

**THE BRAZILIAN CRISIS
OF 1998-1999: ORIGINS
AND CONSEQUENCES**

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Abstract

This article presents the most relevant facts that characterised the evolution of the Brazilian economy before, during and after the currency crisis of the beginning of 1999. It presents the aggravating macroeconomic unbalances that developed until 1998, the crisis chronology, and tries to identify the reasons why the Brazilian economy reacted with relative success to the devaluation of its currency. The article wraps up with a cautiously optimistic evaluation of the perspectives of the Brazilian economy in its new policy regime.

Resumo

Este artigo apresenta a evolução dos fatos mais importantes que caracterizaram a evolução da economia brasileira antes, durante e depois da crise cambial do início de 1999. Mostra-se o agravamento dos desequilíbrios macroeconômicos até 1998; expõe-se a cronologia da crise; e procuram-se identificar as razões pelas quais a economia brasileira reagiu com relativo sucesso à desvalorização. O artigo conclui com uma avaliação cautelosa e otimista acerca das perspectivas da economia brasileira no novo regime econômico.

1. Introduction

In December 1994, Mexico devalued its currency in more than 50% and the consequences were disastrous, at least in the following year. Inflation reached over 50%, GDP dropped around 5% and the country plunged into a financial crisis. When South Korea was brought to take similar action, in 1997, inflation behaved much better – it stayed below 10% –, but GDP suffered a contraction similar to the Mexican case. The financial crisis also reached drastic proportions, leaving behind the need to promote a financial restructuring not yet completed. Contrasting with these experiences, in 1999, when it got to Brazil's turn to devalue the Real (R\$), inflation followed a path similar to Korea's, GDP experienced a modest growth, and nothing close to a financial crisis occurred.

What happened in Brazil was not positively absorbed by the population in a first moment due to the fact that this process was conducted by the recently elected President and by his Finance Minister who, in the previous years, had been among the greatest supporters of currency stability. By drastically changing the exchange rate, Government's popularity dropped in the opposite proportion of the dollar appreciation, which is understandable, given the emblematic character that the exchange rate predictability had assumed in the past. Nevertheless, based on what was said and comparing the Brazilian situation with that of the other countries that abandoned their more or less rigid exchange rate regimes between 1994 – when, with the “tequila effect”, the “first financial crisis of the XXI century took place”, according to M. Camdessus – and 1999, *Brazil promoted the most successful change in exchange rate regime among all emerging countries*, with a substantial real devaluation and a relatively modest cost in terms of level of activity and inflation.

How did this process happen? What characterised the deterioration of Brazil's economic situation throughout the first term of President Fernando Henrique Cardoso? How did the country overcome the crisis in 1999? What can be expected in the new situation? These and other related issues will be covered in this paper.

The article is divided in seven sections, including this brief introduction. Next, it describes the arguments of the supporters of the fixed exchange rate strategy during the 1997-1998 crisis. The main idea was that Brazil was a different case and, therefore, could sustain its exchange rate policy. Then a chronology of the Brazilian crisis is presented, from the 1997 Asian crisis until the eruption of the currency crisis in January 1999. The fourth section explains what happened throughout 1999-2000. After that, two sections constitute the analytical core of this work: one, calling the attention to the *regime change* of Brazil's economic

policy from 1999 on, under the “umbrella“ of the agreement with the International Monetary Fund (IMF), stressing that the greatest test of the new regime will happen in 2002, when the accord expires; and the other, trying to explain why Brazil did not have a financial crisis. Finally, the concluding comments of the text are presented.

2. Why Brazil Was Not Thailand (or Was It?)

Even though the Asian crisis of 1997-1998 is still a recent phenomenon and, therefore, might generate exhaustive academic reflections, the majority of the analysis done on the episodes that successively shook the economies of Thailand, South Korea, Indonesia and Malaysia coincide in pointing out the fragility of the financial system as one of the most important explanatory factors of the crisis. To that was associated, in turn, the previous boom, which could be considered the origin of an “overlending crisis”.

Notwithstanding the particularities of each country, the common denominator of these processes, in general terms, was the combination of:

- a) an investment boom fuelled by the increasing indebtedness of families, firms and countries;
- b) banks high leverage;
- c) lack of appropriate bank supervision;
- d) mounting short-term external obligations of firms and banks; and
- e) fixed, or relatively fixed, exchange rates in a context of increasing current account deficits.

In such circumstances, as stated by a local analyst regarding South Korea’s case, but whose observation could apply to the other countries involved, the crisis was the combination of “a currency crisis and a financial crisis” (Shin and Hahm [1998 p. 1]).

Two numbers illustrate the dimension of the problem: a) according to the BIS, in June 1997, the banking system external debt as a percentage of international reserves was 216% in Korea, 157% in Indonesia and 141% in Thailand (Idea [1998]);¹ b) credit to the private sector, in 1996, had reached 170% of GDP in Korea,

1 For comparative grounds, based on the same table, this proportion in Brazil was 78%.

130% in Thailand, 120% in Malaysia and 80% in Indonesia (Idea [1998]). The success of these economies in such circumstances depended on a “non-stopping engine”, with growth generating revenue flows that would allow for new investment leverage and so on. On the other hand, the stagnation of the economy could have major negative effects on the payment capability of the different economic agents, generating a series of bankruptcies in a typical case of “domino-effect”, where the failure of payment of one agent impedes its lender to pay its own debts to third parties. This situation stands only a step away from a financial crisis.

The deterioration of the Asian countries terms of trade, caused by the price decrease of some of the most important goods that led the growth of the previous years, is understood by some analysts as the critical point of the crisis. Exchange rate rigidity, combined with the short maturity of the debt, were the two ingredients to generate a serious crisis: with a relatively fixed currency and the difficulties to sustain it, the temptation to buy foreign currency due to the upcoming (and predictable) crisis was very high. What happened then was a succession of “self-fulfilling prophecy” cases.

When Thailand, in 1997, triggered the series of crises that marked Asia in that year, Brazilian authorities made an effort to distinguish the Brazilian case from that of the Asian countries who, one after another, started to show the same crisis symptoms that Thailand had experienced. A similar effort had been done – with significant success – in 1995 to show that “Brazil was not Mexico”.

What were the main arguments in pro of the distinct nature of the Brazilian case? Shortly, it was argued that:

i) Thailand’s current account deficit in 1996, coincidentally, was basically the same as Mexico’s in 1994 – about 8% of GDP – and more than twice, as a percentage of GDP, than Brazil’s at that time;

ii) opposite to what happened in those countries and the other countries in Asia, Brazil was initiating a process of gradual real devaluation of its exchange rate, keeping nominal devaluation around 7% to 8% p.a., in a context of declining inflation (around 2% to 3% p.a.);

iii) in the 1997-1999 period, Brazil counted on the perspective of receiving an expressive amount of external resources from the privatisation of State companies: in May 1997, Bacha and Welch [1997] estimated that the privatisation potential was US\$ 56 billions for the 1997-1999 period. If two thirds of these resources originated from overseas – which was a realistic perspective –, it would represent an annual flow of US\$ 12 billions,

enough to finance, *per se*, more than a third of the current account deficit expected for 1997: over US\$ 30 billions;

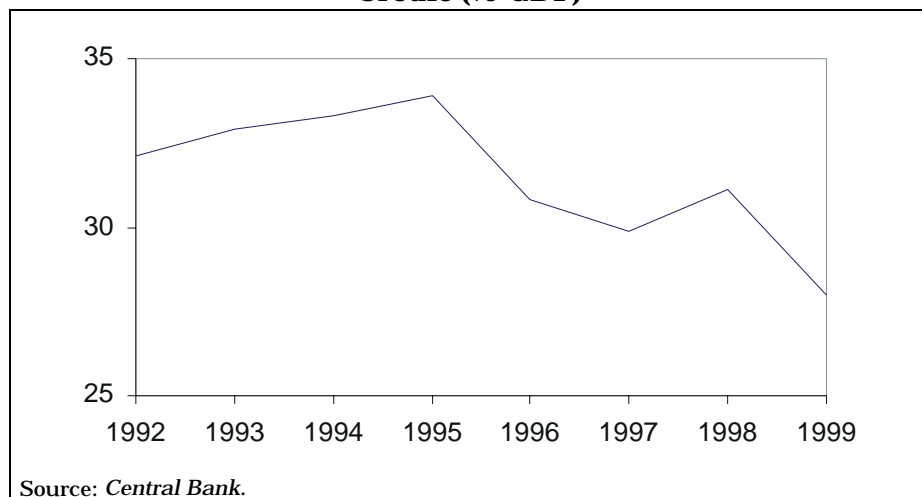
iv) despite the privatisation process, direct investment was sharply increasing in Brazil: excluding the privatisation inflows but including the portfolio resources, the net entrance of direct investment reached US\$ 5 billions in 1995, US\$ 13 billions in 1996, and US\$ 16 billions in 1997; it seemed reasonable, therefore, to imagine that the sum of “pure” direct investment plus privatisation would suffice to finance a substantial part of the current account deficit of the following years, while the country “saved time” to promote a gradual real devaluation of its currency and stimulate exports through non-exchange rate mechanisms, in a context of unrestricted international finance;

v) Brazil had a perspective of a continuing economic policy, with no sight of immediate change of authorities, with the President leading the polls to the 1998 elections running for re-election, and without fractures in the economic staff, leaving no space for suspicion regarding the conduction of future economic policy that emerged, due to the local political circumstances of the time, in Thailand and South Korea; and, last but not least,

vi) the credit expansion indicators in Brazil differed substantially from those shown by Asia, with a total amount of credit provided by the public and private financial systems of only 30% of GDP, in clear contrast with the numbers previously shown for the East Asian countries (Graph 1).

