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***EFFECTS OF THE REAL PLAN ON THE BRAZILIAN
BANKING SYSTEM***

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ABSTRACT

The aim of this paper is to assess the progress of the banking sector before and shortly after the Real Plan. We began by assessing the drop in the inflation revenues (negative real interest rates paid by the excess of demand deposits over total reserve requirements) as a result of the change in inflation from 40% a month for the pre-Real Plan period to a monthly average of 3.65% (IGP-DI), between July 1994 and May 1995. Then, using the financial statement data of a group of 90 banks, we attempt to estimate the net losses due to the inflation drop analyzing the profitability and other parameters of the banking industry. The calculations are made separately for private, state and federal banks. A later analysis on performance using information given to CVM (Securities Exchange Commission) by the six major private banks in the country is also discussed herein.

Effects of the Real Plan on the Brazilian Banking System*

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March 1997

I - Introduction

The Real Plan was launched on the assumption that it would be backed by later tax measures. The delay in carrying out the reforms, however, increased the especially high anti-inflationary costs in the financial system. Moreover, the banking financial system ceased to be based on high inflation transfers, which reduced its profitability.

In the second half of 1995 the public lending policy was found to be very unstable. The easy credit based consumer rush began (although it did include an extremely high interest rate in terms of international standards). Consumers seem to have forgotten that, although the installment value was fixed, nominal earnings would no longer increase as they had done before. Furthermore, the residual increase in prices (chiefly services) implied an increasingly smaller wage residue to pay for the installments. The result was an increase in default and all its unpleasant effects on the health of the financial system. The financial system clearly demonstrated that, after years of living with high floating revenue, it did not yet have a satisfactory means of credit analysis to meet the necessary increase in revenue with this activity. The table below shows the effect of default on the financial system for each sector of activity. There is a clear increase in past due loans or settlement more recently.

TABLE I
Increase in Default Rate After the Real Plan

Periods						
1st Sem/94	5.432	312	5,75%	164.878	12.411	7,67
2nd Sem/94	12.209	535	4,38%	181.950	14.305	7,86
1st Sem/95	15.644	1.222	7,81%	221.205	19.011	8,59
2nd Sem/95	15.601	2.685	17,21%	235.609	29.043	12,33
1st Sem/96	15.801	3.389	21,45%	264.108	36.958	13,99

Source: Central Bank Bulletin - February/96

The "Past Due" column corresponds to past due loans and settlement.

Data in R\$ million

Serasa (1995) reports an 81.4% increase in the number of returned checks when comparing the 07/93-06/94 period to 07/94-06/95, even though the total number of cleared checks had dropped 19.4% in the period. The default reflects two different occasions in the Real Plan. First, in August 1994, when the consumers were wealthier due to the sudden rise in their available personal income because of the drop of 16

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billion dollar/year in inflation tax "collected" by the Central Bank in the 12 months before the Real was issued. The higher purchasing power was also due to the increased value of the real against the dollar. The second occasion, since October 1994, was when this period of elation was replaced by increased default and severe credit restrictions in the private sector.

The financial intermediation system was one of the most affected by frequent changes in regulation during the post-Real phase. As there was no fiscal adjustment, the Plan came to depend too much on the public lending policy. Proof of this is seen in the aforementioned increase in default, the hardships faced by several financial institutions, as well as a rise in the number of unusual corporate financial operations, such as the issue of commercial papers, international borrowed funds through associate companies, debenture issue, credit agreements between capitalized and decapitalized companies, etc. The variety of off-shore agency transactions of Brazilian financial institutions is also evidence of the flight from excessive regulation.

Cases of insolvency recorded after the Real Plan until March 26, 1997 are given below.

TABLE II
Cases of Bank Insolvency after the Real Plan

DATE	INSTITUTION(1)	SYSTEM	MATRIX	DATE	INSTITUTION (1)	SYSTEM	MATRIX
28.07.94	BANCO HERCULES	L.E.J.	MG	11.08.95	BANCO COMERCIAL DE S. PAULO	I.	SP
14.11.94	BCO ADOLPHO DE OLIVEIRA	L.E.J.	RJ	18.11.95	BANCO NACIONAL	R.A.E.T.	RJ
21.11.94	BANCO ATLANTIS	L.E.J.	RJ	05.12.95	BANCO INVESTCORP	L.E.J.	RJ
30.12.94	BANCO EST. RJ	R.A.E.T.	RJ	21.03.96	BANCO DRACMA	L.E.J.	RJ
30.12.94	BANCO EST. RN	R.A.E.T.	RN	20.06.96	BANCO UNIVERSAL	L.E.J.	RJ
13.02.95	BANCESA	L.E.J.	CE	30.12.96	BANCO INTERUNION	L.E.J.	RJ
07.06.95	BCO BANERJ (EX-DTVM)	R.A.E.T.	RJ	21.02.97	BANCO DO PROGRESSO	L.E.J.	BH
11.08.95	BANCO ECONÔMICO	I.	BA	26.03.97	BANCO BAMERINDUS	I.	CR

NOTE: (1) In some cases the implemented system also covers other institutions in the same group.

SOURCE : Central Bank of Brazil

L.E.J. - Extra Judicial Liquidation

I. - Intervention

R.A.E.T. - Temporary Special Administration System

When it put too many restrictions on private lending in the financial sector and Central Bank controllable financial operations, the government created a parallel system of intermediating between savings deposits and withdrawals, in detriment to welfare and economic efficiency. The new terms, quantities and risks of financial assets gave place, in some cases, to broker activities, taking into account the restrictions artificially created by the government. Moreover, it is worth recalling the loss in tax revenue for the government when the financial system started operating on an informal basis, or when it transferred its operations overseas.

