Sedesa Contribution	BCTF Contribution
Jul-95	Banco de Cnel. Dorrego & Trenque Lauquen S.A.	Bco. de la Pampa	109.2	109.2	130.8	91.8	100%		54.9
Aug-95	Tarraubela S.A. (1)	La Industrial CF SA	3.7	3.7	3.7	3.4	100%		
Aug-95	Creditos Luro S.A. Cia. Fciera.(2)	Bco. Velox SA/Invercred Cia.Fciera/Trusteeship	20.2	20.2	20.2	11.8	100%		
Dec-95	Banco Federal Argentino S.A.	Banco Bansud S.A.	157.4	163.9	212.2	104.7	100%		60.0
Dec-95	Banco del Fuerte S.A.	Banco Velox S.A.	19.5	19.5	21.2	14.7	100%		10.5
Nov-96	Banco Caseros S.A.	Bco. Crédito Argentino S.A./Frances	166.7	223.7	249.6	74	100%	73.7	60.0
Mar-97	Banco Coopesur CL	Bco. Credicoop CL	66.8	103.1	107.2	100.6	100%	39.8	15.0
Apr-97	Banco Union Comercial e Industrial S.A.	Corp Banca S.A.	436.5	382.5	436.8	295.9	100%	117.9	35.0
May-97	Nuevo Banco de Azul S.A.	Nuevo Banco Industrial de Azul S.A.	18.5	25.2	25.9	23.0	100%	8.6	5.0
Dec-97	Banco Argencoop	Bco. Credicoop CL	137.8	188.8	210.9	184.2	100%	60.0	40.0
Dec-97	Banco Credito Provincial S.A.(3)	Mercobank	282.0	337.3	506.2	192.9	60%	87.0	
Apr-97	Banco Platense S.A. (4)	Nuevo Banco de la Rioja S.A.	1.4	1.4		1.4	58%	18.0	
Apr-97	Banco Platense S.A.	Bco. Municipal de la Plata	18.2	31.2	51.6	24.0	58%		
Jun-98	Banco Patricios S.A.	Banco Mayo C.L.	335.1	336.04	405.6	331.3	100%	121.3	46.3
Jun-98	Banco Medefin UNB S.A.	Trustee in favor to Bco. Finansur S.A.	161.3	161.7	381.6	105.5	100%		
Oct-98	Banco Mayo C.L. (5)	Citibank N.A., Suc. Argentina	1,046.3	1,060.3	1,316.2	707.6	100%	350.0	60.0
Nov-98	Banco Almafuerce C.L.(6)	Group of Banks	203.3	203.3	266.7	165.0 (7)	100%	60.0	
Feb-99	Bco. Israelita de Córdoba	Group of Banks (8)	168.5	168.5	199.7	168.4	100%	60.0	
Abr-99	Bco. de Mendoza	Group of Banks (9)	385.6	385.6	477.9	368.2	100%	100.0	
			3,738.6	3,924.7	5,024.0	2,968.0	97%	746.4	381.8

Source: Central Bank of Argentina.

(1) Caja de Créditos La Industrial C.L. assumed deposits for \$0.59 million, which were canceled with real estate and other assets, whereas for the cancellation of \$0.973 million in deposits a trust fund was created.

(2) A trust fund was established to cancel deposits for \$4.8 million.

(3) Mercobank S.A. assumed liabilities for \$251 million. Deposits covered by the guarantee of SEDESA were totally canceled. 30% of some \$0.5 million in deposits was capitalized and the remaining 70% was rescheduled according to the provisions of Resolution 742/97.

(4) "Privileged" liabilities were canceled by means of the application of Article 49 d) of the Banking Law. Privileged deposits for \$19.8 million were not canceled.

(5) Preliminary Data.

(6) Balance Sheet as of 10.31.98. The group of acquiring banks was formed by Bisel S.A., Credicoop C.L., Frances S.A., Galicia and Buenos Aires S.A., Macro Misiones S.A., Río Negro S.A., San Juan S.A., and Del Suquia S.A..

(7) Estimated Deposits as of 11.30.98.

(8) The group of acquiring banks was formed by Bisel S.A., Suquia S.A., Supervielle, Sudameris, BNL, and Macro S.A.

(9) The group of acquiring banks was formed by BBV Frances S.A., Credicoop Coop. Ltda., Galicia y Buenos Aires S.A., Banco Nación Argentina, San Juan S.A., Roberts S.A., Macro Misiones S.A., Del Suquia S.A., and Velox S.A.

Resolution processes under Article 35 bis, while representing a dramatic improvement over judicial liquidation, often proved to be protracted. Over time, however, the Argentine authorities have accumulated experience, refined tools and procedures, and streamlined execution. The recent case of Banco Almafuerite may be seen as an illustration that bank failure resolution in Argentina has come of age. However, the same case puts into sharp focus a number of issues that need careful assessment.

2. The Emerging New Model of Bank Resolution—the case of Banco Almafuerite

Banco Almafuerite Coop. Ltda. was a relatively small bank by Argentine standards, with total liabilities of about US\$270 million. Its failure was effectively **resolved over a weekend**, a major achievement even after considering that its size, for it stands in sharp contrast with almost all prior cases that took weeks or even months. This is all the more impressive considering that –as was mentioned earlier– the resolution procedure of Article 35 bis can be performed realistically only with the failing bank’s doors closed. A long period of closed doors is bound to cause not only severe irritation among the bank’s creditors but also a deterioration in the value of its assets. Under unsettled financial markets, furthermore, delays in executing the Article 35 bis procedure could also lead to contagious deposit runs. In the case of Almafuerite, these problems were avoided, as its doors were for only a couple days and during a time (a weekend) when they would have been closed anyhow. In resolving Almafuerite, the Central Bank authorities combined innovative financial engineering with the full range of powers under Article 35 bis, as well as with the powers granted to the Executive Committee of the FGD.

Annex 1 presents a simplified numerical example of a bank resolution based on the approach used in the case of Almafuerite. The example –whose numbers bear no resemblance to the actual case– should help the reader visualize more clearly the description of Almafuerite’s resolution provided below.

A main source of delays in executing the good bank/bad bank surgery contemplated in Article 35 bis has been the time required for due diligence in order reasonably to estimate the value of assets. In the case of Almafuerite, this hurdle was overcome by a form of **asset securitization**, that is, by placing the assets (other than cash) of Almafuerite into a Trust (*Fideicomiso*) that, in turn, issued bonds backed by those assets. The Trust issued three classes of bonds: A, B, and C. Bonds type A were structured to be senior to B, and B Bonds senior to C Bonds. That is, in the event of a shortage of

resources in the Trust, B Bonds would be serviced only if there are resources left over after servicing A Bonds, with C Bonds standing a similar relation of subordination relative to B Bonds. To reduce the probability of default, particularly with respect to A Bonds, the book value of assets placed in the Trust was substantially higher than the total face value of bonds it issued (a ratio of assets to bonds of about 1.50 to 1.00).