Analysing the arguments retrospectively, it cannot be said that they were wrong. In fact, the Brazilian external deficit did not reach the same relative dimension of other countries; the real exchange rate suffered a devaluation of 7% to 8% in 1998; privatisation was very expressive in 1997 and 1998; external investment kept increasing; the President was re-elected and the

Graph 1
Credit (% GDP)



Finance Minister stayed on the job; and domestic credit remained limited.

Why, then, contrary to what the Government used to say, it got to Brazil's turn to devalue its currency? What went wrong? There were two fundamental factors that explained this change. The first was the adverse shock of relative prices: between the months of January 1997 and 1999 – when devaluation took place –, the price index of primary and semi-manufacturing goods exported by Brazil fell 15% and 17%, respectively. The second was the closure of the international markets for credit, after the Russian crisis, in August 1998. The Brazilian strategy assumed that the country would have time to make the necessary adjustments, while the rest of the world financed a temporarily elevated deficit in the current account. However, the price shock aggravated this unbalance. The Russian crisis, in turn, meant that the time was up.²

3. Chronology of the Crisis³

Since the Asian crisis of 1997, it became clear to everyone, including the Government, that Brazil had to change its economic policy, resolving its two main unbalances that deeply worsened in the 1995/1997 period: the budget and current account deficits. The first represented the systematic deterioration of the primary results – i.e., excluding interest – of the consolidated public sector, generating an increase in public debt (Table 1); and the second the increase – also systematic – of the ratio current account deficit/GDP (Table 2). The solution for this required a combination of expenditure cuts and revenue increase, on one hand, and the increase in competitiveness of the Brazilian products – fundamentally, associated to a better real exchange rate –, on the other.

The chosen path was gradualism. When data from 1998 and 1997 is compared, it can be noted an improvement of the primary fiscal result, with a real devaluation of the Real. The adjustments, however, were way short of what should have been required in light of the effective circumstances that took place,

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- 2 It is worth registering that these two effects also hit Argentina, which, nevertheless, succeeded in maintaining the parity of its currency. There are a few reasons, however, to explain this difference. First, the Argentine fiscal indicators in 1997 and 1998 were substantially better than Brazil's, generating a better "good-will" of the market with regards to the country's situation. Second, there was the perception that the country would hesitate much more to devalue, what practically eliminated the possibility that it would be an option for the Government and decreased the speculative demand for reserves, associated to the fear that the Government would change its mind. Third, Argentina maintained the parity but suffered a 3% contraction of GDP in 1999, in contrast with the small positive growth in Brazil. And fourth, the strategy of extending the external debt sought in the previous years by the Argentine authorities proved efficient, generating a relative need for amortisation payments smaller than in Brazil in 1998 and 1999.
 - 3 For more about the points of this section see Giambiagi [1998] and Franco [1999a].

Table 1
Public Sector Net Debt (GDP %)

<i>Composition</i>	1994	1995	1996	1997	1998	1999
Domestic Debt	17,6	21,8	27,0	26,7	31,8	32,7
Central Government	3,0	6,6	12,0	13,3	16,8	16,8
Bonds	11,6	15,5	21,4	28,3	35,5	37,7
Assets	-8,6	-8,9	-9,4	-15,0	-18,7	-20,9
States and Municipalities	9,5	10,3	11,1	12,5	13,7	14,7
State Companies	5,1	4,9	3,9	0,9	1,3	1,2
External Debt	8,4	5,5	3,9	4,3	6,3	9,9
Central Government	6,2	3,5	1,6	1,9	4,3	7,6
States and Municipalities	0,3	0,3	0,4	0,5	0,7	0,9
State Companies	1,9	1,7	1,9	1,9	1,3	1,4
Total Debt /a	26,0	27,3	30,9	31,0	38,1	42,6
Central Government	9,2	10,1	13,6	15,2	21,1	24,4
States and Municipalities	9,8	10,6	11,5	13,0	14,4	15,6
State Companies	7,0	6,6	5,8	2,8	2,6	2,6

n.a. = not available.
/a Excluding monetary basis.
Source: Central Bank.

Table 2
Brazil – Trade Balance and Foreign Direct Investment – US\$ billion

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000/a
1- Trade Balance	10752	10579	15239	13117	10843	-3353	-5556	-8365	-6591	-1198	2000
Exports	31414	31620	35793	38597	43544	46506	47747	52989	51140	48011	55000
Imports	20661	21041	20554	25480	32701	49859	53303	61354	57731	49209	53000
2- Services	-15369	-13542	-11539	-15215	-14743	-18600	-21044	-27289	-28799	-25211	-29500
2.1- Interest	-9748	-8621	-7253	-8280	-6337	-8158	-9173	-10390	-11948	-15170	-15500
2.2- Profits and Remittances	-1865	-1030	-949	-1931	-2566	-2790	-2821	-5749	-7305	-4058	-6000
2.3- Other Services	-3756	-3891	-3337	-5004	-5839	-7652	-9050	-11150	-9546	-5983	-8000
2.3.1- Travel	-121	-211	-319	-799	-1181	-2420	-3594	-4377	-4146	-1436	-2000
2.3.2- Transports	-1644	-1656	-1359	-1700	-2441	-3200	-3480	-4514	-3259	-2802	-3500
2.3.3- Insurance	-68	-133	-58	-65	-132	-122	-64	74	81	-127	0
2.3.4- Government	-328	-370	-166	-345	-327	-339	-275	-350	-385	-494	-500
2.3.5- Other	-1595	-1521	-1436	-2095	-1759	-1572	-1637	-1983	-1837	-1124	-2000
3- Unilateral Transfers	834	1556	2243	1653	2588	3974	2899	2216	1778	2035	2000
Current Account	-3782	-1407	5943	-444	-1312	-17979	-23701	-33438	-33612	-24374	-25500
Memo: Net FDI /b	169	-43	1443	-380	934	2569	9966	15516	22619	28608	25000

/a Author's forecast.
/b Excluding portfolio.
Source: Central Bank.

especially in the second half of 1998. Using an often cited metaphor, it can be said that Brazil changed the route of the Titanic, but this change, being slow and delayed, was not enough to avoid the “ship” to collide with the iceberg – in this case, the external crisis. Why gradualism was chosen as opposed to a shock strategy is an open question, but whose answer certainly involves the combination of three elements: i) a certain amount of confidence by the authorities on the reversion of the Asian crisis effects, similar to what happened in 1995 after the Mexican crisis, promptly forgotten by the international market; ii) the fear of a *débaclé* that an eventual more intense devaluation could cause in the stabilisation plan – the Mexican case in 1995, when inflation reached 50% in that country, partially supported this concern; and iii) the realisation of general elections in October 1998: no Government, anywhere in the world, likes to implement a shock treatment in an electoral year.

The evolution of facts in the first half of 1998 seemed to support the official optimism. The country risk indicators, after the October 1997 jump, improved substantially. The reserves were recovering, and, in this context, interest rates, which had reached almost 40% at the end of 1997, dropped to less than 20% in mid-1998. In July, the Government successfully conducted the privatisation of Telebrás – one of the “crown’s precious diamonds” of the Brazilian government – and, with the perspective of the re-election of President Cardoso – something the market had already anticipated –, there was a favourable expectation in the economic arena that he, once confirmed in post, would do “something” – still not defined – to improve the fiscal accounts and the country would face a perspective of a gradual improvement in the external account from 1999 on, in an environment of inflation at the international level.

It was in this context that Russia defaulted its debt, in August. Contrary to what happened to Mexico or even Asia, this time the market closed almost completely – and for a long time – to emerging countries, particularly those seen as chronic problems – and the negative track record of Brazil explains, in part, this kind of extreme reaction.