Most often the “legislative war” between Central Bank specialists on one hand, and experts in financial operations on the other succeeded in operating only a small portion of what the Bank had initially aspired to. Very often it only succeeded in substituting the credit supplied through some channels with credit supplied through others. Major stores began borrowing resources directly from savings accounts for their customer financing. In many cases, it is probable that the implicitly involved cost-benefit analysis did not answer for the introduced regulatory measures.

Cut in Public Spending and Recovery of Government Credit: Least Distorted Solution

Examination of the Brazilian macroeconomic problems since July 1994 clearly showed the need to obtain a budget surplus which would modify long term expectations regarding government solvency and which would permit the recovery of its credit.

Budget deficit contention is the classic solution for over-demand with high interest and exchange rate appreciation due to high levels of incoming capital. Instead of this, taking the route of least resistance, the option was to avoid a further decrease of the price of the foreign exchange using an IOF (Financial Operations Tax) of 1% on the overseas capital invested in the stock market, and an increase in IOF for the other financial transactions which would imply cash entry of international resources. Concerning over-demand, an attempt was made to correct it basically through monetary-public lending restrictions.

Six months after the Real was implemented, the course of net incoming capital was inverted after the problems in Mexico and Argentina’s discouraging outlook. After a necessary but traumatically operationalized explanation of foreign exchange bands (which was interpreted by some as a maxi-devaluation) in early March 1995, the Central Bank lost in one week around \$ 4 billion in reserves and revoked the legislation which obstructed incoming capital. The sharp drop in the stock market, for instance, was only abated by eliminating the compulsory 1% on international share investments.

The situation was soon again inverted and the government again increased the IOF on incoming foreign portfolio capital when the reserves threatened to exceed the 45 billion dollar mark, making monetary control difficult. In less than six months, the facility with imports and credit swung from one side to the other, just as with the level of economic activity. We have already mentioned the economic inefficiency of such oscillations.

Two years after the Real was introduced, the long term diagnosis continues to be the same: the need to cut public spending with consequent automatic foreign exchange devaluation (due to the drop in interest) and improve the current account balance of payments. Favorable expectations are the link between belated reforms and pressing needs for national and international loans for the government. In this sense, the announced approval of the reforms alone already very much improves the sustainability of the current situation (a little perceived fact).

We may indeed ask the reason for the extremely high real interest in Brazil, bearing in mind the relatively low public internal debt / GDP ratio (30.3% against around 55% in the United States or 100% in Canada) and the low levels of the operational concept of the public deficit, in relation to the GDP, in recent years (respectively, -1.4% of GDP in 1991, 2.2% of GDP in 1992, -0.2% of GDP in 1993, -1.4% of GDP in 1994 and 5.0% of GDP in 1995). There are two reasons. First, this working deficit does not take into account, as it should, a series of unsecured liabilities (Social Security, FCVS⁽¹⁾ (Wage Variation Compensation Fund), FGTS (government severance and indemnity compensation), unsecured liabilities of state and private banks under intervention etc., which the economic agents know well and obviously take as a parameter in forming their expectations.

Second, the government deficit may be small, but what the real interest charged in Brazil and the need to provide daily liquidity to the public debt securities effected by the Central Bank (and also, in some cases, adjusting to short term interest) show, is that its financing capacity is even less. The lack of confidence in the public debt is a legacy from the pre-fixed inflation adjustment in 1979 and from various confiscations, price vectors, tables, etc., perpetrated by the experimentalism phase which the Brazilian economy has presented since 1986.

II - Drop in Inflation Transfers after the Real Plan

This and the next section will appraise the structural instability of the commercial banking sector, with particular emphasis on the state and federal banks, bearing in mind the drop from a 40% monthly inflation relating to the pre-Real Plan period to an average of 3.65% (IGP-DI) or 2.61% (IPC-r) a month between July 1994 and May 1995. For this we initially estimate, in this section, the inflation gross revenues (negative real interest rates paid by demand deposits less total reserve requirements) obtained by the federal official, state and private banks respectively, before and after the fall in the level of inflation. In the next section we use balance sheet data from a sample of 90 banks to attempt to assess net losses and other parameters of solvency and liquidity. The quantitative assessments performed herein show the following:

Between early January 1990 and late June 1994, when the monthly average inflation was around 26.1%, total inflation gross revenues for the Brazilian commercial banking sector (as defined before) were approximately \$794,784 million a month. Of this total, around 38.7% was appropriated (in gross, not necessarily net terms) by the private commercial banking system, another 32.0% going to the group of state banks and the remainder to the federal official banks.

Considering the monthly average of gross revenues inflation-related adjustments from January 1990 to June 1994 and the period from July 1994 to May 1995 after the Real Plan, the drop in inflation-related adjustments for the commercial banking system was \$ 8,631 million a year. Also in gross terms, this loss heavily affected the private

⁽¹⁾ The current instability of FCVS (past contracts) is calculated by CE, federal savings bank, (Sandra Tavares, 1996) at R\$ 15 billion. By the year 2010 unsecured liabilities are estimated at R\$ 51 billion.

banking system (\$ 3,381 million a year), followed by the state banks (\$ 2,751 million a year) and federal official banks (\$ 2,499 million a year). In net terms, however, the fact that the private banks already had, prior to the Real Plan, adapted relatively better to an economy with low inflation, suggests that the state and federal official banks had to undergo a greater adaptation process; while a good part of the private banking sector was temporarily using inflation-related revenue to increase their profits and finance their investments, the official banks were using it to combat the current expenses which must now be reduced.

