Restructuring the banking system – the case of Brazil

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Introduction

The implementation of the *Real* Plan in July 1994 triggered a major process of structural changes in the Brazilian financial system. Years of high inflation had created the incentives for an overbranched banking system in order to benefit from the accumulation of relatively low-interest rate deposits. With currency stabilisation, hyperinflation ended and Brazilian banks were forced to retrench, find new sources of financing and redirect their activities.

The evolution of the financial system since then can be roughly divided into three, partly overlapping, phases. The first phase followed immediately the inception of the *Real* Plan and was marked by the use of official intervention and liquidation to reduce the number of banks. The second phase was characterised by the implementation of the *Programa de Estímulo à Reestruturacão e ao Fortalecimento do Sistema Financeiro Nacional* (Programme of Incentives for the Restructuring and Strengthening of the National Financial System) PROER in November 1995 and the *Programa de Incentivo ã Reducão do Setor Público Estadual na Atividade Bancária* (similar, but for the state-owned financial system) – PROES

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in August 1996. The third, and current, phase is marked by the entry of foreign banks.[1]

The *Banco Central do Brasil* (BCB), with discretionary power to intervene in financial markets and close financial institutions, played a key role in the first phase. The institutional arrangements that provide for these discretionary powers are known as *Special Regimes,* which include intervention, a mechanism for temporary special management (*Regime de Administracão Especial Temporária* (RAET) and extrajudicial (out-of-court) liquidation.

The second phase is marked by the restructuring of private and state-owned banks. The two programmes (PROER and PROES) aimed to protect the interests of depositors and to transfer the shareholding control of troubled banks. Two fundamental objectives were to guarantee the normal functioning of the payments system and to preserve confidence in the banking business generally. This helped to prevent bank runs and to keep moral hazard to a minimum.

The third phase involves the entry of new foreign institutions, a farreaching process which, together with the policies of bank closure and restructuring, is bringing about significant changes in the structure of the banking industry.

The magnitude of the problem

Inflation had provided banks with an important source of revenue ("the float") as the real value of sight deposits fell each day and as time deposits carried interest rates that were typically below the rate of inflation. By the early 1990s, banks' "inflationary revenue" had grown to around 4% of GDP, accounting for almost 40% of the revenue from financial intermediation (i.e. the difference between interest receipts and payments) and other services (Table 1). It fell to 2% of GDP in 1994, and by 1995 it was negligible. A comparison of 1994 figures with the

[1] Significant improvements in banking regulation and supervision have also been recently implemented. Although the measures adopted constitute an important element of the restructuring policy, they are not analysed here. See Almeida Júnior, Mansueto and Mendonca de Barros (1996, 1997), Banco Central do Brasil (1998), IMF (1998) and Tombini (1999) for a discussion on this matter.

Table 1

The inflationary revenue of banks

Year	As % of GDP	As % of Bank Value Added
1990	4.0	35.7
1991	3.9	41.3
1992	4.0	41.9
1993	4.2	35.3
1994	2.0	20.4
1995	0.0	0.6

Source: ANDIMA/IBGE: Financial system: an analysis as from the national accounts – 1990/1995.

average from 1990 to 1993 suggests that banks lost about R19 billion in inflationary revenue from stabilisation.[2]

Such a huge loss meant that financial institutions would have to make radical changes in order to adapt to the new low-inflation environment. As a result, many banks began a process of adjustment involving the closing of branches that were no longer economically viable and the dismissal of employees.