The effects on Brazil were devastating. In the third quarter of 1998 some elementary calculations showed that the country’s external account for 1999 simply “did not close”, generating all types of speculation in the press that, for this reason, Brazil could adopt some form of capital flow control. Brazil, however, which had a *flow* problem in 1999 – in the sense that the predicted current account deficit would be larger than the capital inflow realistically expected –, started to face a problem of *portfolio reallocation* of economic agents in general, which, be it due to the need to recover losses suffered with Russia, the fear of a Brazilian external default or just the perspective of devaluation, promoted a massive capital flight. In fact, in the first week of August, right

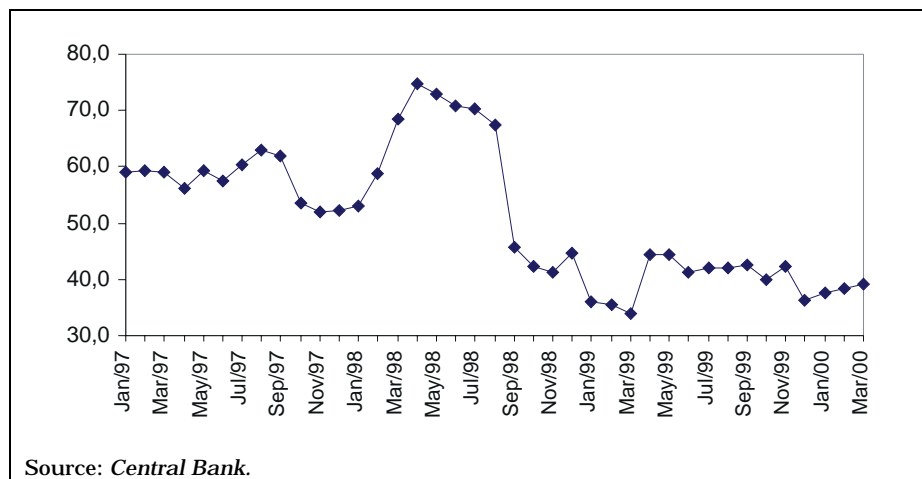
after the financial liquidation of the first payment of Telebrás sale, the international reserves had reached almost US\$75 billions. In only 50 days, however, by the end of September – which was labelled the “black September” –, Brazil lost US\$ 30 billions of its reserves (Graph 2).

It was in this context that, a few weeks from presidential elections, the Government officially announced that it was negotiating with the IMF an agreement to face this situation based on four pillars: i) a strong fiscal adjustment; ii) a tight monetary policy – the interest rates increased to approximately 40% again in mid September; iii) an external help package – from the IMF, multilateral organisations and G7 countries –, of US\$ 42 billions; and iv) the maintenance of the exchange rate policy, an issue then still considered a “taboo” by the authorities.

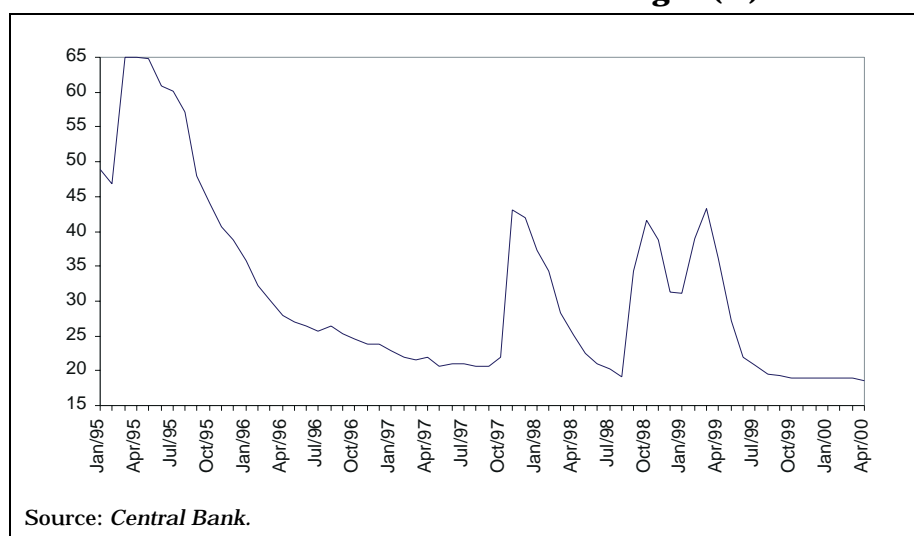
The announcement of external aid – despite the fact that the details had not been released –, the launch of the first adjustment measures, and the confirmation of President Cardoso’s victory in the first round of the elections, let the Government finally catch its breath. The country-risk levels dropped again, the interest rates one more time followed a declining path, reaching about 30% (Graph 3), and the Government prepared itself to receive the promised external aid. The authorities, despite the spoiled credibility due to the successive traumatic and abrupt changes in policy, believed that the story could repeat, with interest rates – like after the Mexican and the Asian crises –, decreasing and the economy regaining its normal rhythm. The proportion of people who believed all this was pointless and at the end Brazil would not manage to avoid a devaluation was undoubtedly increasing. Nevertheless, the Government still hoped that the situation would gradually improve.

The *coup de grace* in the official strategy was given by the

Graph 2
International Reserves – US\$ billion – International Liquid Concept



Graph 3
Nominal Interest Rate - Overnight (%)



combination of two facts. In December, almost at the same time the IMF approved the aid package to Brazil, the Congress rejected one of its most important adjustment measures. A few weeks later, in the beginning of January 1999, the Government of the State of Minas Gerais, which had taken over a few days earlier, called for a temporary *default* of its domestic debt with the Federal Government. Even though the fiscal effect of this latter measure was practically neutral – because the Federal Government had mechanisms to compensate this through the reduction of the legal transfers it regularly makes to the State –, the conjugated impact of both measures was dramatic. On one hand, the possibility that Brazil would start receiving resources from the IMF and fail to reach the fiscal targets revived the old prejudices against the country in the international financial markets – the seven letters of intention signed and not honoured in the 80s were insistently quoted. On the other, the feticide word “default” was reintroduced in scene in a world where the transference of resources from one place to another was processed with extreme facility, agility, and in a much more intense scale than in the 80s.

The Government reacted to these circumstances, in the beginning of 1999, with the habitual mix of renewing the promises of monetary and fiscal austerity. At that point, though, scepticism had become dominant. Additionally, the very monetary austerity itself created two problems. On one hand, operating with interest rates of over 30% with no inflation implied increasing in almost one third of the public debt in one year, something unconceivable considering it had already increased from 26% to 38% of GDP between 1994 and 1998. On the other, since the fiscal targets of the IMF agreement were expressed in terms of the expected behaviour of the Public Sector Borrowing Requirements (PSBR), either the additional

interest rates were compensated by equivalent primary adjustments – something virtually impossible given the dimension of the rates – or the fiscal targets of the agreement would not be honoured in the first quarter of the year.

In mid-January, then, Brazilian credibility reached very low levels. The economic agents were convinced, day after day, that devaluation was inevitable. Drazen and Masson described the uselessness of certain “tough messages” when the market simply does not believe it to be viable:

“Our results may be illustrated by a simple story. One afternoon, a colleague announces to you that he is serious about losing weight and plans to skip dinner. He adds that he has not eaten for two days. Does this information make it more or less credible that he really will skip dinner? [Some model implies] that with each meal he skips, the ‘tough policy’ of skipping the next meal becomes more credible, as each observation of playing tough raises the probability we assign to his being a fanatic dieter. Once we realise that his skipping one meal makes him hungrier at the next mealtime (i.e., that policy has persistent effects), we are led to the opposite conclusion, namely, that it becomes less likely he will stick to his diet the more meals he has skipped” (Drazen and Masson [1994, p. 736]).

In the Brazilian case, the idea that the Government was losing its autonomy to be able to decide over the maintenance of its currency policy was reinforced by the fact that the original agreement with the IMF, signed when the exchange rate was still controlled, established that “adjusted net international reserves” – defined as gross reserves minus the gross official obligations – could not be inferior to US\$ 20 billions. It is worth mentioning that gross reserves were approximately US\$ 40 billions when the IMF agreement was approved. By definition, the resources from external loans did not affect the concept of net reserves because they increased gross reserves but also the obligations. In fact, then, the *IMF agreement was limiting the intervention margin of the Central Bank* with respect to the defence of the currency policy. To be straight forward, *with this amendment the agreement with the IMF became useless*. Worse: in fact, it may have stimulated the demand for reserves, once it had undermined the manoeuvre capacity of the authorities to react to what was configuring as a case of a speculative attack.

On the first days of January 1999, the reserve loss was dramatic. At the end of the controlled exchange rate experience, reserve loss was at the rate of US\$ 1 billion a day. On January 13, the Government announced the substitution of Central Banks President and the adoption of a band system, which in fact represented a 9% devaluation. This could have been an interesting idea in other circumstances but it could not work out on those days. As predicted, the reserve loss continued and in the first day of the band system the exchange rate reached its ceiling.