This version of asset securitization permitted a **quick construction of the “good” bank**. In effect, 8 good banks were assembled during Almafuerite’s resolution, because there were 8 existing financial institutions that participated in acquiring the assets and assuming the deposits of such “good” banks. The “good” banks were put together in line with the geographic distribution of the Almafuerite’s branch network. Each “good” bank contained, in the liability side, the debts to labor and the deposits corresponding to the branches in a given geographic area and, in the asset side, three assets: cash, A Bonds, and an IOU from SEDESA for an amount up to the corresponding guaranteed deposits.¹⁰ There were, consequently, as many Trusts containing Almafuerite’s assets as “good” banks. As required by Article 35 bis, the asset and liability sides of each “good” bank were matched, implying a zero *accounting* net worth, with the IOU from SEDESA covering the shortfall in assets relative to liabilities. Each “good” bank was transferred “as is” to the acquirer, who did not make any explicit payment in respect of the franchise value. This reflected the concerted nature of the operation, with the Central Bank playing a major coordinating role. Each acquirer bank took on, for a fee, the responsibility of managing, recovering, or selling the assets in the corresponding Trust.

Central Bank claims on Almafuerite, resulting from the liquidity assistance it had provided to that bank before its failure, were not part of the liability side of the “good” banks, nor did they stay in the residual (“bad”) bank, in the sense that the Central Bank did not go as a creditor into the liquidation phase. Instead, the Central Bank ceded to the Trust the assets it had received as collateral to the mentioned liquidity assistance and, in exchange, received B Bonds, thereby standing as the second claimant in line vis-à-vis the Trust. This treatment of Central Bank liquidity credits can be construed to be

¹⁰ SEDESA contributed an IOU (backed by future FGD receivables), rather than cash, because the FGD’s liquid funds had been fully drained in previous cases of bank failures.

consistent with the priority of claims rules specified in Articles 49 and 53 of Financial Institutions Law (No. 21.526) for judicial liquidation.¹¹

Similarly, the **claims of SEDESA** on Almafuerite's assets –resulting from the addition of a SEDESA IOU to the “good” bank— did not form part of the liability side of the “good” bank nor did it integrate the residual bank. Instead, SEDESA received C Bonds, thereby standing third in the queue vis-à-vis the Trust. This treatment of SEDESA can be construed to be consistent with the privileges it has under the Law only to the extent that SEDESA has better chances of recovering its resources by standing third in line vis-à-vis the Trust than by standing ahead of non-guaranteed deposits vis-à-vis the judicial liquidation. That this may be possible can be rather surprising for a non-Latin American observer. However, the truth is that in Argentina, as in most of Latin America, the liquidation process –whether judicial or extra-judicial— tends to be staggeringly inefficient, generally implying an excessive destruction of asset value.

The resolution of Almafuerite **minimized the size of the residual (“bad”) bank** that would go on to judicial liquidation. In the liability side, the residual bank contained only non-privileged liabilities, i.e., Almafuerite's liabilities left after excluding those to labor, depositors, the Central Bank, and SEDESA. In the asset side, the residual bank included only the “bad” assets that the Trusts would put back –assets deemed to be non-recoverable or without value.

3. The Emerging Model of Bank Failure Resolution–Issues

The resolution structure applied in the case of Banco Almafuerite was skillfully executed. The securitization of assets achieved by the Trust arrangement was innovative and effective, in that it facilitated the quick transfer of the “good” bank. In turn, the speedy nature of the operation substantially reduced the depositor uncertainty and distress often associated with bank closures, thereby minimizing contagion risk. It may be also argued that this type of rapid, non-destabilizing resolution of troubled banks has had and will continue to have a positive feedback on banking discipline. Quick, effective bank

¹¹ The Central Bank's surrendering of its rights on the collateral to the Trust in exchange for B Bonds is essentially justified as a means adequately to protect the interest of depositors. The procedure was legally challenged, but the Argentine courts ruled in favor of the Central Bank, dismissing the challenge in the first instance and also after it was appealed.

resolution removes concerns that supervisory authorities may have about the systemic implications of closing a bank and, thus, is likely to foster tougher enforcement and earlier intervention and resolution of nonviable banks. Moreover, the authorities' current effort to standardize contracts and procedures involving the Trust scheme, should further enhance the resolution process. However, as the authorities undertake a systematic review of bank failure resolution, a number of general as well as Argentine-specific issues arise, pointing towards areas where improvements may be considered.

3.1. The "all-deposits" constraint

In 16 out of the 18 cases of failed bank resolutions carried out in the period July 1995-April 1999, 100 percent of the deposits were covered when applying Art. 35 bis procedures, with the FGD providing a contribution virtually equivalent to the full amount of the guaranteed deposits. Hence, there is in Argentina a systematic tendency to include *all* of the deposits, regardless of their size, in the liability side of the "good" bank— a tendency which will henceforth be referred to as the "all-deposits constraint".

This "all deposits" constraint is mainly of a practical nature, for the liability side of the "good" bank could be constructed in line with the priority of claims rules set out in Art. 49 of the Financial Institutions Law, which would allow applying a *pro-rata* haircut to uninsured deposits.¹² This legal flexibility, however, is not normally used. A systematic preference exists to make all depositors whole in applying Art. 35 bis not only in order to limit contagion risk during bank closures but also to maximize the business value of the transferred deposits to the institution assuming them. Reasonable as these objectives are, their achievement comes at some increase in moral hazard and create a bias towards rapidly depleting the liquid resources of the FGD.

The experience with Banco Mayo confirms that the "all deposits" constraint implies a quick drain of the FGD's liquid resources in the resolution of a middle-size or large bank. This is partly because, prompt corrective actions notwithstanding, by the time the supervisors have enough objective reasons to initiate the closure and resolution of a

¹² In 2 out of the 18 cases of failed bank resolved to date using Art. 35 bis –i.e., Banco de Crédito Provincial and Banco Platense— only around 60 percent of the deposits were separated and transferred to acquiring institutions, with the rest of deposits staying in the "residual" bank--a haircut based Art. 49 of the Financial Institutions Law (see Table 1).

bank, the insolvency “hole” is typically determined (ex-post) to have been significant. In each resolution SEDESA could contribute to the asset side of the “good” bank up to an amount equal to the failing bank’s guaranteed deposits. But the maximum contribution tends to be required in most resolution cases in order for available assets (including SEDESA’s contribution) to match *all* the deposits of the failing bank.

With cash (or IOUs) from SEDESA used to complete the required amount of assets in the “good” bank, what was intended to be a limited deposit guarantee tends to become *de facto* a full deposit guarantee, with the FGD standing to loose ahead of large depositors. (Recall in this connection that SEDESA gets C bonds, compared to depositors whose resources are backed by A Bonds.) Annex 1 depicts this type of situation, illustrating also that a maximum contribution from SEDESA to the “good” bank may be required even in cases where the failing bank’s insolvency is not particularly deep –equivalent to 10 percent of total liabilities in the Annex’s example.