It must be understood that these figures do not include the existing inflationary "floating" on deposits not classified as demand deposits. The federal and state public banks thus have an extra source of loss not included in those statistics, taking into account the existence of several deposits (not accounted as demand deposits) made in those institutions on behalf of the public or state sector, in some cases with zero remuneration and in others with remuneration well below inflation.

Comments on the of Inflation-Related Adjustment Calculations

What we call here inflation gross revenues for commercial banks (IR) is the theoretical equivalent of the Central Bank inflation tax applied to commercial banks. Central Banks earn with inflation due to negative real interests paid by the monetary base. Commercial banks have the same type of inflation generated revenues, as long as the excess of demand deposits over total reserve requirements, as well as the High Powered Money, pay zero nominal interests. Cysne (1994) shows that such inflation gross revenues in Brazil, between the start of 1950 and end of 1993, when average inflation was at around 108.6%, give on average a sum of around 1.93% of the GDP. In 1987 dollar terms, this figure amounts to around 3.83 billion a year.

Appraisal of these inflation gross revenues by the banking system is important when attempting to analyze the adjustments necessary for its continuity in a low inflation environment. The Brazilian financial system in the past few years presents an added value of around 11.5% of the GDP, when this figure is around 4% or 5% in countries such as Germany and the United States. Of course, part of the explanation for such asymmetry is the high inflation level of the Brazilian economy.

As previously mentioned, the earnings previously reported represent gross income and not net income of the banking system, as a result of inflation. This is because part of such income returns to the non-banking system of the economy in the form of reduced bank aliquots, reciprocal lending and/or other facilities which would have a higher cost for the public in the absence of inflation. Moreover, it is important to remember that, in this section, effects of inflation on the "banking spread" relating to other asset and liability operations of the commercial banks are not taken into consideration.

Methodology for Inflation-Related Adjustments Calculations

If $B(t)$ and $P(t)$ represent, respectively, the surplus demand deposits over total reserve requirements in hand of a certain bank or banking sector, inflation gross

revenues between the instances of 0 and 1 reference, in purchasing power currency at instance j (IR_j), are given by:

$$IR_j = P_j \int_0^1 \frac{B(t)}{P(t)^2} \cdot \frac{dP(t)}{dt} dt$$

For example, if $B(t)$ remains constant in real terms, then:

$$IR_j = P_j \frac{B_j}{P_j} \int_0^1 \frac{1}{P(t)} \frac{dP}{dt} dt = B_j \cdot \ln(1 + \pi)$$

where $\pi = (P_1 - P_0) / P_0$ is the periodical inflation rate.

The above equation is normally used for an approximate calculation of inflation gross revenues. Besides the arbitrary simplifying hypotheses on the evolution in time of the monetary base and price level, a previous IT equation must be approximate using sums and calculations. If i represents the nominal rate and r the real interest rate, then by definition:

$$1 + r = (1 + i) / (1 + \pi)$$

As the currency pays zero nominal interest, the real interest rates paid by currency is given by $\pi / (1 + \pi) = (P_{t+1} - P_t) / P_{t+1}$. The real interest figure on monetary stock B in currency at instant j is obtained by multiplying $P_j(B/P)$ by the real interest, obtaining $P_j \left(\frac{B_t}{P_t} - \frac{B_t}{P_{t+1}} \right)$.

An important question to be addressed is, bearing in mind that the inflation after the Plan, although quite reduced, has been different from zero, what were the average inflation gross revenues effectively lost when inflation dropped to the level observed in the eleven months after the start of the Real Plan. Table III shows the figures which effectively translate by each sector this loss in inflation-related adjustments.

TABLE III
Estimate of Inflation Gross Revenues Losses after Real Plan
Private Banks (IRP), State Banks (IRS) and Federal Banks (IRF)

(in million dollars)

	IRP	IRS	IRF	IRP	IRS	IRF	Total
Monthly Average (January/90-June/94)	307,876	38.74	254,617	32.03	232,291	29.23	794,784
Post-Real Monthly Average (July/94-May/95)	26,078	34.56	25,36	33.61	24,022	31.38	75,46
Monthly Revenues Losses (median - July/94-May/95)	281,798	39.18	229,257	31.87	208,269	28.95	719,324
Annual Floating Loss (June/94-July/95 Results Extrapolation)	3,381.58	39.18	2,751.0	31.87	2,499.23	38.95	8,631.89

The figures of the losses of inflation revenues for state and federal banks in the last two columns of Table III raise the serious question of the adjustment required for these financial institutions, with regard to their survival in a world of stable or nearly stable prices. If these banks, either at the state or federal level, have already shown problems before the drop in inflation, when the adjusted total equity (taking into account the correction of inconsistently reported assets) calculated by the Central Bank was very often already negative¹, it is possible to predict the seriousness of its problem in current circumstances after monthly losses of inflation-related adjustments of \$ 229 million (state banks) and \$ 208 million (federal banks). This matter was explained qualitatively by the then future president of the Central Bank of Brazil, Persio Arida (1994), who, in his speech in the Congress, defended the extinction of the state banks, exclaiming: "If they cannot even be profitable with a monthly inflation of 40%, imagine now, with almost stable prices". The data reported herein provides the necessary quantitative support to this statement. The situation can be settled in a heated economy, as in the second half of 1994, but not in the steady state.