Once again we saw the same *script* of other currency crises where, after the Government “blinked”, nobody believed in its

promises that the new limit would be respected. The new system lasted exactly 48 hours. Finally, due to the absolute lack of alternatives, the Central Bank let the currency fluctuate on January 15.⁴ Brazil experienced, then, an overshooting case typical of text books. Before the currency change the rate was at R\$/US\$ 1.21. On January 14 it reached the band's ceiling: 1.32. At the end of January it boosted 1,98;⁵ and in the beginning of March – the peak of devaluation – it got to 2.16.

Krugman's terminology is well known when he refers to the genesis of currency crisis, brought up by the reflection around the successive Asian crises of 1997-1998, which did not fit into the most popular academic models of the time (Krugman [1998]). In the "first generation" models (Krugman [1979]), a government with successive fiscal deficits tries to maintain a certain currency parity that the agents perceive as unsustainable overtime, which promotes a speculative attack against the currency. In the "second generation" models (Obstfeld [1994]), the propagation mechanism of the crisis is different because, even though the exchange rate is defensible, currency policy has a cost for the government, represented by the interest rate required to win over the confidence of the economic agents regarding the maintenance of the policy. The Brazilian external crisis had a few components of the second generation models, where the self-fulfilling prophecies play an important role. It was, nevertheless, a somehow classical textbook crisis – i.e., of first generation –, where fiscal and current account unbalances, in a rigid exchange rate regime, lead to a successive gradual loss of reserves, speculative attack and devaluation. The Asian crisis may have caught analysts by surprise and left many perplexed. In the Brazilian crisis case, though, it was an outcome expected by many of the – increasingly numerous – critics and that the Government perfectly knew it could happen – not only since the Asian crisis but since the Mexican, in 1995.

A few weeks later, with the economy in the process of normalisation, the dollar would go back down to 1.65. In the

4 In the words of a Central Bank ex-president, Afonso Celso Pastore, the abandoning of the controlled currency policy followed between 1994 and the beginning of 1999, in the circumstances it occurred, represented an initial relief similar to that of a puncture. Once rid of the "infection" that was causing the true reserve bleeding, it was necessary to treat a long line of measures so that the country could overcome the crisis, but on that moment the feeling was that either the previous regime was to be abandoned, or the country would be left with no reserves, or still an external default would become inevitable.

5 On the last day of January, facing the risk of losing control over the inflationary process, with internal conflicts within the economic staff and in the midst of conflicts between the Central Bank's President and the IMF mission, President Cardoso dismissed the president of the Central Bank, naming Mr. Arminio Fraga for the post. Though, for approximately 40 days, Brazil, in the midst of a dramatic currency crisis, stood in the bizarre situation of having simultaneously four Central Bank Presidents: Gustavo Franco, who left on January 13 but had not formally passed his post onto his successor; Francisco Lopes, approved by the Senate but dismissed before the formal ceremony of job transmission; the Director of the External Area, who became the provisory President; and the new President, Arminio Fraga, who could only take over after being approved by the Senate and was only confirmed in March. Two leadership changes in the maximum monetary authority in 20 days, lack of a President in post and absence of Directors in the Central Bank – the new ones had not even been indicated: it is difficult to think of a worse scenario to implement a change in currency regime!

overshooting stage of the currency, however, a situation close to panic was installed in respect to what could happen with the public debt.⁶ The latter closed 1998 at 38% of GDP. Nevertheless, the debt affected by devaluation – external debt and internal debt in bonds indexed to the exchange rate –, before it occurred, was of approximately 15% of GDP. With the elevated nominal interest rates of January and the nominal devaluation of 64% that took place between December and January, and before the nominal drop of the exchange rate and the price increase that followed this change – and that, in fact, inflated GDP –, the public debt in January reached 48% of GDP: a 10 point GDP jump in only 30 days!

The analysis that debt was following an explosive path and the threat of a default of the internal debt brought to life old ghosts and the trauma of March 1990, when President Fernando Collor blocked a substantial part of the country's financial savings. On the last business day of January, specifically, there was a race to the banks all over the country and a generalised rumour – though unfounded, as later proved – that the Government would declare a bank holiday and President Cardoso would default the internal debt, similar to what President Collor had done.⁷ In this context, the original agreement with the IMF had turned into dust only a month after it has been formally approved by the institution's board, in December 1998.

4. The End of Gradualism: What Happened in 1999?

In the light of what had happened at the beginning of the year, the path followed by the various macroeconomic variables in the months following the devaluation was simply unimaginable. Nobody could have guessed that, surrounded by the exchange rate highs verified until March, the year would end with inflation – in terms of consumer prices – below 10% and a slight GDP growth.

The inflexion point was, undoubtedly, the fact that Arminio Fraga took office at the Central Bank in March and the decisions were made after that. The economic staff, after a few weeks of absolute silence, acted in many directions. First, it took the decision – which would prove crucial – to, despite the criticisms, elevate nominal interest rates again, something essential to avoid

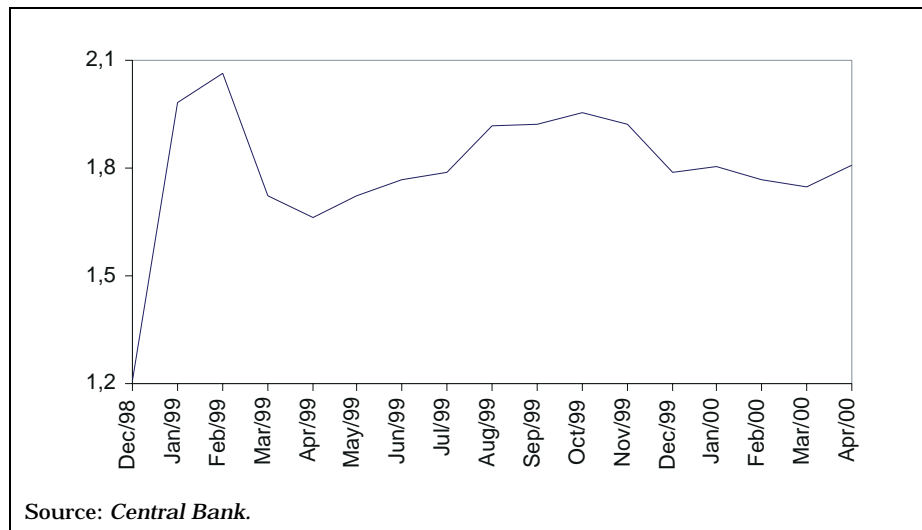
6 The public debt concept used in this paper refers to the net debt of the consolidated public sector, but excludes the monetary base, which is computed as debt in the official statistics. For comparative effects, it is important to recall that the monetary base in Brazil has been around 3 to 4% of GDP in the last years.

7 It was on this day, in a picture of complete apathy by the Central Bank, which was also paralysed by the impasse of the IMF negotiations, that President Cardoso decided to promote the second change in the Central Bank's presidency.

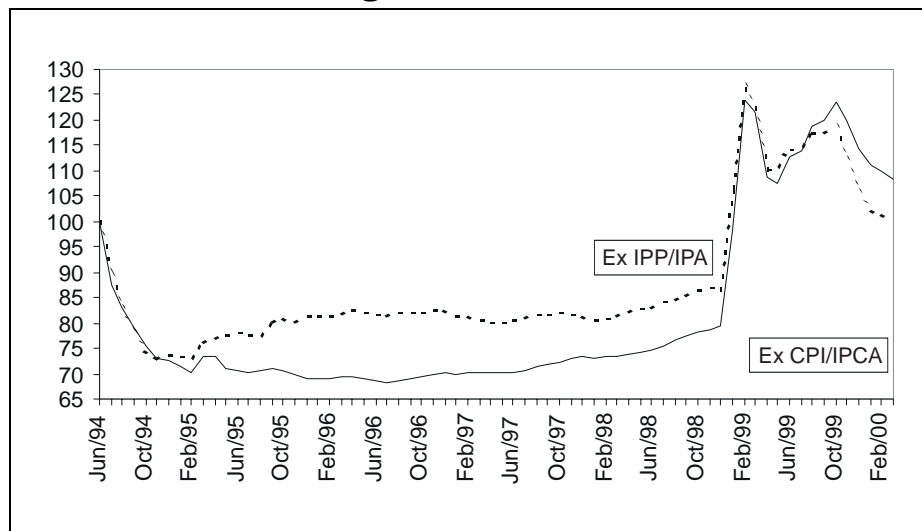
that, in the trace of inflation, the real rates became negative, and the same mistake that spoiled the previous stabilisation plans was made again. Second, it teamed up with political leaders to promptly approve the remaining issues of the adjustment. Finally, it organised a series of road shows around the world with the purpose of reopening the credit lines, whose closure was holding back the normalisation of the country's commercial relations. It was this package of initiatives that generated an expressive nominal appreciation still in March (Graph 4). At the end of the year, taking as reference the wholesale price indexes, the real devaluation December-December ended up limited to 22% - in the case of consumer price index (CPI) indicators, it was substantially higher: exactly the double, 44% (see Graph 5).