There are, of course, ways to relax the all-deposits constraint and control better the contribution of SEDESA to the asset side of the good bank. Given the trade-off between moral hazard and contagion risk, it would be presumptuous and plain wrong to think that a simple recipe for a “right” balance exists. However, in assessing possible refinements to their bank failure resolution system, the Argentine authorities may wish review the range of feasible policy choices and issues as set out below.

3.2. Criteria to construct the liability side of the “good” bank

Key issues concern the procedures and criteria used to construct the asset and liability sides of the “good” bank during the resolution phase. As regards the liability side of the “good” bank, the all-deposits constraint reflects a well-known legal tradition whereby different *classes* of creditors have different priorities of claim vis-à-vis available assets, but there are no priority of claim differences *within* a given class of creditors.

Accordingly, depositors as a class of creditors have a priority of claim over, say, subordinated debt holders but individual depositors are treated alike, sharing *pro-rata* in the pool of available assets. An explicit, limited deposit insurance scheme alters this scheme somewhat, as it gives guaranteed deposits a privilege over the non-guaranteed ones in the event of a bank failure. The logic of these priority of claims rules, together with a limited deposit guarantee scheme, contributes to the fact that, in applying Art. 35

bis, the liability side of a “good” bank tends to include either all deposits or only guaranteed deposits, normally with no choices in between.

To escape the tendency towards these corner solutions, a rule would be needed to establish a priority of claim sequence among depositors, effectively revising the proportional criterion. A natural candidate that would give maximum flexibility would be an **incremental rule**, according to which the limit per depositor to be included in the “good” bank would be decided at the discretion of the resolution authorities. The authorities would have the freedom to raise such limit gradually, starting from the guaranteed amount, up to the point where the amount per depositor is such that liability side of the “good” bank is no greater than its asset side. The examples provided in Annexes 2 and 3 use this incremental rule in constructing the “good” bank; however, as deposit amounts cannot be shown along a continuum, they are shown in tranches (e.g., more than \$30,000 but less or equal to \$50,000, etc.).

This incremental rule would mitigate moral hazard by giving operational meaning to the notion that smaller depositors have a priority of claim over larger ones. The risk of loss in the event of a bank failure for large depositors would give them an incentive to monitor the condition of banks. With appropriate legal drafting, the application of the incremental rule could be circumscribed to the resolution phase, leaving the application of the traditional *pro-rata* criterion to deposits left in the “residual” bank for liquidation.

The Argentine authorities have recently proposed to Congress certain legal reforms, including a rule that would help avoid the “all-deposits” constraint. Under the reformed legislation, the liability side of the “good” bank could incorporate deposit amounts only up to US\$100,000. But if there were an excess of assets in the “good” bank, deposit amounts above that figure could be also included on a *pro-rata*, rather than an incremental, basis.

Another issue in the construction of the liability side of the “good” bank concerns the **definition of ineligible liabilities**, i.e., those liabilities that should normally be left in the “residual” balance sheet to await the results of the liquidation. To be sure, the Argentine legal framework, particularly though Art. 49 of the Financial Institutions Law, already provides flexibility to select liabilities to be included in the liability side of the “good” bank in line with certain priority of claims sequence. In fact, in the 18 failed bank

resolutions executed since July 1995, some 22 percent of the total liabilities of the failed bank were, on average, not separated and transferred with the “good bank” but rather remained in the “residual” balance sheet (see Table 1 above).

However, the current framework does not signal with sufficient clarity that certain types of bank liabilities are ineligible, i.e., that they would be always left in the “residual” balance sheet in the event of a bank failure. In particular, it stands to reason to include in the ineligible category the claims from bank creditors that have special informational advantages, to ensure appropriate monitoring incentives and limit moral hazard. The simplest way to achieve this would be by extending to the application of Art. 35 bis the same logic already used in defining insured deposits for the purposes of liquidation (see footnote 5). As a result, such liabilities as subordinated debt, related-party deposits, deposits by other financial institutions, and deposits whose interest rate exceed certain level would all be ineligible.¹³

3.3. Criteria to construct the asset side of the “good” bank

The key issue in assembling the asset side of the “good” bank concerns the determination of whether the Deposit Guarantee Agency (DGA) should make a contribution and the size of it. Following are the main options and issues in this regard.

One option that would maximize protection to the DGA resources and, hence, minimize moral hazard, would be to define the **deposit guarantee as conditional on asset insufficiency**, implying that the DGA would make a contribution to the “good” bank only if there are not enough assets in the failing bank to cover guaranteed deposits. The DGA conditional contribution, if triggered, would be for an amount no greater than what is needed to honor the deposit guarantee. To further protect its resources, the DGA could be given a first-in-line claim in the liquidation of the residual bank.¹⁴ To enhance the

¹³ In the absence of a clear delimitation of ineligible liabilities, inter-bank deposits related to the Argentine subordinated debt scheme could end-up in the “good” bank, bailed-out at the expense of FGD resources.

¹⁴ This alternative could be relaxed without undermining its spirit by allowing the DGA to advance liquid resources to facilitate the resolution process, provided that within a certain period (and in any case prior to the liquidation of the residual bank) the DGA recovers in full such resources.

effectiveness of bank failure resolution process, the incremental rule mentioned above could be used for the determination of the liability side of the "good" bank.

A deposit guarantee conditional on asset insufficiency implies that non-guaranteed deposits would not benefit at the expense of the DGA and that bank failures would not drain systematically the DGA's liquid resources. The trade-off is that such guarantee is relatively less effective in limiting contagion risk. Annex 2 provides a simplified example of a bank resolution under a regime that combines a deposit guarantee conditional on asset insufficiency, on the one hand, and an incremental rule, on the other. The example illustrates that, under that regime, the DGA would tend not to be exposed to a risk of loss even in the resolution of a deeply insolvent bank (the bank in the example has an insolvency "hole" equivalent to 50 percent of total liabilities), and even if asset value declines significantly under the liquidation (in the example, non-cash assets lose 60 percent of their value as a result of moving on to liquidation), but provided that the level of the deposit guarantee is not too high.

At the other extreme from the previous option would be a **"full" DGA's contribution**, meaning that the DGA would *always* inject resources in the asset side of the "good" bank in an amount *equal* to the guaranteed deposits of the failing bank, independently of the value of available asset in this bank. In exchange, the DGA would stand as a creditor in the liquidation of the residual ("bad") bank. The example in Annex 1 has been constructed to illustrate this regime.