Many banks only felt the effects of the drop in inflation-related adjustments (later apparent in the R\$ 4.25 billion loss reported by the Banco do Brasil in 1995, as well as in the problems faced by the Banco Econômico, Banco Nacional, BANERJ and BANESPA) in the first half of 1995. In the second half of 1994, when the economy was somewhat warmer, this drop in revenue was very much compensated by the rise in bank service aliquots and generalized increase in lending operations. Although we are not including the Central Bank in the sample, the extrapolation of the results presented herein to this institution helps understand its loss of around R\$3.0 billion in 1995.

¹ According to Central Bank overseeing directorate, in a study of the balance sheets for June 1991, December 1991 and June 1992 of the consolidated equity data of seven state banks, one federal savings bank and seven development banks, the discrepancy found between the adjusted total equity (ATE) reported by these institutions and the settled total equity (STE - which excludes doubtful loans) was as follows (in millions of dollars):

	JUN/91	DEC/91	JUN/92
ATE	2,495	2,792	3,095
Settled TE	(5,788)	(3,001)	(1,985)

Source: Almeida de Souza (1994)

The same criterion, when applied to private banks, implied a drop in adjusted total equity of only 11%.

Here we made measurements that indicate the need for an adjustment of the banking sector as a whole, if the post-Real Plan levels of inflation continue. These conclusions are directed to the institutions which depended mostly of the inflation revenues on demand deposits. It is also worth remembering that the necessary adjustment of the banking sector, bearing in mind the drop in inflation, must be in proportion to the net "floating" loss and not the gross calculated herein. In this sense, the public banks are also at a severe disadvantage. The reason for this is that, while the private banks were forced, by a question of competition, to develop part of the "floating" obtained in the form of services provided at reduced costs and reciprocities, the public banks, with monopolies of various public sector deposits, were obliged to give much less in exchange to the non-banking sector of the economy for having their deposits. That is, the net losses of the public banks with the drop in inflation will be very much more than the private banking sector net losses.

III - Commercial Bank Performance after Economic Stabilization: Six-monthly Results Comparison

In this section we use balance sheet data to empirically assess the effect of the economic stabilization on Brazilian banks, taking as basis the comparison of the results of the first half of 1995, in which accumulated inflation was 10%, with the same period the year before, when accumulated inflation was 763%. The use of balance sheet data gives an advantage in relation to the approach used in the previous section, of obtaining net instead of gross results. Furthermore, solvency and liquidity parameters can be examined. The disadvantage of the analysis lies in the possible masking of balance sheets (see the recent cases of the Econômico and Nacional banks), as well as taking only an arbitrary sample of the total number of banks.

With this objective, the balance sheets relating to the first semester (1994 and 1995) of 90 Brazilian commercial and multiple banks, whose results were published in constant currency according to the legally established criteria, were examined. The sample includes the most important private, state and federal banks (such as Banco do Brasil and CEF), only excluding state banks Banerj and Banespa⁽¹⁾ because of lack of data.

The data in Table IV, referring to the main indicators of structure and performance of the institutions considered in the sample, suggest that the Brazilian banks have been strongly affected by the stabilization program (the results change when Banco do Brasil is excluded from the sample). In fact, although the general liquidity (reflecting the static balance between borrowed and invested resources) and degree of leverage has shown only a slight deterioration, the whole group of banks under study had a loss of R\$ 597 million in the first half of 1995. The profitability of total equity consequently dropped from 6.22% to -1.91%.

⁽¹⁾ The state banks included in the sample are Banco do Estado de Minas Gerais, Nossa Caixa Nosso Banco SA, Banco do Estado do Rio Grande do Sul, Banco do Estado de Santa Catarina, Banco de Brasília SA, Banco do Estado da Bahia, Banco do Estado do Espírito Santo, Banco do Estado do Ceará, Banco do Estado de Sergipe, Banco do Estado de Alagoas and the federal banks Banco do Brasil SA, Caixa Econômica Federal SA, Banco do Nordeste Brasil SA and Banco Meridional do Brasil SA.

TABLE IV
OVERALL SAMPLE (3)

Year	1994/1	1995/1
Number of banks	90	90
General Liquidity (1)	1,02	1,01
Degree of Leverage (2)	11,26	10,39
TE Profitability % (Sem.)	6,22	-1,91
Net Results (R\$ million)	1.980	-597

(1) (Current Assets + Long term assets) / (Current Liabilities + Long term liabilities)

(2) Total Liabilities / Total Equity

(3) Data relating to the balance sheets presented at end of first semester of each year

These results, however, have been heavily distorted by Banco do Brasil, which showed a loss of R\$ 2.4 billion in the first half of 1995. Banco do Brasil, regarded as the largest Brazilian bank, had 22.3% of all assets of the 140 largest commercial banks in the country in December 1994 and, till 1986, had the position of monetary authority. Currently, Banco do Brasil is still an important financial arm of the government for carrying out its development policies.

As illustrated in Table V, it was concluded that the group of banks under study, with the exclusion of Banco do Brasil, successfully increased their liquidity, reduced the degree of leverage and maintained reasonable profitability of the total equity in the first semester of 1995. In fact, with the exclusion of Banco do Brasil, the results of the banks under study then showed an increase of R\$ 80 million.