Inflation, if measured by CPI, followed an amazingly mod-

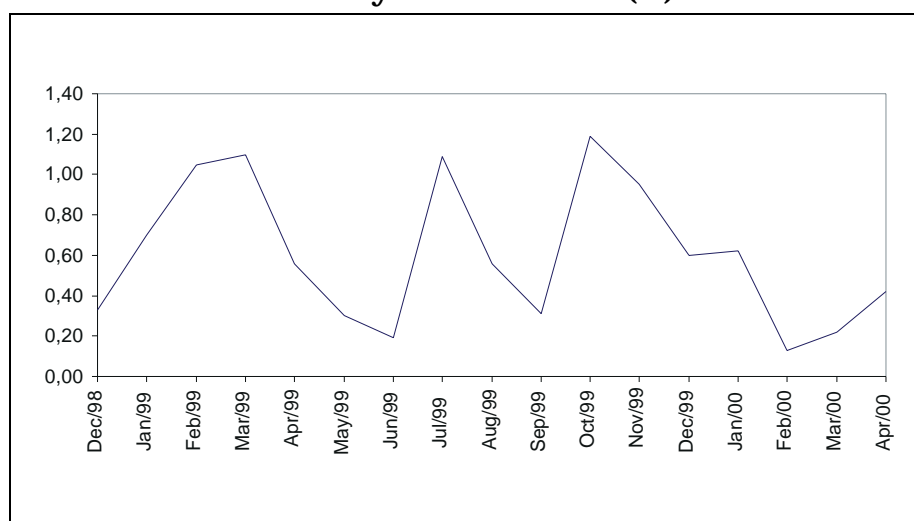
Graph 4
Exchange Rate - R\$/US\$ - End of Period



Graph 5
Real Exchange Rate (June 1994 = 100)



Graph 6
Monthly inflation - CPI (%)



erate trajectory, staying slightly below 9,0% in the January-December period, which, given the nominal devaluation of 48%, implied a pass-through of just 0.19, something that not even the most optimistic defender of the devaluation could predict. In only four of the 12 months of the year CPI monthly inflation was superior to 1% (Graph 6). This, by the way, was partially due to the hike in the oil prices in the international market – which started the year at approximately US\$15/barrel and later reached US\$30 –, that generated unbearable pressures, leading the Government to implement successive price increases for gasoline and other oil derivatives throughout the year.

In respect to the level of activity, the majority of foreign analysts committed major forecast mistakes with regards to what could happen to GDP after the devaluation. There were reasons to fear a strong increase in inflation, which ended up not happening, but the predictions of GDP decrease were clearly exaggerated. Some foreign investment banks, in their analysis about Brazil, stated with conviction that GDP's fall could reach 6% or 7%, similar to what was verified in Mexico and Korea in consequence of their respective crises. Three reasons, though, supported the hypothesis that this could hardly occur:

i) contrary to those countries, Brazil had already experienced recession in the previous year, making it difficult to believe in a new and profound decrease in the level of activity in a scenario of already low demand;

ii) historically, Brazil have had two very grave crises in the past 50 years: the external debt crisis in the beginning of the 1980s, and the contraction caused by the blocking of financial assets in 1990, in the Collor Plan, when during a whole month many sectors simply ceased production, affecting the annual

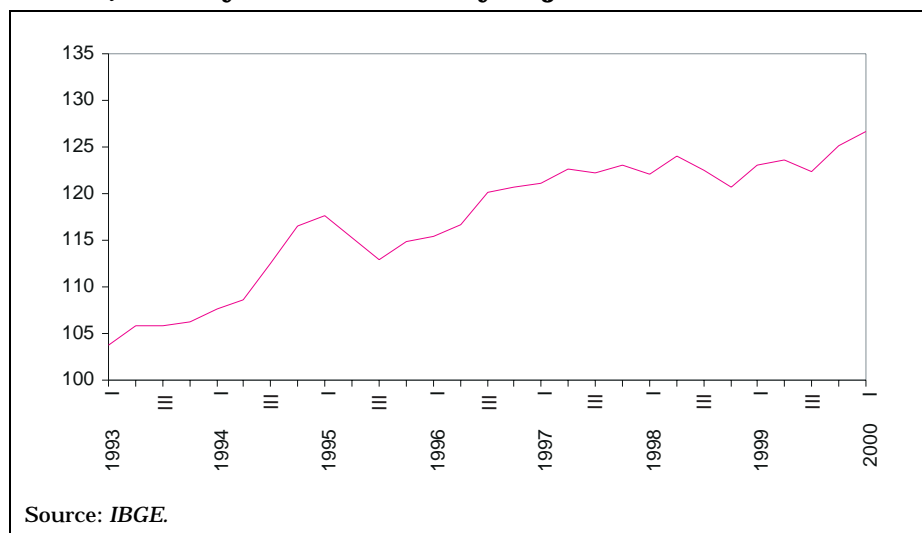
result; nevertheless, in neither of these cases GDP's fall was superior to 4%; and

iii) in Brazil, nothing close to a financial crisis and its typical "domino-effect" happened, as it occurred in both Mexico and Korea.

In any way, due to the decrease in real wages and the highs in interest rates observed in the beginning of the year, it was reasonable to imagine a drop in GDP. The Government, though, in the fear of being considered excessively optimistic – a sin it had already committed in the past and that made it lose its credibility –, opted to be conservative and officially assume that GDP would drop between 3% and 4% in 1999.

The observed trajectory, though, was completely different. In fact, in seasonally adjusted terms, GDP began to *grow* still in the first quarter of the year in respect to the previous quarter (see Graph 7). The reasons for this have been linked to two factors: i) a movement towards import substitution in the industry, with the increase in production of the sectors where the demand for imports fell the most; and ii) the drop in real interest rates.⁸ On the other hand, the contraction of real wages that was initially predicted did not occur in the magnitude expected due to the moderate inflation. Consequently, a strong consumption contraction did not happen. With all that, GDP ended up having a slightly positive growth of around 1%, due basically to the negative carry

Graph 7
Quarterly GDP, Seasonally Adjusted (1990 = 100)



8 To measure real interest rates in a situation of relative price changes is something always difficult. The fact, however, is that, in the end, the nominal overnight rate stayed at 25,6% in 1999, against a variation of industrial prices January-December of 28,3%. Therefore, the reality in terms of real interest rates turned out to be significantly different from what was initially feared, when prices had not yet increased and interest rates were stratospheric. To have an idea of the contrast with the previous situation, in 1998 the nominal overnight rate was 28,8% and industrial prices *dropped* 0,2%.

over inherited by the level of activity in 1998. If we compare the GDP from the last quarter of 1999 with the same quarter of 1998, however, there was a growth of 3,6%. In this context, unemployment remained stable at approximately 7,5% because, although employment did not grow, an atypical behaviour of the Economically Active Population (EAP) – which remained stagnated – occurred due to the increase in the number of people who gave up the search for jobs.

In general terms, January 1999 marked the end of the gradualist strategy to face the crisis. As stated before, the primary result had improved in 1998 in respect to 1997 at the same time that the real exchange rate had already been devaluating in real terms. The crisis, though, precipitated the facts and obliged the Government to speed the double adjustment process – external and fiscal. Besides letting the exchange rate fluctuate, it adopted extremely ambitious targets for the public accounts, in the context of the IMF agreement. In the agreement negotiated by the end of 1998, before the devaluation, the goal was to achieve a consolidated primary surplus of 2,6%, 2,8% and 3,0% of GDP for the years 1999, 2000 and 2001, respectively. When the agreement was revised, after the devaluation – which forced a modification in parameters –, two important modifications were made in the fiscal side.

The first was the replacement of the Public Sector Borrowing Requirements (PSBR) by the primary surplus as a performance criterion to evaluate the agreement. In the final version of 1998, the primary surplus was included in the calculations that generated the agreement, but the formal target was represented by the PSBR, which let the agreement too vulnerable in the face of an eventual need to tighten monetary policy. Brazil argued – reasonably – that, in the context of uncertainty around future interest rates that characterised the beginning of 1999, it would be dangerous to assume PSBR targets, and it managed to convince the IMF authorities to change the performance criteria.