A good bank/bank procedure based on a "full" contribution by the DGA to the "good" bank would provide flexibility to protect all deposits in most cases, thereby reducing the trauma of a bank closure and minimizing the risk of contagious runs on other banks. This flexibility would be valuable particularly in the management of systemic stress. The trade-off is, of course, the increase in moral hazard because large depositors would get bailed out at the expense of DGA's loss.¹⁵ A corollary disadvantage is that bank failure resolution would systematically and substantially drain the liquid

¹⁵ Moral hazard could be offset in some degree, however, through tight supervision and, particularly, early intervention and resolution. Early resolution takes away from the shareholders and administrators of an insolvent bank the "captive" depositor funds, thus depriving them of the wherewithal with which they could take on excessive risks or loot.

resources of the DGA. The more bank failure resolution approaches this polar alternative, the greater would be the need for backstop financing for the DGA.¹⁶

3.4. The “least cost” criterion and its implications

Between the two extremes mentioned above, there are a continuum of alternatives where the contribution of the DGA to the “good” bank is controlled through some form of least cost criterion. For the purposes of this paper, the standard definition of this criterion implies that a good bank/bad bank type resolution should be implemented only if it imposes a cost to the DGA that is no greater than the cost that the DGA would incur if it were to pay out guaranteed deposits in cash, in exchange for a fairly privileged claim on the liquidation. **Four variables affect the potential size of the DGA contribution to the “good” bank under a least cost criterion:** (i) the size of the insolvency “hole” of the failing bank –*ceteris paribus*, the greater the insolvency the greater the potential contribution by the DGA; (ii) the priority of claim accorded the DGA in the liquidation – the higher such priority, the smaller the potential contribution by the DGA; (iii) the share of guaranteed deposits in the liabilities of the failing bank –the higher such share, the higher the potential contribution by the DGA; and (iv) the degree of loss in the value of assets as they move into judicial liquidation –the greater the loss, the larger the potential contribution by the DGA. Rather than examining in detail the effects of the various combinations of these four variables on the contribution by the DGA to the “good” bank, it appears preferable to lay out two sets of general observations that are helpful in clarifying the policy options.

First, only benefits can be obtained from **improving and enforcing prompt corrective action and early intervention rules**, as these would reduce the probability that insolvent banks continue to operate and minimize the size of the insolvency “hole” of a bank subject to Art. 35 bis. As a consequence, the soundness of the banking system would be better protected and the DGA’s resources would be less exposed to losses. Similarly, major benefits could also be obtained from **streamlining the liquidation process**, as this would imply a lesser loss of value for assets under liquidation and, thus, a lower risk of loss for the DGA under a least cost criterion. Regardless of whether the

¹⁶ Under Argentine-type convertibility, backstop financing to a DGA could not entail money creation by the Central Bank; it would have to come from domestic or, preferably, external debt.

DGA stands first in line or not vis-à-vis the liquidation, and notwithstanding the importance of minimizing the size of the residual bank for effective resolution, the least cost criterion would yield a high cost to the DGA if asset value collapses in the liquidation phase. The foregoing considerations suggest that, in reviewing bank failure resolution, the Argentine authorities would do well in casting a wide net, so as to identify improvements to both the antecessor phase (prompt correction and early intervention) and the successor phase (liquidation) of bank resolution proper.

Second, given the way in which least cost is calculated, the **DGA's priority of claim in the liquidation makes a significant difference in its exposure to risk of loss.** The good bank/bad bank resolution examples in Annex 3 illustrate the two alternatives for the DGA's priority ranking vis-à-vis the liquidation, namely, for the DGA to be (i) in the same situation as non-guaranteed depositors, sharing with them on a *pro-rata* basis,¹⁷ or (ii) first in line, i.e., ahead on non-guaranteed depositors.

Sharing *pro-rata* with non-guaranteed depositors in the liquidation necessarily entails that the DGA offers some protection to these depositors. The way this plays out in an Art. 35 bis-type resolution procedure is that the least cost calculation leads to a significant contribution by the DGA to the asset side of the "good" bank, as is illustrated by the example in Alternative A of Annex 3. In contrast, a first-in-line priority of claim in the liquidation severely reduces the DGA's exposure to risk of loss, even if the failing bank is deeply insolvent and the loss of asset value under the liquidation phase is substantial. This is illustrated by the example in alternative B of Annex 3, where the least cost calculation leads to no losses for the DGA in a resolution of a failing bank that has an insolvency "hole" equivalent to 40 percent of liabilities and whose non-cash assets lose 60 percent of their value by virtue of entering the liquidation stage. Again, by moving from the first to the second alternative in Annex 3, flexibility to control contagion risk is sacrificed for the sake of reduced moral hazard.

The pros and cons of alternative positions in the priority of claims ladder for the DGA cannot be assessed independently of the liquidity available to the DGA, the degree of efficiency of the liquidation process, the organizational arrangements in place, and the incentives for maximum asset recovery. Where liquidation is carried out by the judicial

¹⁷ This alternative is featured in the United States Federal Deposit Insurance system.

system, as in Argentina, efficiency is likely to be low, implying a relatively greater collapse in the liquidation value of assets and, hence, low recovery indices. In such cases, assigning to the DGA a first-in-line place in the priority of claims ladder would still give some flexibility for least cost procedures such as those of the Argentine Art. 35 bis (in the sense that the DGA would contribute some resources to the asset side of the “good” bank). However, it would also reduce the DGA’s interest in maximum asset value recovery from the liquidation –once it gets paid, it would have little interest in other creditors getting paid. Where the liquidation is carried out in a relatively more efficient manner, say, by the same DGA and using a broad range of market based techniques, it seems better for the DGA to share with other uninsured depositors in the priority of claims ladder. If in this latter case the DGA were to be assigned a first-in-line position vis-à-vis the liquidation, the least cost formula would yield a zero or negligible amount, eliminating desirable flexibility needed to carry out effectively Art. 35 bis-type resolutions and totally eliminating incentives for the DGA to worry about maximizing asset value recovery in favor of creditors placed after it in the order of priority of claims. In sum, it appears that, unless the net worth and liquidity of the deposit guarantee fund are precarious, flexibility and incentive considerations tilt the balance in favor of assigning the DGA the same position in the priority of claims ladder as other depositors.

3.5. The asset-liability equivalence constraint

Article 35 bis explicitly requires that “equivalence” be maintained between the assets and liabilities that are separated from the failing bank and then transferred. While it is not clear why such equivalence is called for under the Law, one can certainly think of cases where the constraint would unnecessarily hinder maximum asset value preservation and recovery. Assume the failure of a bank where the value of “good” assets significantly exceeds deposits. The equivalence constraint would force to leave “good” assets in the residual bank, with social costs resulting from the loss of value of such assets under liquidation. Clearly, non-depositor creditors would be better off and depositors would not be worse off if: (i) a “good” bank containing an excess of assets over deposits were constructed and transferred; *and* (ii) the proceeds from such transfer (net of transactions costs) would be placed –as they should— in favor of the liquidation.

3.6. Institutional arrangements

The effectiveness of bank failure resolution is not independent of the organizational and institutional arrangements that house it. This raises the general issue of whether the responsibility for bank resolution should rest with an independent, specialized institution, separate from the banking supervision agency. A number of incentives-related reasons appear to militate in favor of a separate entity which, in practice, has tended to be a publicly administered Deposit Guarantee Agency –such is the case, for instance, of the United States FDIC and Spanish FOGADE.