The other side of the coin was that, with the end of hyperinflation, it became more attractive to hold bank deposits, which grew dramatically following stabilisation ("remonetisation").[3] To relend these deposits, and to compensate for the loss of inflationary revenue, the banking system was under some pressure to expand lending. Therefore, in order to forestall an excessively rapid growth of bank credit, the authorities increased the reserve requirements on sight deposits from 48% to 100% (at the margin) right at the outset of the Real Plan. Even so, financial sector loans to the private sector grew by almost 60% during the first year of the Plan.[4] Such rapid growth of bank loans at first partly compensated for the loss of the "float", postponing the adjustment of the financial system. But the downturn in economic activity in the second quarter of 1995 as a result of increased interest rates after the Mexican crisis led to a substantial increase of non-performing loans (NPLs).[5]

[2] See Almeida Júnior, Mansueto and Mendonca de Barros (1997).
[3] Sight deposits grew by 165% during the first six months of the Real Plan.
[4] See Almeida Júnior and Mendonca de Barros (1997).
[5] The delinquency rate reached a peak of about 10.5% in July 1996.

The combination of a low-inflation environment (loss of the float) with the (temporary) surge in bank credit expansion (increase of NPLs) thus served to destabilise a financial system that had long lived under high and volatile inflation rates and that had yet to develop a solid "credit culture".

To make matters worse, the fiscal position of most of the state governments began to deteriorate from 1995: here, too, the slowness to adapt to the low-inflation environment and the devastating effects of high real interest rates were the main reasons for renewed problems.

Bank intervention and closure

The legislation that deals with bank intervention and closure, established in Law 6,024/74, Decree-law 2,321/87 and Law 9,447/97, covers the cases of (a) insolvency, (b) bad management and (c) violation of banking laws and regulations. Under these legal provisions, private and non-federal public financial institutions can be made subject to certain procedures, known as *Special Regimes,* such as intervention, the so-called temporary special management (RAET) and extrajudicial liquidation.

The decree and the management of a special regime is the responsibility of the central bank. The provisions of the general Bankruptcy Law (Decree-law 7,661/45) are also applicable to financial institutions under extrajudicial liquidation.

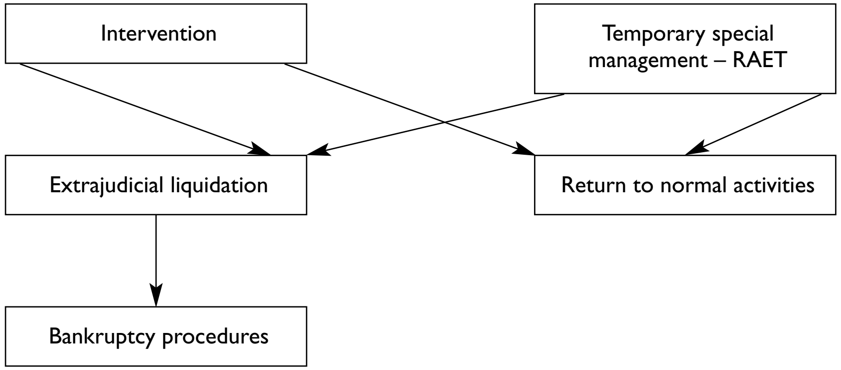
In addition, financial institutions may also be dissolved by the shareholders (ordinary liquidation), following the provisions of the Brazilian Corporate Law (Law 4,595/64).[6] Moreover, the bankruptcy of financial institutions can be declared by judicial order; in this case, the general provisions of the Bankruptcy Law are applicable.

Special Regimes

The Special Regimes of intervention, extrajudicial liquidation and RAET essentially provide the early, structured intervention mechanisms (exit

[6] In the ordinary liquidation, assets are disposable and liabilities are enforcable, but the institution stops setting up new operations. Authorisation to operate is cancelled as obligations are met.

Diagram 1
Special regimes



policy) of the financial system: whenever there are cases of insolvency, bad management or infractions of banking laws, the central bank can, at its discretion, take action (Diagram 1). Accordingly, there is no quantitative rule triggering a Special Regime.[7] Under a Special Regime, the directors of the financial institution concerned automatically and immediately lose their offices. An Intervenor, a Liquidator and a Board of Directors are appointed by the central bank and are granted the power to conduct the transformation, merger, split or transfer of the shareholding control of the institution (including federalisation). Managers and majority shareholders assume joint responsibility for the institution's uncovered liabilities: during this process, they are not allowed to sell any properties they own.