TABLE V
SAMPLE EXCLUDING BANCO DO BRASIL (2)

Year	1994/1	1995/1
Number of banks	89	89
General Liquidity (1)	1.02	1.02
Degree of Leverage (2)	11.52	9.36
Total equity profitability % (Sem.)	7.65	6.86
Net Results (R\$ million)	1,764	1,844

(1) (Current Assets + Long term assets) / (Current Liabilities + Long term liabilities)

(2) Total Liabilities / Total Equity

(3) Data relating to the balance sheets presented at end of first semester for each year

It is worth mentioning, however, that the data shown in the financial institution balance sheets did not permit the assessment of the dynamic balance between borrowing and investment of resources, reflected in the risks and terms of the banks' assets and liabilities.

When analyzing the Brazilian banking system it is fundamental to make the distinction between private, federal and state public banks. The first group generally follows a working logic focused on maximizing profits. The second group, although it has some smaller banks working on a regional basis, is mainly represented by Banco do Brasil and Caixa Econômica Federal, the federal savings bank. Lastly, the third group is made up of the state public banks controlled by the state governments and widely used as their financial support. It is worth mentioning that, as they are under Central Bank intervention and have not published a balance sheet for the first half of 1995, São Paulo and Rio de Janeiro state banks, in third and eighteenth ranking respectively among the major commercial banks in Brazil in 1993 in asset terms, were not included in the data herein.

The data in Table VI, which reproduce Tables IV and V for the three groups, demonstrates that the private banks had a much more positive reaction to the end of inflation than the public banks. Contrary to the public banks, the private banks managed to keep the general liquidity constant (reflecting the static balance between borrowing and investing resources) and reduce leverage. Moreover, although the three groups have shown a loss in profitability in the period under study, the private banks' performance was significantly better than that of the public banks. The group of federal public banks, as a result of the Banco do Brasil's net income, showed the worst performance: a profitability of -31.5% in 1995.

TABLE VI
Pre and Post Real Comparative Analysis

Group	Private		State Public		Federal Public	
	1994	1995	1994	1995	1994	1995
Number of banks	76	76	10	10	4	4
General Liquidity (1)	1,03	1,03	1,07	1,04	1,01	0,99
Leverage (2)	10,01	7,61	7,74	10,58	14,02	18,64
Total Equity Profitability %	7,96	7,57	8,03	3,11	2,87	-31,48

(1) $(\text{Current Assets} + \text{Long term assets}) / (\text{Current Liabilities} + \text{Long term liabilities})$

(2) $\text{Total Liabilities} / \text{Total Equity}$

The data in Table VII, representing the banks' main income statements, permit us to analyze the factors which most contributed to the performance presented by the three groups under study.

TABLE VII⁽³⁾
Pre and Post Real Comparative Analysis

Group	Private		State Public		Federal Public	
Year	1994	1995	1994	1995	1994	1995
Number of banks	76	76	10	10	4	4
OC+TV+PS Results(1)	7,102,199	7,930,565	1.496.815	1,347,022	5,775,508	3,311,788
OC+TV Results(1)	2,541,344	7,797,204	478.179	1,269,968	606,409	3,098,180
PS Result(1)	4,560,855	133,361	1.018.636	77,054	5,169,099	213,608
Administration expenses (2)	7,026,393	7,108,941	1.605.392	1,258,609	6,689,656	6,069,041
- Personnel (2)	3,662,362	3,651,048	1.210.179	936,986	5,370,530	4,718,635
- Others (2)	3,364,031	3,457,893	395.213	321,623	1,319,126	1,350,406
Personnel Exp./ OC+TV+PS Res. (%)	51.6	46.0	80.9	69.6	93.0	142.5
Other admin. exp./OC+TV+PS Res. (%)	47.4	43.6	26.4	23.9	22.8	40.8

(1) OC = Loans (in R\$'000)

TV = Securities (in R\$'000)

PS = Liabilities without Charges (in R\$'000)

(2) (in R\$'000)

(3) Includes Banco do Brasil

The first comment concerns the drastic loss inflation revenues, as measured in the previous section, and here reflected in the PS (liabilities without charges) results. The drop of this account for the private banks was 97.08%, 95.87% for federal public banks and 92.44% for state public banks.

It is interesting to compare certain figures with those obtained in the previous section. In the previous analysis the inflation transfers dropped 91.5% in the case of the private banks, 90.0% for state banks and 89.6% for federal banks. On the whole, the inflation transfers for commercial banks, in the eleven months after the Real, fell around 9.5% of those existing between January 1990 and June 1994.

Although the relative impact has been practically the same for the three groups, in absolute terms the floating loss had a much stronger impact on the federal public banks. This is because, based on the results of credit operations, securities operations and operations with liabilities without charges, the influence of this last item for the federal public banks was 89% of the total in June 1994 against 68% of the state public banks and 64% of the private banks.

Secondly, it is obvious that the loss of floating revenues was mostly compensated by the increase in the result of the credit operations and securities placements: 206% for private banks, 165% for the state public banks and 410% for the federal public banks. Despite the higher relative increase, the overall impact of this turnover for the federal public banks was less significant due to the lighter weight of these items in the income structure of this group.

In short, taking as base the three items considered (credit operations, securities investments and operations with liabilities without charges) the private banks improved their result by 11%, justifying the performance obtained in terms of

profitability. The behavior of such income items for the state public (10% down) and federal banks (43% down) also explains the performance of such groups in terms of profitability. In fact, it was principally the increase in the credit operations result, from the increase in credit demand and opening up the spreads between borrowing and investment, which compensated the loss of the floating revenue in this initial period after the drop of inflation.