It may be argued that a separate deposit guarantee/resolution agency would have (i) a natural incentive to protect the integrity of the accumulated guarantee fund; (ii) no psychological resistance for early intervention and resolution of a failing bank, as opposed to bank supervisors who may tend to perceive their role as one of preventing bank closures, possibly even interpreting those closures as an admission of supervisory failure; and (iii) specialized skills in bank failure resolution, skills that are quite different than those required for bank supervision. Furthermore, it would seem that involving the Central Bank too deeply in bank failure resolution processes could damage the credibility of monetary and bank supervision policies.

These arguments have to be weighed against important reasons, particularly practical ones, that can be advanced in favor of keeping bank failure resolution powers with the supervisory agency. There is, in the case of Argentina, the credibility that that the Central Bank brings to the application of Article 35 bis, on account of its recognized independence and proven professionalism. More generally, there are likely to be coordination gains and economies of scale (particularly where skilled human resources are in shortage and substantial learning by doing has already been accumulated) in having the supervisory and resolution functions under the same roof.

3.7. Legal protection

Resolving and closing a failed bank are extreme expressions of “enforcement” which, if delayed, gives rise to high social costs. Hence, the prompt and effective execution of resolution procedures requires solid legal ground as well as clear **legal protection for the bank failure resolution process itself (lawsuits should not suspend it) and for the authorities charged with the responsibility.** Authorities need to be protected against lawsuits initiated against them for actions carried out in good faith in

the performance of their official duties; otherwise they would fail to act forcibly and in a timely manner. Such protection, which is consistent with the first of the Basle Core Principles for Effective Bank Supervision, is unfortunately weak in most Latin American countries, including Argentina, and needs to be upgraded via suitable legal reforms.

As adequate legal protection for supervisory officials is achieved, it is worth putting in place **counterbalancing elements**. For instance, an independent advisory body -- made up of knowledgeable and reputable people-- could be set up to survey the activities of official supervisors and assess fairness in the application of norms. Or a quality control unit could be established inside the supervisory agency to monitor compliance with supervisory guidelines. Alternatively, a supervisory authority from another country could be asked to provide a peer-group assessment against guidelines established by the home supervisory agency.

3.8. Argentine-specific issues in least cost failure resolution

Two specific issues are worth mentioning. The first concerns the **current lack of liquid resources in the DGF** managed by SEDESA. These funds were depleted with the resolution of Banco Mayo; moreover, as a result of the most recent resolutions, several months of the Fund's future receivables have already been mortgaged. Such lack of liquid resources does not necessarily imply insolvency for the DGF, as the present value of its future stream of income from assessments may well exceed the (uncertain) present value of the cost of future insurable events. However, it does erode the credibility of the Deposit Guarantee and hinders the effectiveness of bank failure resolution processes. In this connection, the Argentine authorities may wish to analyze the convenience and/or feasibility of backstop financing for SEDESA, secured by its future stream of receivables.

Second, the Argentine authorities should consider suitable normative amendments to widen the arsenal of contractual arrangements that can facilitate the transfer of a "good" bank's assets --for instance, "loss-sharing" agreements that may improve the buyer's incentives to maximize asset recovery. The review of these alternatives could prove even more useful considering that **the Trust scheme used in the case of Banco Almagro appears to lack adequate incentives to promote maximum asset**

recovery.¹⁸ More effective fee structures –compared to the ones in effect at present— could be easily designed. In particular, a low flat fee could be set for the asset recovery up to a conservatively estimated minimum value, and an additional, proportional (success) fee could be tacked on in relation to amounts recovered in excess of such minimum value, hence providing the Trust manager with upside potential contingent on effort. The implementation of revisions to the Trust contracts aimed at improving incentives to maximize asset recovery is clearly needed in Argentina and should be relatively straight forward.

And third, the particular financial engineering utilized in the resolution of Banco Almagro raises issues in connection to the **potential payment failure by the Trust and the treatment of A Bonds for regulatory purposes**. To be sure, the over-collateralization of the Bonds issued by the Trust clearly reduces the risk of default by the latter, particularly in respect of the (senior) A Bonds. Nonetheless, it seems reasonable to argue that there is a nonzero probability of nonpayment. Recognizing this, the Central Bank recently has created a contingent fund that would make payments on A Bonds in case the corresponding Trust were unable to do so. This fund is the result of a “controlled” regulatory forbearance scheme, according to which the banks that acquire “good” banks (in the context of the application of Article 35 bis) are allowed to constitute part of the minimum liquidity requirement with public bonds that yield a greater interest rate than that earned on deposits in the Central Bank; the earnings attributable to such difference in rates feed the mentioned fund. Given this scheme, the Central Bank allows for A Bonds to be recorded in the balance sheets at face value, without the need for provisions. Ingenious though it is, the scheme does reduce systemic liquidity, insignificantly at this stage, but it could do it in a noticeable manner in the event of a failure of a large bank or of several small to mid-size ones.

3.9. Beyond Art. 35 bis: voluntary exit for solvent but nonviable banks

The Argentine Central Bank authorities have identified the need to complement their failure resolution framework with mechanisms to facilitate the early, voluntary exit of banks that are solvent but nonviable. These banks may be considered **nonviable in at**

¹⁸ In effect, early observations on the performance of the Trust scheme indicate a tendency for the Trust process to be “captured” by lawyers, with the consequent sacrifice of market-based financial criteria.

least two senses: (i) they are on a trajectory of deterioration that would likely put them within few years in capital or liquidity conditions that would warrant their closure under Article 35 bis; and (ii) their net worth (defined as the going concern value of assets minus liabilities), albeit positive, is insufficient to offset the transaction costs involved in, say, a merger or a take-over; in other words, these would be banks that are just not worth the headache for a potential buyer. The owners of these banks also see no future in the long term and would thus be willing to close them and pay all the creditors, without coercion from the supervisory authority, but they cannot easily do that because of the illiquidity of the assets. As these banks formally meet the capital, liquidity, and other regulatory requirements, the Central Bank lacks an objective basis to enforce early closure in a legally unassailable way, despite projections of future deterioration. There is no voluntary bankruptcy for banks in the Argentine legislation and, even if it existed, Central Bank authorities see a need for alternative mechanisms that could be applied swiftly, quietly, and smoothly to facilitate voluntary exit of these solvent but nonviable banks, thereby minimizing adverse effects on the confidence in the system, and without exposing public sector resources to a risk of loss.

One scheme that the BCRA is studying in this regard would involve the **use of resources from the Bank Capitalization Trust Fund (BCTF)** to finance, say, 50 percent of deposit payouts. Such lending would be secured by the exiting bank's assets which, to avoid asset stripping, could be put into a Trust. The Trust could be managed by the exiting bank administrators/owners, who would have strong incentives to maximize asset recovery given that they would receive the residual value, after all creditors (including the BCTF) have been paid. If the recovery from the assets in the Trust were insufficient to pay the BCTF, SEDESA could make a contribution in line with a least-cost criterion to pay the BCFT. (Recall that SEDESA is funded solely by the private banking industry, without any recourse to public funds.) The authorities consider that the contribution by SEDESA would virtually eliminate the risk of losses for the public sector resources of the BCTF, although some, relatively minor subsidy could be implicit in the interest rate charged on the loans by the BCTF, a subsidy that could be justified by the positive externalities derived from the early exit of solvent but nonviable banks.