In the case of *intervention,* there occurs "a suspension of liabilities enforcement", that is, deposits are blocked.[8] In an *extrajudicial liquidation,* creditors' potential claims against the institution's assets (including property) are suspended. No similar claims may be made during the liquidation period. Once the institution has been liquidated,

[7] Note that the central bank can also take action by selling the institution *before* it reaches the stage of complete insolvency (see Law 9,447/97): in this way the scale of ultimate losses can be limited. Liquidity problems (overdraft to bank reserves' account) may also motivate the adoption of the RAET (see Decree-law 2,321/87).
[8] Only the amount covered by the deposit insurance agency is enforceable.

Table 2
Liquidation, intervention, temporary special management (RAET) and bankruptcy since the Real Plan
(July 1994 – December 1998)

Type of Intervention	Number of Institutions
Intervention	2
Extrajudicial Liquidation	28
Ordinary Liquidation	3
RAET	5
Bankruptcy	10
Total	48

Source: Central Bank of Brazil.

the maturities of all liabilities are brought forward to the date of the liquidation. Interest payments are not necessarily due.[9] Moreover, the inflation correction is not applied to liabilities.[10] The period of an intervention shall not exceed six months; the central bank may renew this period only once (i.e. for at most another six months).

Contrary to intervention and extrajudicial liquidation, however, the adoption of a RAET will *not* affect the normal activities of the financial institution. Moreover, the duration of a RAET is set more flexibly (i.e. is not limited to at most one year).

If the institution does not return to its normal activities, intervention and the RAET are ultimately followed by extrajudicial liquidation, while bankruptcy procedures follow the extrajudicial liquidation.

Since the outset of the *Real* Plan until December 1998, 48 banking institutions have undergone Special Regimes procedures, with 31 being liquidated. Considering the financial system as a whole (that is, including

[9] The institution is only required to make interest payments if it is able to do so.
[10] During the years of high inflation this constituted a great incentive for the extrajudicial liquidation to be decreed upon request of the managers of the financial institution since several months of inflation were sufficient to obliterate the real value of liabilities. Liabilities are now adjusted by the interest rate on savings deposits, i.e. the *taxa referencial* (reference rate, TR).

also non-banking financial institutions), 182 financial institutions were submitted to Special Regimes in the same period.

Special Regimes have constituted the major exit policy for financial institutions. However the difficulties of some private banks considered too big to fail and the recurrent problems with state banks made it necessary to design a new set of policy instruments to forestall the risk of a systemic banking crisis.

Programme of incentives for the restructuring and strengthening of the national financial system (PROER)

Access to the PROER is based on a case-by-case authorisation by the central bank and is restricted to universal banks, commercial banks, investment banks, development banks, savings banks, consumer finance companies and real estate credit companies.[11] Brazil's deposit insurance agency, called *Fundo Garantidor de Créditos* (FGC), takes part in the PROER.[12] Foreign financial institutions are allowed to find their way into the Brazilian financial system through PROER lines of credit. It is implemented through administrative, operational and corporate reorganisation resulting in the transfer of the shareholding control of private financial institutions.

The basic principles of the PROER can be summarised as safeguarding the payments system and penalising bad banking policies. Safeguarding the payments system means that deposits are protected and can be claimed at any time. The sanction applied is that shareholding control of the troubled bank is transferred to new (reputable) owners. Hence the risk of moral hazard from bail-out operations is reduced.

The PROER comprises two general models: one applying to large banks and the other to small/medium banks (Table 3). Under the *first general model,* large troubled banks that have been placed under Special Regime (intervention or RAET) are split into a "good bank" and a "bad

[11] Including institutions under Special Regimes (intervention and RAET).