The second modification was an increase in the primary effort requisites, to 3,10%, 3,25% and 3,35% of GDP in 1999, 2000 and 2001, respectively (Table 3). The movement was justified because, with the increase in public debt caused by devaluation, the primary surplus necessary to meet (at the end of the three-year program) a certain target of the relationship debt/GDP

Table 3
Primary Surplus – IMF Agreement (% GDP)

	1999	2000	2001
Central Government	2,50	2,65	2,60
States and Municipalities	0,30	0,50	0,65
State Companies	0,30	0,10	0,10
Total	3,10	3,25	3,35

would have to be bigger to compensate for the debt increase. For a country with such negative fiscal record and with perspectives of a fall in per capita income for two consecutive years, going from an equilibrium in the primary result to a surplus of 3,1% of GDP in only one year was a major challenge, politically feasible only by the “feeling of being a step away from the precipice”, which dominated the country’s leaders in such circumstances.⁹

Contrary to the expectations of the majority of analysts and the old Brazilian tradition of not meeting targets accorded with the IMF, in 1999 the fiscal target was honoured (Table 4). What also contributed to that was inflation, which, despite remaining within the limits desired by the Government, “facilitated” somehow the real fall in expenditure.

The combination of i) currency appreciation, comparing to the overshooting of the beginning of the year; ii) fall in nominal interest rates after March; iii) inflation, which ended up making real interest rates – that determine the dynamics of the relationship debt/GDP – fall substantially throughout the year in respect to 1998; and iv) real growth of the economy *during* the year, made the debt/GDP ratio drop from a maximum of 48% in February to 43% at the end of the year.

Table 4
Public Sector Borrowing Requirements – PSBR (% GDP)

	1998	1999	2000/a
PSBR /b	7,58	5,57	4,00
Central Government /b	5,00	2,60	1,55
States and Municipalities	2,05	3,03	2,50
State Companies	0,53	-0,06	-0,05
Primary deficit /c	-0,01	-3,08	-3,25
Central Government /c	-0,56	-2,25	-2,65
Federal Government and BC /c	-1,36	-3,17	3,45
INSS /c	0,80	0,92	0,80
States and Municipalities /c	0,19	-0,21	-0,30
State Companies /c	0,36	-0,62	-0,30
Interests /b	7,59	8,65	7,25
Central Government /b	5,56	4,85	4,20
States and Municipalities	1,86	3,24	2,80
State Companies	0,17	0,56	0,25

a/ Author’s forecast.

b/ Not including effects of devaluation.

c/ (-) = Surplus.

Source: Central Bank.

9 For a description of the historic problems of the Brazilian public sector, see Giambiagi and Além [1999].

On the other hand, the main disappointment in 1999 was, undoubtedly, the result of the Trade Balance, which once again terminated with a deficit. In light of the facts, though, it is not difficult to explain what happened. There are fundamentally four reasons that explain the result and the contrast with the dimension of the adjustment by which Mexico and Korea had previously gone through due to their respective crises:

a) the collapse of commodity prices in the international market strongly affected Brazil: the average price index of basic products fell 15% in respect to 1998 and the semi-manufactured goods 17%, causing an expressive drop in the total export index (Graph 8);

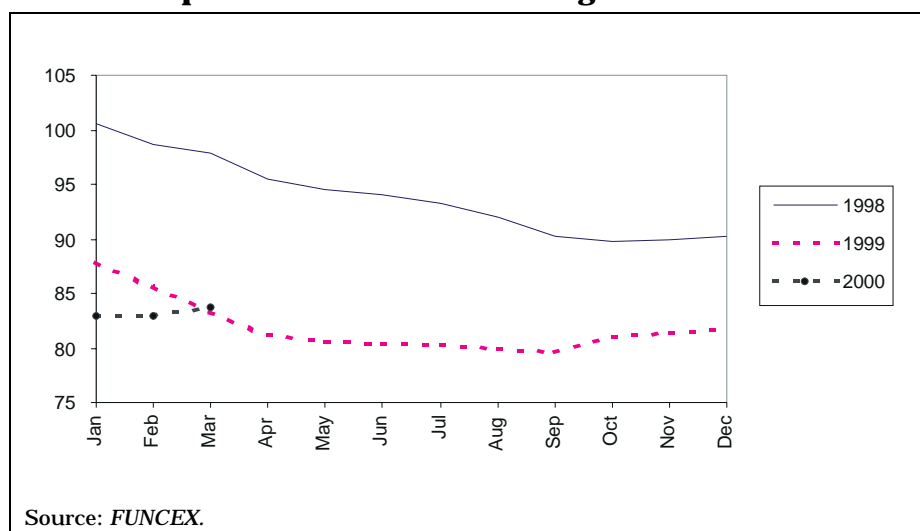
b) an important part of Brazilian exports is composed of manufactured goods and, among them, there is a certain concentration in Latin American countries. Because in 1999 all Latin America – except Mexico, with whom Brazilian trade is scarce, and Peru, a small country – was in recession, manufacture exports to the region suffered a substantial reduction, affecting the country's total sales;

c) instead of suffering a big fall as many had initially predicted and as happened in Mexico and Korea, Brazil's GDP grew around 1% in 1999, meaning that a contraction of aggregate demand did not happen in the economy; and

d) oil prices had an increase comparable to the 1973 and 1979 shocks, harming the country, since it imports around one third of the oil consumed.

In this context, the export *quantum* experienced a progressive improvement after devaluation and a time lag, as it was expected (Graph 9). The still high demand for imports and the fall

Graph 8
Exports Prices Index - Average 1996 = 100

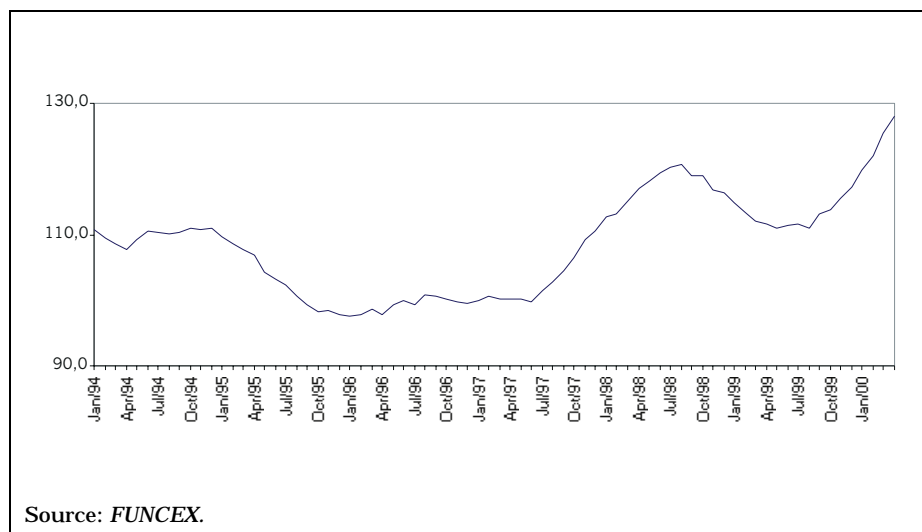


in prices, however, impeded a more accentuated improvement in the trade balance. In the year's balance, exports fell 6% and imports 15%, but the country finished 1999 with a trade deficit of approximately US\$ 1 billion – way below the US\$ 7 billions in 1998, though.

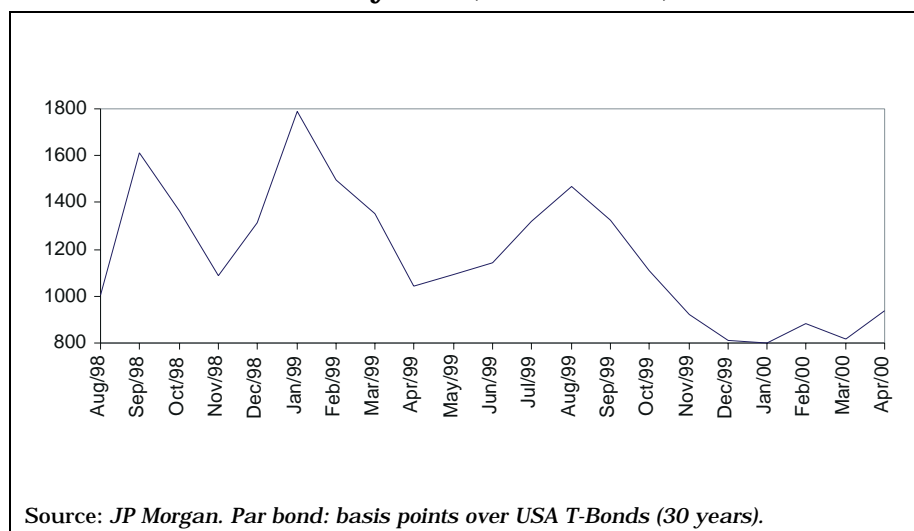
The current account, in turn, experienced an important improvement. Besides the drop in the trade deficit, the currency devaluation had a positive impact on the other two important rubrics of the current account: the transportation account – linked to the trade movement – and especially the travel account – travelling abroad became very expensive! At the same time, after devaluation, the heavy profits and dividends remittances of 1998 – obviously stimulated by the fear of an exchange rate change – did not reoccur. Together, these two factors decreased the current account deficit from US\$ 34 billions in 1998 to US\$ 24 billions in 1999. This did not translate into an improvement in the same scale of the indicator current account deficit/GDP, by the simple fact that the devaluation decreased the GDP value in dollars. However, it will probably allow a drop in this indicator if, as expected, with the economy growth – and even if the real exchange rate remains unchanged –, GDP's value increases in the future.