With regard to administration expenses (personnel and others), the last two lines in Table VII show that the private banks, which have been implementing a streamlining administration program since the Collor Plan I in 1990, have increased its administration expenses by 1.2%. The state public banks considered herein showed a drop of 22% in personnel expenses and 18% in the other administration expenses, a result which certainly contributed to the group's having maintained positive profitability. The federal public banks, in their turn, showed more timid downsizing, reducing personnel expenses by 12% and increasing the other administration expenses by 2%. It is worth noting anyhow that in 1995 Banco do Brasil implemented an ambitious voluntary retirement plan.

In dynamic terms, the relevant point is to know if the banks were able to adjust their administration expenses to the new revenue structure. The data in Table VII, referring to the ratio between administration expenses (personnel and others) and the sum of the results of credit operations, securities investments and operations with liabilities without charges, permit a better understanding of this matter. The increase in this ratio indicates that, for the period under study, some banks did not succeed in making the necessary adjustments. The data in Table VII show that, in the case of the private and state public banks, there is an improvement in the situation but the same cannot be said for the federal public banks.

Given the numbers herein and assuming that inflation continues at reduced levels from now on, it is concluded that the part of the Brazilian commercial banking system that was dependent on inflation revenues has to be redimensioned in relation to that which existed in June 1994, besides being redirected towards new forms of financing its activities. Most of the adjustment must be the responsibility, as we mentioned before, of the state and federal banking sectors.

The foregoing history of adjusting the state banks shows that the shared administration system, in which the decision-making power returns to the state government after a certain time, does not solve the problem. Since the Treasury will have to do transfers to various state institutions to prevent serious setbacks in the financial system, the solution for the disagreement with these banks should obviously involve the same sum of payments to the Treasury by the state governments, which are the majority shareholders responsible for these institutions (for instance, by transferring state assets of majority shareholdings from banks and/or state owned companies to the central government, by retaining the taxes transferred to the states, etc.). After streamlining all state banks they should be privatized and the states prohibited from reopening them.

Concerning the federal banking sector, it must be streamlined firstly based on three fronts: capitalization of the Federal Savings Bank (Caixa Econômica Federal), bearing

in mind the unsecured liabilities of FCVS and FGTS, using privatization resources; radical downsizing of Banco do Brasil, with a cut in personnel and number of agencies, and privatization of Banco Meridional. The privatization of Banco do Brasil, although politically remote, must be included in the government objectives.

IV - The performance of the six largest Brazilian private banks in 1995

The financial statements of the six largest private banks in the country (Bamerindus, BCN, Bradesco, Itaú, Real and Unibanco) were also included for the period 1993/95 in the analysis of the banking sector's 1995 performance, including the effects of price stabilization. The results, shown in the following table, refer to information from full inflation accounting, in currency at December 1995, provided by the banks to the Securities Exchange Commission.

TABLE VIII
THE 6 LARGEST BRAZILIAN PRIVATE BANKS
SUMMARY OF INCOME STATEMENT 1993/95 (R\$'000)

THE SIX LARGEST PRIVATE BANKS		1993	1994	1995
INCOME FROM INTERMEDIATION		14,549,071	16,137,011	19,087,079
	CREDIT OPERATIONS	4,134,186	6,616,948	13,848,610
	SECURITIES GAINS	3,943,709	4,953,028	4,018,492
	FLOATING INCOME - FLOATING LOSSES	5,111,911	3,531,858	343,938
	OTHERS	1,359,265	1,035,177	876,039
INTERMEDIATION EXPENSES		-6,658,364	-7,409,779	-12,088,024
	INTERBANK EXPENSES	-5,186,078	-6,220,933	-8,006,748
	LOAN LOSS RESERVES	-273,158	-799,356	-3,602,588
	OTHERS	-1,199,128	-389,490	-478,688
GROSS PROFIT FROM INTERMEDIATION		7,890,707	8,727,232	6,999,055
NON-INTEREST INCOME AND EXPENSES		-5,860,564	-6,451,552	-5,031,813
	SERVICE FEES	1,609,589	2,226,208	3,111,001
	PERSONNEL EXPENSES	-4,071,644	-4,822,985	-4,874,745
	OTHER ADMINISTRATION EXPENSES	-3,765,469	-4,463,850	-4,478,431
	EARNINGS FROM AFFILIATES	943,022	913,766	979,861
	OTHERS	-576,062	-304,691	230,501
OPERATING INCOME		2,030,143	2,275,680	1,967,242
NON-OPERATING INCOME		-131,054	-57,515	-71,613
INCOME BEFORE TAXATION		1,899,089	2,218,165	1,895,629
PROFIT/ LOSS FOR THE YEAR		1,376,932	1,433,580	1,384,209
PROFITABILITY OF TOTAL EQUITY %		13.96	12.57	10.60

In first place, we found that there is still a downward trend in the banks' profitability, recorded the year before, a result coherent with the pressure suffered by the sector in face of the loss of floating revenue. However, bearing in mind the slowing down of the Brazilian economy's growth in 1995, the profitability (now annual) of 10% over the total equity obtained by the six banks in question is far from showing a poor result. A study made by Getulio Vargas Foundation, considering 254 non-financial companies, pointed to a median profitability of 3.4% for 1995.

The effect of the loss of floating revenue is patently obvious from the figure in the floating gains account deducted from the floating losses, which in 1995 showed a 93% drop in relation to 1993 (around R\$ 4.8 billion). The loss was R\$ 3.2 billion compared to 1994.

However, despite this drastic drop in floating revenue, the gross result from intermediation in 1995 was only 11% below that of 1993 (reflecting a difference of R\$ 900 million). The data presented shows that the income from credit operations (even considering the increase in borrowing cost) played a fundamental role in maintaining the economic balance of the institutions under study. In fact, the volume of short and long term credit operations declared in the statement of assets and liabilities for the six banks showed a rise of 64% in 1995 in relation to 1993.