[12] The FGC, created in late 1995, provides coverage of up to R20,000 per depositor on deposit (and other assets), in case of intervention, extrajudicial liquidation and bankruptcy *since the beginning of the Real Plan.* All financial institutions participate in the FGC, with the exception of credit unions. Institutions contribute 0.025% of their deposit account balances each month.

bank".[13] The "good bank" is constituted from the good assets and deposits of the troubled bank. The acquiring bank is free to select the assets from the troubled bank (due diligence), but it is compelled to assume *all* troubled bank deposits. The "bad bank" is made up of the remaining troubled bank assets (i.e. the impaired assets) and liabilities (after Special Regime).[14]

PROER operations serve to close the "good bank" asset gap (deposits *minus* troubled bank selected assets), i.e., to redress the balance sheet of the "good bank".[15] The financial assistance provided by the central bank is converted into a "good bank" asset (bank reserves' availability) and a "bad bank" liability (PROER's debt). The acquiring bank takes over the "good bank", thus originating a "new bank".[16] All troubled bank deposits are transferred to the "good bank" and enforceable through the "new bank".[17] The "bad bank" is liquidated; the central bank-appointed liquidator is responsible for disposing of the impaired assets. The managers and majority shareholders of the troubled bank are dispossessed, may be prosecuted and are prevented from selling any property they hold pending final resolution.[18]

Table 3

Mergers and acquisitions under PROER

PROER general models	Acquiring institution	
	Domestic	Foreign
PROER general model 1 – large banks	4	1
PROER general model 2 – small and medium-sized banks	2	0
Total	6	1

Source: Central Bank of Brazil.

[13] In practice, the central bank intervenes once the acquiring bank has been identified and the PROER arrangements finalised.

[14] For instance, FGC coverage and PROER's debt.

[15] Two numerical examples of PROER balance sheet operations are set out in an annex. The following paragraphs outline the general principles.

[16] Accordingly the "new bank" is simply the bank that results from the acquisition of troubled bank (selected) assets and liabilities (deposits).

[17] The FGC covers deposits up to the limit. Similar to PROER operations, FGC coverage is entered as a "bad bank" liability and a "good bank" asset.

[18] Any action taken with respect to managers' properties, however, depends upon verification of their contribution to the failure of the bank. The properties of the majority shareholders are frozen independently of such verification.

The BCB's ensuing claim on the "bad bank" is collateralised by federal debt instruments whose face value must exceed by 20% the amount of PROER finance.[19] Financial charges correspond to a spread of 2% over the remuneration of the collateral provided.[20] If the "bad bank" lacks the required volume of federal debt instruments to secure the debt, the central bank may also finance the purchase of the accepted collateral. In this case, the volume of PROER finance is equal to the "good bank" asset gap *plus* the value of collateral purchased.[21]

PROER financial assistance is also granted to a federal financial institution to acquire the troubled bank's mortgage portfolio.[22] Another line of credit is based on (troubled bank's) claims on the FGC,[23] while three others are still pending.[24]

The *second general model* is tailored for small and medium-sized banks. In this case the troubled bank is simply taken over by another bank (the troubled bank is not split into a "good bank" and a "bad bank"). The "new bank" has to be capitalised. A PROER line of credit is granted to the acquiring bank as a liquidity cushion against potential deposit withdrawals or as a lever to help to replace the troubled bank's impaired assets.[25]

Several important mergers and acquisitions took place under PROER arrangements (Table 3), whereas others were managed *without* borrowing from PROER facilities (Table 4). Total BCB disbursements under PROER totalled around R20 billion from November 1995 (approximately 2.5% of 1996 GDP), with the bulk of disbursements being made before mid-1997 and under the first general model. Claims on the FCVS provided nearly 2/3 of total PROER guarantees.