Following the fiscal improvement and the perception that the change in the external situation, despite its tardiness, was beginning to occur, investors were gaining more confidence in the future perspectives of the economy. Then the country-risk, measured by the spread of the of the 30-year Par Bonds, in basis points, over the US treasury bond of similar characteristics, which had

Graph 9
Exports Manufactured Goods - Quantum Index - Moving
Average 12 Months (1996 = 100)



Graph 10
Country-risk (Basis Points)



passed the 2300 points in the crucial moments in January 1999, started to descend (Graph 10).

5. From the Deficit of Targets to the Deficit Targets: a New Economic Policy Regime (Temporary or Permanent?)

In the years of fiscal deterioration, in more than one opportunity and coming from more than one analyst, it appeared in the economic debate the proposal that the Government should commit itself to fiscal targets; i.e., ceilings in the “Maastricht style”, which would limit governmental action and control the evolution of public debt. In fact, though, such proposals lacked purpose and the Government did not adopt them. Instead of deficit targets, Brazil experienced a deficit of targets...

In 1999, in the context of the IMF agreement, the situation changed completely and the Government was led to adopt a *fiscal rule* correspondent to a behavioural principle, in the form of a variant of the definition of Kopits and Symansky: “A fiscal policy rule may consist of a limit on, or a target for, the stock of public debt as a proportion of GDP” (Kopits and Symansky [1998, p. 26]). Even though the difficulty in guessing with certain precision the future behaviour of interest rates had led Brazil to adopt a primary surplus target instead of a nominal deficit target. In fact – and as long as interest did not exceed the premises of the exercise that served as basis for the calculation of the primary effort requirement – the objective was to redirect the trajectory of public debt. The idea was to “substantially reduce the proportion between

public debt and GDP” throughout 1999 – after the highs associated with the devaluation – and continue with this trend in 2000 and 2001, as stated in the memorandum of economic policy of the agreement approved by the IMF board in March 1999, after the revision of the original 1998 accord.

The economic policy regime adopted in 1999 was based on four pillars:

- a) fiscal austerity, in the form of strict targets of primary results for the three-year period 1999-2001;
- b) approval of the so-called “reforms”;
- c) adoption of inflation targets;¹⁰
- d) free-floating exchange rate.

The targets established in the IMF agreement have been mentioned earlier. Nevertheless, it is worth comparing these targets with the surplus that would be required, *ceteris paribus*, to maintain debt stable at 45% of GDP, with a *seignorage* of 0,2% of GDP. In a relative normal situation – inflation at 2%, nominal interest rates at 10% to 12% and real economic growth of 4% to 5% –, the public sector would need to generate a primary surplus of 1,0% to 2,3% of GDP (Table 5). It is important to recall that, in the 1999-2001 period, interest rate has been standing above these numbers and growth below them. This is why primary surplus has to be so expressive. In the future, with lower interest rates and the perspective of a higher growth, the required primary surplus could be lowered to the levels mentioned above.

Focusing on the remaining elements, in 1999, the Government tried to create the basis for a permanent change in the country’s fiscal situation. Two measures were relevant in this

Table 5
Primary Surplus Required to Stabilize Debt at 45% of GDP
(% GDP)

Nominal gross interest rate (%)	GDP real growth rate (%)			
	3,0	4,0	5,0	6,0
8,0	1,06	0,61	0,18	-0,25
10,0	1,92	1,46	1,02	0,58
12,0	2,77	2,31	1,86	1,41
14,0	3,63	3,16	2,70	2,25
16,0	4,49	4,01	3,54	3,08

Seignorage = 0,2% GDP
Inflation = 2 %

10 See Mishkin [1999] for the logic to adopt an inflation target regime.

respect. The first was the approval of new rules for retirement, limiting the income of those who retire too early. Even though early retirements are still possible, whoever has an early retirement will have a low pension ceiling, which will increase as the individual postpones the retirement. This has improved the perspectives of the Social Security account in the next years. The second measure was the proposal of a Constitutional Amendment – to be discussed during the year 2000 – freeing until 2006 part of the earmarked resources, which leaves considerable room for Government to cut down public expenditure.

With regards to inflation targets, since 1999 Brazil became a member of a group of approximately 10 countries that, like New Zealand, England and Canada, adopted this system. The authorities defined an inflation target of 8% for 1999, 6% for 2000 and 4% for 2001, with a 2 percentage point margin tolerance. In the first year, inflation (CPI) stayed at 8,9%, within the accorded interval, and for 2000 the expectations stand around 6% or 7%. With this, the Government committed itself, formally and explicitly, to the goal of reaching price stability, something that represents a new experience for Brazil. If these targets are met, bringing national inflation to international levels (2,0% to 2,5%) in 2003 or 2004, such fact will certainly shape the behaviour of future Governments because it would represent a true *cultural revolution* in the Brazilian context, where part of the political leadership, in the past, were always willing to allow “a little more” inflation in exchange for growth.

The free exchange rate, finally, completes the array of the economic policy tools available. In the controlled exchange rate regime, the nominal devaluation of 7% to 8% a year, in a context of practically no inflation, represented a source of pressure on domestic interest rates, which, despite not being particularly attractive when measured in dollars, were extremely high when adjusted by a domestic price index. With the devaluation and the floating exchange rate, the monetary authority gained degrees of freedom. Therefore, the rates, in real terms, fell significantly in 1999, reflecting these new circumstances.

The remaining doubts regarding the Brazilian economic policy regime rely on its sustainability overtime. Even though the adjustment effort is evident, a substantial part of the surplus has been obtained through temporary and emergency measures to raise revenue and/or cost cuts (Table 6). The most significant example is the Provisory Contribution over Financial Transactions (*Contribuição Provisória sobre Movimentações Financeiras – CPMF*), which is expected to collect, in 2000, more than 1,5% of GDP, but should be extinct in June 2002.

The Government’s challenge from now on – and this is valid not only for the current but for the next Government, which will take over in 2003 and will not count on the presently available

Table 6
Extraordinary Factors of Fiscal Adjustment (% GDP)

<i>Composition</i>	<i>1998</i>	<i>1999</i>	<i>2000</i>
CPMF	0,9	0,9	1,6
Concession Revenues	1,0	1,0	0,5
Additional Income Tax	0,1	0,1	0,1
Income Tax: Financial Assets	0,3	0,0	0,0
Elimination of Deductions (Cofins)	0,0	0,3	0,3
FEF/DRU	0,3	0,3	0,1
Debt Payments	0,0	0,6	0,0
Total	2,6	3,2	2,6

revenue sources – is to preserve the adjustment effort, even if with a less ambitious primary target. However, this will have to take place i) without the aid of these temporary sources of adjustment, and ii) without the “umbrella” of the IMF, now converted into a comfortable scapegoat for the authorities.

6. Why Did Brazil Not Have a Financial Crisis?¹¹

Up to this point, we have analysed the evolution of the Brazilian crisis and compared it with some of the other crises that occurred in the second half of the 1990s. As mentioned earlier, even though Brazil suffered a traumatic currency devaluation in 1999 – despite its relatively positive aftermath –, it did not experience a financial crisis *per se*, such as the Asian countries did. But why did a financial crisis not happen in Brazil? What differentiated Brazil’s financial system from Asia’s?

An important characteristic of the Brazilian financial system that distinguishes it, for example, from the Asian case, is its low level of financial depth. In 1996, for instance, private sector total credit to GDP in Brazil accounted for 31%, much lower than the numbers higher than 100% of GDP of several Asian countries (see figures on page 12). These numbers indicate that Brazil, when compared to the Asian countries, had a much less vulnerable financial system, providing more stability and confidence to the market and lessening the chances of a “domino effect” breakdown in the system due to a possible series of defaults, such as happened in Asia due to the high leverage levels.

11 Most data presented in this section – unless otherwise stated – was extracted from Puga [1999] and the Central Bank of Brazil.

After the Real Plan (1994), many changes took place in the Brazilian financial system due, most importantly, to the banks' significant loss in revenues linked to the end of inflationary transfers, i.e., the *floating*. At that time, many financial institutions significantly expanded their credit lines – favoured by the economic growth that followed stabilisation –, increased their leverage and exposure. Later, with the impact of the Mexican crisis in 1995, there was a significant increase in non-performing loans. This was in part due to interest rate increases – which also had a direct negative impact on the banks' profits – and the drop in the level of activity. Many banks did not resist and went bankrupt.