While a good case can be made for a scheme to facilitate the voluntary exit of solvent but nonviable banks, much caution and deeper analysis would be needed to layout an appropriate design, for there are a number of important problems. First, the scheme

would require substantial amounts of liquid resources, but BCTF is at present virtually empty. Second, unlike SEDESA's resources, which are entirely of private sector origin, the use of BCTF resources in any exit scheme would, to one degree or another, expose public funds to the risk of loss, a route that so far the authorities have wisely succeeded in minimizing or avoiding. Third, the typical tendency of bank owners to overestimate the value of their bank would tend to be a deterrent to an early willingness to exit voluntarily. Fourth, for this sort of scheme to work smoothly, all the creditors of the exiting bank have to get paid on demand or at the moment their claims matured, without applying priority of claim rules. Any queuing based on priority of claims rules would prompt large creditors to run on the bank the moment they suspected that a "voluntary exit process" may be initiated. And fifth, even if the scheme under study would offer reasonable protection to public resources by maximizing the probability of full repayment to the BCTF, it does so at the risk of some increase in moral hazard: large depositors and non-depositor creditors may get payment at the expense of SEDESA losses, even if these losses were limited by the least-cost criterion.

Be it as it may, it must be emphasized that any scheme for the early exit of solvent but nonviable banks be **integrated into a broader supervisory strategy**. This strategy would aim at: communicating frankly to bank managers the supervisor's assessment of the bank's viability, pointing towards deterioration trends; requiring corrective actions and stepping up enforcement measures; intensifying monitoring to update assessments constantly, prevent excessive risk taking and, more generally, "shepherd" the bank towards resolution, including by identifying ways to facilitate orderly shrinkage (i.e., the wind-down of assets to pay off liabilities).

4. Concluding Remarks

A deeper, general issue that permeates most of the discussion in this paper is that of **rules versus discretion**.¹⁹ Bank resolution is a complex subject where sound judgement is essential, which argues for a degree of discretion, particularly in resolving a too-big-to-fail bank. Too much discretion, however, contributes to lack of transparency,

¹⁹ The paper in fact illustrates that the issue of rules versus discretion emerges even if the discussion on bank resolution is circumscribed to a range of difficult but still "normal" circumstances. *A fortiori*, this issue would play out in an even more acute fashion in the context of "extraordinary" circumstances, e.g., a generalized banking crisis.

erodes accountability, and has attendant moral hazard complications. The “right” balance is of course elusive, not the least because even in a rules-intensive system aimed at minimizing moral hazard, the too-big-to-fail phenomenon would tend to undermine the viability –and hence the credibility– of air-tight rules. To put matters in some perspective, however, it appears useful to outline two prototypical approaches to sorting out the balance between rules and discretion in the area of bank resolution.

The first approach emphasizes the option value of discretion. As a consequence, it has a bias in favor of a bank resolution framework that would leave considerable, albeit not explicitly stated, flexibility to control contagion risk and bail out bank creditors in the event of, say, a too-big-to-fail case. The legal framework tends to be silent or vague on the bailout possibility,²⁰ thus generating a high degree of “constructive ambiguity”. Often under this approach, the management of a too-big-to-fail case would require emergency legislation.

The second approach, by contrast, emphasizes the virtues of rules. It tends to favor a bank failure resolution framework that minimizes moral hazard and the risk of loss to the DGA for all “normal” circumstances. However, it also provides for a potential need to control contagion risk in the case of a too-big-to-fail bank, not by tacit or vague flexibility embedded in the law, but via an *explicit* “rule” or “escape valve”. This could take the form of a contingent clause in the Law that specifies the conditions under which, when a too-big-to-fail bank that could pose systemic risk arises, the deposit guarantee limit can be, by exception, raised to cover up to all deposits and, if needed, even up to all bank liabilities.²¹

²⁰ In some cases (e.g., the Colombian FOGAFIN and the Spanish FOGADE), resolution frameworks allow flexibility to handle too-big-to-fail cases by enabling the Deposit Guarantee/Resolution Agency to perform, at its discretion, “open-bank resolutions”, i.e., taking control of a failing bank, keeping it open to the public, writing down shareholders capital, and injecting fresh capital into it as needed to rehabilitate and, eventually, sell it. The cost of such a operation may well exceed a traditional least cost criterion and may often imply a depositor bailout at the expense of the DGA.

²¹ This second approach was adopted in United States by the FDIC Improvement Act of 1991. It introduced a contingent clause according to which, when handling a failing bank, the FDIC can extend coverage to bank liabilities beyond the insured amount if there is a joint determination by the Board of Governors of the Federal Reserve, the FDIC Board, and the Treasury Secretary (after consulting with the President of the United States) that the failure of such bank would entail systemic risk.

That no simple answers are available in key areas of bank failure resolution –including in regard to rules versus discretion— is not only due to their inherent complexity. It is also a reflection of a **void in the development of international minimum standards for bank resolution**, which is in part due to the relevance of differences in historical, legal, and organizational traditions among countries. In effect, internationally accepted “core principles” such as those now in existence for banking supervision have yet to be developed for bank “exit” in general, and failure resolution in particular. As a result, there is little international consensus as to what constitutes “best practices” in this field, which at the minimum calls for great caution in advancing policy prescriptions. But as the area of “bank exit” moves –as it likely will— into the priority agenda for international coordination efforts, the Argentine experience should constitute an important point of reference in the Latin American Region, as it would seem to contain important elements of “best practices.”

ANNEX 1

Example of Bank Resolution under the Emerging Model (à la Almafuerite)

Simplifying assumptions: Transactions costs are zero; non-cash assets are net of provisions; the going concern value of assets is preserved during the resolution; assets become valueless under judicial liquidation.

The failing bank's balance sheet:

Failing bank	Assets	Liabilities
Cash	10	2 Liabilities to labor
Non-cash assets	80	20 Guaranteed deposits
		48 Non-guaranteed deposits
		10 Liabilities to Central Bank
		20 Other liabilities
		-10 Capital

The failing bank's non-cash assets are securitized via a Trust, as follows:

Trust	Assets	Liabilities
Non-cash assets	80	40 A Bonds (senior to B Bonds)
		10 B Bonds (senior to C Bonds)
		20 C Bonds
		10 Excess collateral for bonds

A "good" bank is formed for all deposits:

"Good" bank	Assets	Liabilities
Cash	10	2 Liabilities to labor
A Bonds	40	20 Guaranteed deposits
IOU from Deposit Guarantee Agency	20	48 Non-guaranteed deposits
		0 Capital

The failing's bank debt to the Central Bank is settled with B Bonds:

The Central Bank releases to the Trust the failing bank's assets that had been the collateral for a \$10 past liquidity loan, and receives \$10 in B Bonds in payment for such loan.