[19] PROER also accepted as collateral for loans unmarketable federal debt instruments, i.e. debt instruments of uncertain settlement which are therefore negotiated at a substantial discount (because of their high liquidity risk) in secondary markets (when a secondary market for them exists at all). The *Fundo de Compensacão para Variacões Salariais* (Government-subsidised mortgage assets (FCVS) may be considered as a representative unmarketable federal debt instrument used as collateral for PROER loans.

[20] The remuneration of the FCVS is equivalent to a spread over the TR.

[21] Federal debt instruments are offered as PROER guarantees at their *face value,* but purchased at their *market value*. This means that the collateral purchased is settled at the books of the "bad bank" by its value of acquisition. See annex.

[22] The federal financial institution is the Caixa Econômica Federal (CEF). As the main savings and loan institution in Brazil, the CEF has a considerable volume of FCVS on its portfolio that may be used to secure PROER finance. There was no case of an acquiring bank taking over the mortgage portfolio of the troubled bank.

[23] This line of credit has the maturity of up to five years and interest rate charges set by the market overnight rate on federal debt repos, the so-called *taxa referencial do* SELIC (SELIC rate).

[24] These are related to (i) cleanup operations, (ii) administrative reorganisation and modernisation of operational systems, and (iii) fixed assets reduction.

[25] This line of credit has the maturity of up to five years. Collateral is defined according to BCB criteria and interest rate charges are set by an annual accruing spread over the SELIC rate.

Programme of incentives for the restructuring of the state public financial system (PROES)

The main objective of the PROES is to reduce the role of state governments in the banking system.[26] A major problem in Brazil had been the extraction by these governments of credit from their "own" banks, thus undermining the independence of credit assessment.

In much the same way as PROER, PROES principles can be summarised as safeguarding the payments system and penalising bad banking policies. Deposits are protected, but the nature of state control is to be changed or the bank has to modify its line of business.

Table 4

Transfer of shareholding control, merger, acquisitions and split after the real plan without borrowing from PROER facilities

Type of adjustment	Institution	
	Domestic	Foreign
Transfer of shareholding control	9	20
Merger, acquisition	3	6
Split	6	0
Total	18	26

Source: Central Bank of Brazil.

[26] Laid down originally by Provisional Measure 1,514, August 1996. Federal financial institutions also engaged themselves in restructuring plans, but these were not under PROES facilities. For instance, the two largest federal banks, Banco do Brasil (BB) and CEF, have sought to restructure their operations and restore capital adequacy, while the third largest, Banco Meridional, has been privatised.

The PROES forms part of a comprehensive process of state fiscal adjustment and debt restructuring.[27] The fiscal adjustment programme aims at generating primary surpluses so that states are able to service their debt, while debt is reduced to sustainable levels through restructuring.[28]

The debt restructuring agreements involved both forgiveness of (securitised) debt and an (implicit) interest rate subsidy on (total) restructured debt. Banks were able to exchange the state government paper they held for federal government paper. Part of the state's resultant debt to the federal government was then forgiven through the capitalisation of the outstanding securitised state debt at a specific (past) date using a below-market interest rate. The difference between the overnight market interest rate and that on the restructured debt over the period (i.e. up to the time of the signing of the renegotiating debt contract between the state and the federal government) was assumed by the federal government.[29] The securitised debt was then consolidated with other debts and the total restructured debt was given the same interest rate subsidy as the securitised debt.[30]

Under PROES arrangements, the federal government finances the restructuring of state banks. State bank claims on impaired assets (mainly credits granted to their controlling shareholders, i.e., state governments) are assumed by the federal government and this debt is also consolidated with other state debts under restructuring. The

[27] Current legal provisions (Law 9,496/97) has been recently preceded by two other state debt renegotiations. Accordingly, in 1989 the federal government assumed much of the states' external debt (Law 7,976) and in 1993 it assumed state debts owed to federal financial institutions (Law 8,727). Another form of federal bailout for the states that has taken place since 1994 is a forward selling agreement involving BCB bonds and non-tradable state government securities (which must remain frozen in state banks' portfolios).