The structural change, in fact, occurred in 1994, when all credit operations showed a rise of 53%. In 1995, as a result of the slowing down in the rate of economic growth and more caution by the banks themselves, given the default risks, the growth in relation to the year before was only 7%. It is interesting to note that in 1995 the gross income from intermediation was very much weakened by the loan loss reserves, which reached R\$ 3.6 billion (19% of intermediation income). Expenses with borrowing, of course, also increased.

Graph I
EVOLUTION OF MAIN INTERMEDIATE RESULTS - 1993/95
(R\$ MILLION)

Graph II
MOVEMENT OF MAIN INTERMEDIATION EXPENSES - 1993/95
(R\$ MILLION)

Lastly, with regard to the other operating expenses and income, two comments may be made.

First, there was no cut in administration expenses, even considering the item of personnel expenses separately. This means that the dismissals which were to occur compensated increases in expenses with wages and tax obligations.

Secondly, it is evident that the service fees (from bank charges) also played a relevant role in sustaining the level of profitability of the banks. 1995 recorded a 93% increase in relation to 1993, implying an increase in income of R\$ 1.5 billion.

Graph III
EVOLUTION OF ADMINISTRATION EXPENSES - 1993/95
(R\$ MILLION)

GRAPH IV
EVOLUTION OF SERVICE FEES AND EQUITY EQUIVALENT INCOME - 1993/95
(R\$ MILLION)

V - Central Bank Reactions to Recent Banking System Problems

In November 1995, the Central Bank had two mechanisms with which to combat problems in the financial system: Law 6024 dated March 13, 1974 and Decree-Law 2321, dated February 25, 1987. Law 6024 regulates the interventions and extrajudicial liquidations in private and public financial institutions not under the control of the federal government. If, after a six-month intervention period, the financial institution shows no likelihood of continuing to operate normally on its own, without threatening the financial system's health, the intervention may be renewed for another six months or come under extrajudicial liquidation.

Ever since its decree the law has not fully functioned: instead of correcting the poor banking administration using preventive measures, Law 6024 normally consists of a first step towards extrajudicial liquidation of financial institutions. Moreover, as the financial institution, when under intervention, would not honor its obligations with the depositors, the absence of a deposit insurance eventually penalized the latter. Furthermore, Law 6024 would symmetrically place directors and members of the Administration Council of the institutions under investigation when under intervention. This legal defect, contrary to the spirit of the corporate law, revealed its weakness over time, when countless controllers of financial institutions under intervention began systematically to win lawsuits against the Central Bank.

Decree-Law 2321 created RAET (Temporary Special Administration System) in which the financial institution continues to operate and honor its obligations. Although this 1987 decree does not discriminate between public and private banks

this system has only been used for state banks. This is possibly due to the heavy losses usually assumed by the Central Bank when adopting this alternative. The application of RAET assumes federal losses (by repassing from state banks to the Central Bank) arising from spendthrift public administrations but not from mistakes made by private bankers. The recent case when RAET was not used for Banco Econômico, months after it was used for Banespa and Banerj, is a good example of this fact. This is, evidently, an untenable procedure of two weights and two measures, incompatible also with Laws 4728 and 4595, on which basis the Brazilian financial system is regulated.

An important difference between applying Law 6024 (intervention or extrajudicial liquidation) and Law 2321 (RAET) is that, in the latter case, the bank's liabilities do not lose liquidity and consequently do not affect the savings accounts. In the case of intervention (Law 6024), applied in the case of Banco Econômico, for instance, the savings accounts lost their immediate liquidity. In the case of the Banco Nacional crisis, after the Econômico crisis, its prior acquisition by Unibanco, under the new jurisdiction to which we will refer in the following paragraph, it was not necessary to use intervention or even RAET application. Banco Nacional's acquisition by Unibanco, on the edge of a liquidity crisis suffered by the former, freed the Central Bank from the horns of a dilemma: if the intervention had been applied to Banco Nacional, as in the procedure adopted for Banco Econômico, the risk of losing credibility of the savings customers in the national financial system would have been quite serious and might have sparked off a banking crisis; the application of RAET to the Nacional, on the other hand, would explain the error committed by the Central Bank in not having used this possibility but rather intervention, which directly penalized the savings customers, in the case of Banco Econômico.

After the problems created by using RAET in Banerj and Banespa at the end of 1994 and the intervention in Banco Econômico in August 1995, two new Temporary Measures (*Medida Temporária*, a temporary law which has 30 days to be voted or rewritten) and a Central Bank Resolution were passed in order to put a stop to the then existing threat of a banking crisis. The first Temporary Measure number 1179, of 11.03.95, instituted PROER - Restructuring and Strengthening Incentive Program for the National Financial System. This measure, also applied to the institutions in special regimes in the terms of Law 6024, of 03.13.74 and Decree-Law 2321, of 02.25.87, was initially designed to rule the cases of financial institution mergers until 12.31.96. Financial institutions which merge with others are permitted, under this measure, to record as premium the difference between the acquisition and capital stock value of the acquired company, after entering non-performing loans as a loss. This premium can be amortized under certain conditions of income tax to be paid by the taker company.

The first bank to use the facilities instituted by PROER was Banco Nacional, quite before the recent incorporation by Unibanco. PROER has not yet been used for state banks, bearing in mind that none have either been amalgamated or amalgamating agent. The institution of public credit and tax facilities similar to those instituted by PROER is, however, planned specifically for a new program to facilitate the clearance and later privatization of state banks (the first candidate is the state bank Credireal).