The Deposit Guarantee Agency (DGA) receives C Bonds for its contribution to the "good" bank:

A \$20 IOU from the DGA, equal to the amount of guaranteed deposits, is added to the assets of the "good" bank. In exchange, the DGA receives C Bonds from the Trust. The DGA is not worse off compared to a cash payout of guaranteed deposits in exchange for a claim against the liquidation because, by assumption, no value is recoverable through judicial liquidation.

The residual ("bad") bank, containing the rest the failing bank's liabilities, moves on to judicial liquidation...

Residual bank	Assets	Liabilities
Non-cash assets	0	20 Other liabilities

The assets of the residual bank are those not retained in the Trust because they are deemed valueless.

ANNEX 2

Example of Bank Resolution with (i) an Incremental Rule for Inclusion of Deposits in the "Good" Bank, and (ii) a Deposit Guarantee Conditional on Asset Insufficiency

Simplifying assumptions: Transactions costs are zero; non-cash assets are net of provisions; the going concern value of assets is preserved during the resolution; non-cash good assets lose 60 percent of their value under judicial liquidation.

The failing bank's balance sheet:

Failing bank	Assets	Liabilities
Cash	5	5 Liabilities to labor
Non-cash "good" assets	45	30 Deposits amounts $\leq$ \$30,000 (guaranteed)
Non-cash "bad" assets	0	15 \$30,000 < Deposit amounts $\leq$ \$50,000
		20 \$50,000 < Deposit amounts $\leq$ \$75,000
		20 Deposit amounts > \$75,000
		10 Other liabilities
		-50 Capital

Available good assets imply that not all deposits can be included in the "good" bank; an incremental (not prorata) rule is used to select deposits for the "good" bank

Since good assets in the failing bank exceed guaranteed deposits, the Deposit Guarantee Agency makes no contribution to the "good" bank

"Good" bank	Assets	Liabilities
Cash	5	5 Liabilities to labor
Non-cash "good" assets	45	30 Deposits amounts $\leq$ \$30,000 (guaranteed)
\$ from DGA	0	15 \$30,000 < Deposit amounts $\leq$ \$50,000
		0 Capital

The incremental rule dictates that only up to \$50,000 per depositor can be included in the liability side of the "good" bank. Larger deposit amounts take a hit in the liquidation (see residual bank below). The Deposit Guarantee is conditional on assets being insufficient to cover guaranteed deposits, hence, in this case, it makes no contribution to the "good" bank. Due to the incremental rule and the preservation of asset value within the resolution, smaller non-guaranteed deposits are clearly better off than under the liquidation, while larger depositors are not necessarily worse off.

The residual ("bad") bank containing larger deposit amounts and other liabilities moves on to liquidation...

Residual bank	Assets	Liabilities
Non-cash "bad" assets	0	20 \$50,000 < Deposit amounts $\leq$ \$75,000
\$ from sale of "good" bank	?	20 Deposit amounts > \$75,000
		0 Liability to DGA
		10 Other liabilities
		? Capital

ANNEX 3

Example of Bank Resolution with (i) an Incremental Rule for Inclusion of Deposits in the "Good" Bank, and (ii) a Least Cost Criterion for the contribution of the Deposit Guarantee Agency (DGA) to the "Good" bank

Simplifying assumptions: Transactions costs are zero; non-cash assets are net of provisions; the going concern value of assets is preserved during the resolution; non-cash good assets lose 60 percent of their value under judicial liquidation.

The failing bank's balance sheet:

Failing bank	Assets	Liabilities
Cash	5	5 Liabilities to labor
Non-cash "good" assets	60	20 Deposits amounts ≤ \$30,000 (guaranteed)
Non-cash "bad" assets	0	40 \$30,000 < Deposit amounts ≤ \$75,000
		15 \$75,000 < Deposit amounts ≤ \$125,000
		15 Deposit amounts > \$125,000
		5 Other liabilities
		-40 Capital

Alternative A:

Available good assets imply that not all deposits can be included in the "good" bank; an incremental (not prorata) rule is used to give priority to smaller depositors for inclusion in the "good" bank

For the least cost criterion, it is assumed that, in the liquidation, the DGA has the same priority of claim as that of non-guaranteed deposits, sharing with them prorata

"Good" bank	Assets	Liabilities
Cash	5	5 Liabilities to labor
Non-cash "good" assets	60	20 Deposits amounts ≤ \$30,000 (guaranteed)
\$ from DGA	15	40 \$30,000 < Deposit amounts ≤ \$75,000
		15 \$75,000 < Deposit amounts ≤ \$125,000
		0 Capital

Under this alternative, given available assets, the incremental rule dictates that only up to \$125,000 per depositor can be included in the liability side of the "good" bank. Larger deposit amounts take a hit in the liquidation (see residual bank below). The least cost criterion implies that the DGA's contribution to the "good" bank could not exceed a maximum (MaxC), usually defined as the cost to the DGA of paying out guaranteed deposits in cash in exchange for a claim against the liquidation. Given the assumptions regarding the loss of asset value and the DGA's priority of claim in the liquidation, MaxC may be calculated as follows:

$$\text{MaxC} = \text{GD} - (\text{GD}/\text{L}) * (\text{CA} + \text{LVNCA} - \text{LL})$$

$$\text{MaxC} = 20 - (20/100) * [5 + (1 - 0.6) * 60 - 5] = 15.2$$

GD = guaranteed deposits; L = total liabilities; CA = cash assets; LVNCA = liquidation value of non-cash assets; LL = liabilities to labor.

The residual ("bad") bank containing large deposit amounts and other liabilities, including the claim of the DGA, moves on to liquidation...

Residual bank	Assets	Liabilities
Non-cash "bad" assets	0	15 Deposit amounts > \$125,000
\$ from sale of "good" bank	?	15 Liability to DGA
		5 Other liabilities
		? Capital

ANNEX 3 (cont.)

Alternative B:

Available assets for "good" bank imply a need to exclude certain (high) deposit amounts; such exclusion is performed according to an "incremental rule"

For the least cost criterion, it is assumed that the DGA has priority of claim over depositors in the liquidation, i.e., that it stands first in line (after labor claims)

"Good" bank	Assets	Liabilities
Cash	5	5 Liabilities to labor
Non-cash "good" assets	60	20 Deposits amounts ≤ \$30,000 (guaranteed)
\$ from DGA	0	40 \$30,000 < Deposit amounts ≤ \$75,000
		0 Capital

Under this alternative, given available assets, the incremental rule dictates that only up to \$75,000 per depositor can be included in the liability side of the "good" bank. Larger deposit amounts take a hit in the liquidation (see residual bank below). The least cost criterion implies that the DGA's contribution to the "good" bank could not exceed a maximum (MaxC), usually defined as the cost to the DGA of paying out guaranteed deposits in cash in exchange for a claim against the liquidation. Given the assumptions regarding the loss of asset value and the DGA's priority of claim in the liquidation, MaxC may be calculated as follows:

$$\text{MaxC} = \text{GD} - X$$

$$X = (\text{CA} + \text{LVNCA} - \text{LL}) \text{ if } (\text{CA} + \text{LVNCA} - \text{LL}) \leq \text{GD}$$

$$X = \text{GD} \text{ if } (\text{CA} + \text{LVNCA} - \text{LL}) > \text{GD}$$

$$(\text{CA} + \text{LVNCA} - \text{LL}) = [5 + (1 - 0.6) \cdot 60 - 5] = 24 > \text{GD} = 20$$

$$\Rightarrow \text{MaxC} = 20 - 20 = 0$$

GD = guaranteed deposits; L = total liabilities; CA = cash assets; LVNCA = liquidation value of non-cash assets; LL = liabilities to labor.