[28] Under fiscal adjustment programmes, state governments are required to pursue primary surpluses to cover debt service obligations (overall balanced position). A decreasing trend is set for the debt-revenue ratio, which has to fall to one from an average value of 2.2 in 1996. Furthermore, debt service due on newly *and* previously restructured debt is scheduled to commit from 11% to 15% of net revenues (own revenues plus transfers from the federal government less transfers to the municipalities), any excess being capitalised.

[29] According to Law 9,496/97, the stock of outstanding securitised state debt is taken at 31 March, 1996 and capitalised using an annual interest rate of 6% plus inflation (as measured by the IGP-DI index). The portion of the debt assumed by the federal government was considered to be about R6.2 billion by the end of 1996 (0.7% of GDP). In 1997 the interest rate subsidy would have increased to some R8 billion (1% of GDP) and it was [expected to be] even higher in 1998 (IMF, (1998)).

[30] The newly restructured debt is divided into two portions. The first portion, the so-called *"conta gráfica"*, corresponds to 20% of the restructured debt. It had to be amortised by the end of 1998 using revenues from the privatisation of state assets. The remaining 80% is amortised over 15 to 30 years at an annual interest rate of 6% plus the rate of inflation.

quid pro quo for such aid is that the state bank has to agree to be further privatised, liquidated or transformed into a non-banking financial institution (such as a development agency).[31]

With a view to reducing the role of state banks in the financial system, the federal government may acquire shareholding control of the bank for the exclusive purpose of privatisation or liquidation. The federal government may also finance the liquidation of the state bank and the adjustments required to privatise or change the status of the state bank to that of a non-banking financial institution.[32] Lastly, the federal government is responsible for the assignment of assets (treasury bonds) to secure payment of PROES obligation. However, if the state government should decide to maintain control over the state bank, only 50% of the costs of the restructuring programme would be met by the federal government. In either case, the bank would have to be recapitalised and the management changed.[33]

All transactions conducted by the federal government under debt restructuring agreements and PROES finance are made through marketable treasury securities. The central bank provides the state bank with liquidity by swapping short-term bills for the long-term federal securities issued under debt restructuring agreements.[34] In addition, the central bank provides bridge loan finance for federal financial institutions or state financial institutions to acquire state bank impaired assets owed by the federal government, the state government or the private sector.[35] The

[31] Even if the state government decides not to adhere to PROES, there still remains the possibility that the central bank may intervene in the bank (Special Regime) so as to liquidate or transform it into a non-banking financial institution. In this case, however, the state government debt owed to the state bank is not given a special treatment, i.e., it is not consolidated with the state debt under restructuring.

[32] Privatisation revenues are used to amortise state restructured debt owed to the federal government.

[33] This is also the case when the state government decides to keep control over one of the state financial institutions, allowing the others to be privatised or liquidated.

[34] The central bank issues short-term bills in exchange for long-term federal securities. The BCB bonds are redeemed at a premium (for the central bank) at regularly scheduled (weekly) intervals.

[35] The line of credit based on claims on the federal government is identical to the PROER line of credit applied to large banks, except for the financial charges, which are set in the protocol (letter of intent) signed by the federal and the state government. The line of credit related to claims on the state government and the private sector has the maturity of up to one year. Guarantees are accepted according to BCB criteria and financial charges are those established in the protocol. The federal financial institution is the CEF that acquires the state bank mortgage portfolio and the (another) state financial institution is eventually the one that remains under state government control.

central bank may also provide bridge loan financing for a federal financial institution to assume state bank deposits.[36]

After the renegotiated debt contract between the state and the federal government is signed, the federal government provides finance to the state government for either recapitalising the state bank, paying its debt to the state bank or acquiring state bank impaired assets. The revenue received by the state bank is used to pay the federal financial institution or state bank financial institution, which, in turn, redeems the BCB bridge loan.