Resolution 2211 of 11.16.95 created the Credit Guarantee Fund (FGC) to protect depositors in the national financial system. This is a species of deposit insurance which:

- i. Fixes the value of monthly contributions to FGC at 0.025% of the balance of the accounts which are the Fund's guarantee;
- ii. Limits the FGC member to the financial institutions which issue demand and time deposits, savings deposits, bills of exchange, housing financing or mortgage notes;
- iii. Maintains, for FGC guarantee purposes, a top level restriction of R\$ 20.000,00 (twenty thousand reais) as credit for each depositor against the same financial conglomerate.

This deposit insurance is temporary and has not yet been defined under complementary law, as required in the Constitution. Its technical tenability is reduced, as more risky liabilities, such as time deposits, which already include in their remuneration various risk premiums, are treated in an identical manner as the demand deposits and savings deposits, whose remuneration is fixed by law (being zero in the case of demand deposit).

Finally, Temporary Measure 1182 of 11.17.95 assigns powers to the Central Bank to compulsorily capitalize, yield or transfer the control of any financial institution to protect the financial system. This measure extends the penalty of non-availability of personal properties to the major shareholder (and not only the directors) of financial institutions.

As yet without detriment to later adoption of intervention, extrajudicial liquidation or RAET, the measure grants the Central Bank powers to transfer share control, assets, rights and obligations, undertake company reorganizations, expropriate shares (and sell them in public auction) and/or decide on the need to capitalize the institution. Several Central Bank actions in order to safeguard the interests of depositors also become possible once intervention, judicial liquidation or RAET has been decreed (paragraph 4). Among them are included the transfer to other companies, separately or together, of company property, rights and obligations, as well as alienation of property and right to third parties. The measure also eliminates the vacation right of minority shareholders by which their deposits in shares would be guaranteed by their equity value.

VI - Conclusions

This set of measures introduced by the government came in useful, taking into account the possible crisis in the financial systems due to the reduction in inflation revenues and to the hardships encountered by some major institutions. In addition to the figures presented herein, recently collected data (FGV) show that the profitability on the total equity of a group of 194 commercial or multiple banks fell between 1994 and 1995 from 15.4% to 10.6%, excluding Banco do Brasil, or from 12.9% to -1.6% when this institution is included in the sample.

The problem of inevitable socialization of unsecured liabilities of the financial institutions subject to RAET still remains, as in the case of Banespa, Banerj and those still under intervention (Banco Econômico). The Banerj 1994 balance sheet reported a negative total equity of R\$ 1,032 billion, and annual loss of R\$ 307 million. By the end of 1995, Banespa had not yet published its financial statement for 1994, and could not consequently present such figures in the São Paulo case. Socialized costs also represent the subsidies implicit in the credit lines instituted by PROER (as in the case of the Nacional), as well as the advantages of tax origin inherent to this legislation.

These are certainly, however, less costly than those that may exist in the case of a banking crisis. It is worth mentioning, for example, to support this theory, the hundreds of billions of dollars spent by the American government on the mass saving and loans bankruptcies, the difficulties occurred with the banks in Chile in the early eighties, the French government's spending to prevent the lack of liquidity of Crédit Lyonnais, or even the loss of over 10 % of GDP incurred by Venezuela after the bankruptcy of Banco Latino, dragging down with it countless other institutions. Not to mention the more recent cases of Barings bank in England and Daiwa in New York.

Another residual problem concerns the abrupt loss in value of preference shares of the acquired banks, belonging to minority shareholders. This was, for instance, the case of the Banco Econômico and Banco Nacional shareholders. As a justification, it can be said that such shares corresponded to risk investments and there was no reason for complaints by the minority shareholders (or those without voting stock) prejudiced by the acquisition of Banco Nacional by Unibanco. The affirmative is no real defense, however, since the risk taken by the shareholders was on the condition of the Central Bank's and CVM overseeing which would eliminate the problem of asymmetric information between the depositor and borrower of resources, which did not occur.

The challenge also remains of endowing the Brazilian banking system with a better self management of risks and overseeing by the Central Bank. Not only in Brazil but in several other countries, as we see above, the overseeing of the financial system has not been able to avoid default crises during the past ten years.

Some of the problems with current overseeing mechanisms, common both to developed and developing countries, may be as follows:

- i. vulnerability to shocks;
- ii. very often undesirable reactions of the regulated agent (e.g. deposit insurance causing decapitalization or higher risks);
- iii. delay and reluctance of the overseeing agent in taking drastic measures when they are necessary (in this sense, the cases of the state banks in Brazil and American savings and loans are good examples),
- iv. the possibility that some regulations taken have sparked off yet another crisis (in the savings and loans case, the decision for the junk bonds to be sold lowered even further the prices of those assets, aggravating the liquidity crisis of the institutions).

The solution for such problems lies in creating market mechanisms that force shareholders, administrators and other economic agents involved with the banks to

demand that these institutions take less risks. It is, therefore, fundamental for the financial institutions to have sufficient capitalization, as well as transparency and quality of the available information. Credit portfolios must be constantly evaluated at their market value. The institution itself must appraise the quality of each agency's credit. Capital adjustment must be frequent and the Central Bank must stipulate minimum limits. Moreover, the financial institutions themselves must be encouraged to develop their own risk management systems. Lastly, it is important to stress that the their own risk management does not eliminate the need for monitoring and ongoing inspection by the Central Bank, bearing in mind that moral hazard may be involved.

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