The residual ("bad") bank containing large deposit amounts and other liabilities, including the claim of the DGA (if any), moves on to judicial liquidation...

Residual bank	Assets	Liabilities
Non-cash "bad" assets	0	15 \$75,000 < Deposit amounts ≤ \$125,000
\$ from sale of "good" bank	?	15 Deposit amounts > \$125,000
		0 Liability to DGA
		5 Other liabilities
		? Capital

Argentina at a glance

POVERTY and SOCIAL

1998

	Argentina	Latin America & Carib.	Upper-middle-income
Population, mid-year (millions)	36.1	502	588
GNP per capita (Atlas method, US\$)	8,970	3,940	4,860
GNP (Atlas method, US\$ billions)	324.1	1,978	2,862

Average annual growth, 1992-98

	Argentina	Latin America & Carib.	Upper-middle-income
Population (%)	1.3	1.6	1.4
Labor force (%)	2.2	2.3	2.0

Most recent estimate (latest year available, 1992-98)

Poverty (% of population below national poverty line)	..	..	..
Urban population (% of total population)	89	75	77
Life expectancy at birth (years)	73	70	70
Infant mortality (per 1,000 live births)	22	32	27
Child malnutrition (% of children under 5)	2	8	..
Access to safe water (% of population)	65	75	79
Illiteracy (% of population age 15+)	4	13	11
Gross primary enrollment (% of school-age population)	113	113	108
Male	114	..	..
Female	113	..	..

Development diamond*

KEY ECONOMIC RATIOS and LONG-TERM TRENDS

	1977	1987	1997	1998
GDP (US\$ billions)	56.8	111.1	292.9	298.1
Gross domestic investment/GDP	30.9	19.6	19.4	19.9
Exports of goods and services/GDP	9.6	7.9	10.6	10.4
Gross domestic savings/GDP	33.2	19.9	17.2	17.4
Gross national savings/GDP	32.5	15.2	15.2	15.1
Current account balance/GDP	2.0	-3.8	-4.1	-4.9
Interest payments/GDP	1.0	3.3	2.1	2.1
Total debt/GDP	20.2	52.6	42.1	49.7
Total debt service/exports	27.4	74.3	54.9	61.9
Present value of debt/GDP	..	..	40.9	..
Present value of debt/exports	..	..	329.0	..

(average annual growth)

	1977-87	1988-98	1997	1998	1999-03
GDP	0.4	4.4	6.1	3.9	4.2
GNP per capita	-1.1	3.1	6.7	2.6	3.0
Exports of goods and services	1.3	8.8	12.0	9.2	4.5

Economic ratios*

STRUCTURE of the ECONOMY

(% of GDP)	1977	1987	1997	1998
Agriculture	..	8.1	5.6	5.7
Industry	..	37.8	29.1	28.7
Manufacturing	..	27.5	19.5	19.1
Services	..	54.1	65.3	65.6
Private consumption	57.8	75.4	70.7	70.7
General government consumption	9.0	4.7	12.1	11.9
Imports of goods and services	7.3	7.6	12.7	12.9

(average annual growth)

	1977-87	1988-98	1997	1998
Agriculture	0.8	3.2	0.2	10.9
Industry	-1.3	4.3	9.9	3.2
Manufacturing	-1.0	3.6	9.2	1.6
Services	1.7	4.8	7.7	4.7
Private consumption	..	4.0	8.8	4.0
General government consumption	..	1.4	3.2	-1.1
Gross domestic investment	-0.5	8.4	17.7	6.6
Imports of goods and services	-1.3	21.0	26.6	8.4
Gross national product	0.4	4.5	8.1	3.9

Growth rates of output and investment (%)

Growth rates of exports and imports (%)

Note: 1998 data are preliminary estimates.

* The diamonds show four key indicators in the country (in bold) compared with its income-group average. If data are missing, the diamond will be incomplete.

Argentina

PRICES and GOVERNMENT FINANCE

	1977	1987	1997	1998
Domestic prices				
(% change)				
Consumer prices	176.0	169.2	0.5	0.9
Implicit GDP deflator	159.5	127.8	-0.5	-2.0
Government finance				
(% of GDP, includes current grants)				
Current revenue	..	15.0	18.7	18.9
Current budget balance	..	-3.0	-0.4	-0.3
Overall surplus/deficit	..	-6.4	-1.5	-1.4

TRADE

	1977	1987	1997	1998
(US\$ millions)				
Total exports (fob)	..	6,360	26,430	26,221
Food	..	744	3,007	3,056
Meat	..	655	1,025	836
Manufactures	..	3,661	8,335	8,543
Total imports (cif)	..	5,820	30,450	31,437
Food	..	..	..	..
Fuel and energy	..	653	967	852
Capital goods	..	973	14,823	15,587
Export price index (1995=100)	..	81	102	97
Import price index (1995=100)	..	82	106	105
Terms of trade (1995=100)	..	99	97	93

BALANCE of PAYMENTS

	1977	1987	1997	1998
(US\$ millions)				
Exports of goods and services	6,588	8,134	30,940	30,822
Imports of goods and services	4,712	7,627	37,241	38,326
Resource balance	1,876	507	-6,301	-7,504
Net income	-781	-4,738	-6,171	-7,614
Net current transfers	31	..	436	388
Current account balance	1,126	-4,239	-12,036	-14,730
Financing items (net)	719	2,070	15,309	18,168
Changes in net reserves	-1,845	2,169	-3,273	-3,438

Memo:

Reserves including gold (US\$ millions)	..	3,734	22,482	22,922
Conversion rate (DEC, local/US\$)	5.00E-9	2.10E-4	1.0	1.0

EXTERNAL DEBT and RESOURCE FLOWS

	1977	1987	1997	1998
(US\$ millions)				
Total debt outstanding and disbursed	11,445	58,458	123,221	148,033
IBRD	343	2,146	5,494	7,188
IDA	0	0	0	0
Total debt service	1,849	6,244	19,969	18,106
IBRD	46	224	635	725
IDA	0	0	0	0
Composition of net resource flows				
Official grants	0	0	27	26
Official creditors	43	664	-110	549
Private creditors	384	940	10,954	8,682
Foreign direct investment	144	-19	3,569	2,382
Portfolio equity	0	0	214	-986
World Bank program				
Commitments	205	639	1,220	3,815
Disbursements	20	795	797	2,029
Principal repayments	20	133	299	350
Net flows	0	662	498	1,678
Interest payments	26	91	335	375
Net transfers	-26	571	163	1,303

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