Last but not least, the central bank is always responsible for evaluating the magnitude of the necessary adjustment of state banks.

Total debt restructuring agreements amounted to about R75 billion out of a total state debt of R143 billion (as of December 1996). It was composed of securitised debt (R41 billion), ARO[37] (R0.5 billion), debt owed to CEF (R2.5 billion), borrowing to finance the clean-up of state banks under PROES (R3.5 billion) and other debt (R28 billion) including bank debt owed mainly to state-owned commercial banks and to suppliers. Previously rescheduled debt was *not* included in this restructuring round. The federal government issued about R100 billion in treasury securities to finance state debt restructuring agreements and PROES operations in September 1997 (IMF, (1998)). As a result of PROES, much of the state public financial system has been restructured in various ways (Table 5).

Entry of foreign banks

The greater participation of foreign banks has played a key role in restructuring the Brazilian financial system. The main channels have been,

[36] In other words, the central bank provides unlimited protection to state bank's depositors through a federal financial institution that assumes all state bank deposits. The federal financial institution is turned into the state bank's sole depositor and, as a counterpart, is given a claim on state bank assets. It is also the case when the state bank is liquidated or transformed into a non-deposit taking financial institution. This line of credit has the maturity of up to five years and the federal government as the guarantor. Interest rate charges are set by the SELIC rate. As federal financial institutions cannot incur any losses from taking part in official restructuring programs, the federal government is responsible for equalising the cost of the liabilities assumed (deposits) with the cost of PROES' finance.

[37] States' short term revenue anticipation loans.

Table 5
The restructuring of local state financial systems under PROES

Option	Number of institutions
Liquidation	9
Privatisation	7
Federalisation	4
Cleanup	6
Transformed to Development Agency	14
Out of PROES*	3

* Local state governments that did not adhere to PROES.
Source: Central Bank of Brazil.

first, capital increases in banking institutions where foreign banks were already minority shareholders and, secondly, the entry of new banks. Foreign institutions have also set up or taken over non-banking financial institutions.

Article 192 of the 1988 Federal Constitution dealing with the financial system (including the regulation of foreign institutions) still has to be ratified. Meanwhile, the *Act of Transitory Provisions of the Constitution* prohibits either the entry of new branches of foreign financial institutions or the increase in the participation of non-residents in the equity of financial institutions headquartered on Brazilian territory. However, this disposition (barrier to entry) does not apply to permission derived from international agreements, reciprocity arrangements or when it is considered to be in the interest of the federal government.

Administrative guidelines based on these arrangements establish that it is in the country's interest to permit the entry, or the increase in the participation, of foreign banks in the Brazilian economy (moral suasion).[38] To facilitate the entry of external institutions, the restriction that the minimum capital for a foreign bank had to be twice as large as that required for a national bank was eliminated.

[38] The so-called *"Exposicão de Motivos 311",* as of August 1995.

The expectation of a more stable environment created by the Real Plan stimulated growing foreign interest in Brazil's financial system. The possibility of acquiring well-established institutions with valuable goodwill (even if in distress) opened an important channel for the entry of foreign institutions (Tables 3 and 4).[39]

Moreover, the opening of the capital market, the privatisation programme and the prospect of profits from project finance for infrastructure investment have been attracting the attention of foreign investors.

The central bank charges a "toll" for the entry of new foreign institutions in order to recover the public resources used in restructuring. The increase in the equity participation of external institutions is also subject to a toll. Although no specific rule governs these charges, the value of the toll has been established broadly according to the minimum capital required for setting up a financial institution ("entry capital"). The BCB revenues from toll collection has amounted to R350 million (Franco, (1999)).

The share of foreign banks' assets in the total banking system has increased from 7% in December 1994 to around 14% in December 1998. Some of the foreign banks to enter are important international banks and, in contrast to earlier practice, the new participants are competing strongly in the retail market, instead of simply exploiting specialised niches, such as private banking and corporate finance.[40]

Concluding remarks

The comprehensive approach taken to bank restructuring in Brazil has prevented a systemic crisis that once seemed likely. Although it remains to be completed, restructuring has already produced important structural changes in the banking system. The intervention and closure of numerous institutions, the restructuring of public banks (both state and federal) and the entry of foreign competitors have been accompanied by major mergers and acquisitions. Private banks have adjusted their balance sheets, local state financial systems have shrunk and foreign banks have grown in importance. The process of mergers and acquisitions and the ensuing increase in the level of concentration is likely to continue.

[39] Only one foreign institution entered the Brazilian banking system through PROER arrangements, but this resulted from an unprecedented take-over transaction.

[40] The number of foreign commercial and universal banks in the Brazilian financial system more than doubled (from 20 to 44) and the share of foreign banks' branches increased from 2% to 15% in the same period. See Banco Central do Brasil (1999).

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Annex
Restructuring troubled banks: a numerical example

Case 1: closing "good bank-1" asset gap without having to finance the purchase of collateral (FCVS)

Troubled bank	
Assets Good assets = 20 NPLs = 60 (= zero) FCVS = 120 (= 60)	**Liabilities** Deposits = 120 NET WORTH = 80 (= –40) (*)
Good bank-1	
Assets Good assets = 20	**Liabilities** Deposits = 120 NET WORTH = –100
Bad bank-1	
Assets NPLs = 60 (= zero) FCVS = 120 (= 60)	**Liabilities** NET WORTH = 180 (= 60)
Good bank-2	
Assets Good assets = 20 PROER = 100	**Liabilities** Deposits = 120 NET WORTH = zero
Bad bank-2	
Assets NPLs = 60 (= zero) FCVS = 120 (= 60)	**Liabilities** PROER = 100 NET WORTH = 80 (= –40)

(*) Adjusted (marked to market) for the assumption that FCVS is negotiated at a discount of 50% and that NPLs amounts to zero.

The amount of PROER resources needed to conduct the operation in this case is equal to the amount needed to close the asset gap of the "good bank-1".

PROER = "good bank-1" asset gap.

The bank holds FCVS securities and, as explained in the text, provides them as collateral for PROER's finance. As established by the authorities the face value of this collateral has to exceed the amount of finance by 20%.

Case 2: closing "good bank-1" asset gap and financing the purchase of collateral (FCVS)

Troubled bank	
Assets Good assets = 20 NPLs = 60 (= zero)	**Liabilities** Deposits = 120 NET WORTH = –40 (= –100) (*)
Good bank-1	
Assets Good assets = 20	**Liabilities** Deposits = 120 NET WORTH = –100
Bad bank-1	
Assets NPLs = 60 (= zero)	**Liabilities** NET WORTH = 60 (= zero)
Good bank-2	
Assets Good assets = 20 PROER = 100	**Liabilities** Deposits = 120 NET WORTH = zero
Bad bank-2	
Assets NPLs = 60 (= zero) FCVS = 150 (**)	**Liabilities** PROER = 250 NET WORTH = –40 (= –100)

(*) Assuming that NPLs amounts to zero when marked to market.

(**) Purchase of FCVS booked by its value of acquisition (at a face value discount of 50%).

In this second case, the amount of resources provided by PROER is larger than in the first case. This is because the "bad bank" does not have collateral to secure PROER's finance, and receives support by PROER to acquire it.

In this case, the amount of PROER finance is given by:

PROER = "good bank-1" asset gap + finance to purchase FCVS at market value (= FCVS face value/2)…(1).

Additionally, the face value of the collateral has to exceed by 20% the amount of PROER finance:

PROER = FCVS face value/1.2…(2).

From the formulas (1) and (2) above:

FCVS face value = 300,

FCVS market value = 150,

PROER = 250.