This financial crisis took place in 1995 and forced the Brazilian Government to take action in order to overcome the turmoil and strengthen the financial system, under the Basle standards. *These changes became of vital importance later, in 1999, in keeping the currency crisis from building up into a financial crisis.* The adjustment was made mainly through a series of legislation changes, such as:

- the establishment of minimal capital requirements for the constitution of a bank;
- the establishment of a minimum level for the financial institutions' adjusted net worth of 11% of their risk-weighted assets (it started at 8% and jumped to 10% before reaching the final level);¹²
- fiscal incentives for the incorporation of financial institutions;
- more power to the Central Bank in order to allow it to take preventive actions to strengthen the financial system;
- the obligation of banks which depend on or have the ownership participation of international financial institutions to operate within accorded operational limits;
- the allowance of financial institutions to charge for a range of services, many of them free of charge in times of high inflation;
- the obligation of financial institutions to identify and inform the Central Bank about all clients with a granted credit of above R\$ 50 thousand, for safety reasons;

¹² The 11% ratio is even more conservative than the Basle requirements.

-
- the obligation of financial institutions to present the Central Bank with a program of internal system control, according to the Basle Committee;
 - the creation of the Proer program, with the goal of securing the liquidity and solvency of the system; and
 - the creation of the Proes program, with the goal of strengthening the public financial system at the state level.

One of the most important steps taken by the Brazilian government in restructuring its financial system was the effort towards mergers, acquisitions, incorporations and transfer of ownership control, intensified with the Proer program, instituted in November 1995. The program consisted in creating a special line of financial assistance for the administrative, operational and ownership reorganisation of financial institutions. This process deepened in the following years and concentration in the bank industry increased as a consequence. In December 1994, the ten largest banks in the country accounted for 63% of the system's total assets and the twenty largest for 76%, while in December 1998, these numbers went up to 68% and 81%, respectively. Another tendency was the increase in participation of privately owned institutions in the banking system, which grew from 49% in December 1994 to 54% in December 1998. These two trends have been playing an important role in making the system more solid and reliable.

Another major move in Brazil's transforming financial system was the implementation of the Proes program, in August 1996. The plan consisted in either privatising, liquidating or changing the role of public state-level banks. At the beginning of the program, the public state financial system was composed of 35 institutions and by the end of all processes it is expected that just about nine state level banks will remain. So far, from the 26 institutions which have entered the program, 10 were privatised, 5 were extinct and 11 became foment agencies. The highlight of the program was probably the acquisition of the Banerj (the Bank of Rio de Janeiro) by the Banco Itaú, the second largest private bank in the country. The Proes played a major role in making the system more solid and healthy, decreasing the leverage ratio of multiple and commercial state-level banks (credits/net assets) – from 15% in June to 9% in December 1996 –, and increasing the share of provisions in respect to delayed credits and credits in liquidation.

The increasing participation of foreign banks in the Brazilian scene is also a phenomenon that contributed to the country's financial system improvement. The number of foreign banks in Brazil, from June 1995 to December 1998, increased from 37

to 52 (the number of foreign controlled national banks grew from 20 to 36) increasing the participation of foreign banks in the total number of universal and commercial banks from 15% to 26% in the period. If we take into account foreign banks' subsidiaries and banks with foreign control, international institutions owned 21% of multiple and commercial banks' total assets by the end of 1998 against 12% in June 1994, and banks with foreign share increased from 6% to 10% in the same period. In this context, an important step was taken when the Banco Real joined forces with the ABN Amro Bank, becoming Brazil's fourth largest private financial group.¹³ The importance of foreign participation in the financial system is especially related to improvements in the quality of services, technology transfer, *spread* reduction (even though better results are still expected on this matter), operational efficiency, their better capacity to absorb macroeconomic turbulence and more facility to protect the system from exchange rate volatility (*hedge*).¹⁴

The technological upgrade of the Brazilian Bank Industry came with the constant need of change and adjustment linked to the turbulent macroeconomic conditions of the past, with the reforms mentioned above and the input of foreign know-how, strengthening the financial system even further. As put by Standard & Poor's [1999], "the need to process transactions in different local currency denominations... and/or refer to a diverse set of multiple indexes, including inflation rates during the hyperinflationary era, forced banks to constantly upgrade their systems" (p. 8). Financial institutions in Brazil have strongly invested in technology not only to improve the processing, payments and telecommunications areas, but also to develop alternative distribution channels. Technology in the Brazilian financial system is of the highest international standards and proofs of this were the highly successful Y2K transition, the advanced services provided by banks and brokers online (through the Internet), the high automation level of the São Paulo stock exchange, and so forth.

All factors mentioned above prevented Brazil from sinking into a financial crisis after the devaluation of 1999. Brazil's financial system is probably the most solid in Latin America because of its diversion, the presence of strong international players, its good automation, capitalisation level and its fairly low leverage ratios: all this backed up by the relatively stable eco-

13 Some of the other major international players in the Brazilian financial system are the BankBoston, HSBC Bank, Citibank., Creditanstalt, Santander, Bilbao Vizcaya, Lloyds, Chase Manhattan and JP Morgan.

14 By the end of 1998, the bank system's external obligations for multiple and commercial banks reached US\$ 50.3 billions. Nevertheless, only 28.7% corresponded to national private banks obligations while 40.3% belonged to foreign banks, which have more facility to honour these debts because they can always count on their headquarters overseas, therefore lessening their vulnerability to volatility.

nommic environment established by the Real plan. To sum up, the main reasons for the system's current good shape are:

- the corrective actions taken after the 1995 crisis, including the Proer and Proes programs.
- the increase of foreign participation in the national financial system.
- the low levels of financial depth and non-performing loans.
- the increase in efficiency brought, among other things, by technology improvements and competition.

7. Conclusions

Contrary to Argentina, where the defence of a *nominal* peso/dollar parity has been the common denominator among the immense majority of economists, in the Brazilian case, the consensus among economists in the country after the Asian crisis was that the exchange rate should be devaluated. The controversy regarded the speed of the process. The government – and those who support its policy – argued that, as long as the rate of nominal devaluation remained constant – or even declined gradually –, in a context of virtually no inflation, currency appreciation would disappear. The critics, on the other hand, were in favour of a discontinuity.

The official line of argumentation before the devaluation can be summarised by the following words of one of the authors of this paper: “Brazil,..., in contrast with England in 1992, is not committed to a fixed exchange rate but a policy of gradual – yet intense – real devaluation of its exchange rate, which has been depreciating at a rate of 7% to 8% a year in a context of inflation close to zero. [Then], as time passes by, exchange rate will become closer to [the] ‘ideal’ point” (Giambiagi [1999]).

The strategy had two drawbacks. First, it was based on the premise that the rest of the world would continue to finance the country, what actually turned out to be wrong. Second, the internal cost of this policy, represented by the effect that the announced gradual real devaluation implied over the interest rates, pressuring public debt and limiting the growth potential of the country. On the other hand, the benefit claimed over the maintenance of the policy was obvious: to preserve stabilisation, which the Government thought that could be threatened by the discontinuity of the exchange rate policy.

It is worth registering that, rhetoric aside, the fear towards the inflationary effects of an eventual devaluation was not exclusive to the defenders of the policy. As sincerely stated by one of the most notorious critics of the policy followed until January 1999 – in light of the amazingly low inflation of 1999 –, “even the economists who were more optimistic regarding the realisation of a currency devaluation without the destruction of the stabilisation program, among them myself, none could have predicted such a combination of nominal exchange rate and inflation for 1999” (Batista Jr. [1999]).

To understand why, after devaluation, annual inflation (CPI) was over 50% in Mexico and less than 10% in Brazil, despite the fact that GDP in Mexico suffered a historic fall and Brazil’s a modest growth, will certainly be a theme for research in the Brazilian academic environment for the next few years. Some lines of thought, however, provide a few clues to what could be the correct interpretation of the facts.

Firstly, Brazil did not suffer a complete erosion in its international reserves. Currency fluctuation in Mexico was decided when it was impossible to have another alternative and the Central Bank did not have any room for manoeuvring. In Brazil, fluctuation was also the only way out, but at that time the country still had around US\$ 40 billions in reserves, which represented a certain power to switch directions in the case of an overshooting. This power was actually used, without exaggeration but with favourable results, in certain critical moments.

Secondly, even though GDP had grown in Brazil in 1999, devaluation met the country in the middle of a “valley” on its level of activity.¹⁵ Nevertheless, *at the time of devaluation*, the conditions to practice a generalised exchange rate passthrough were much worse for companies than at the time of the Mexican or Korean cases, who were going through a growth stage.

Thirdly, monetary policy played a preponderant role in disarming inflationary expectations after devaluation. Although it had proven useless in avoiding external crisis, the opportunity cost of continuing with speculation became too high once devaluation had occurred, and the fact that the Central Bank elevated nominal interest rates to 45% when all political pressures pushed to the opposite direction, represented a clear indication that the “anti-inflationary philosophy” that had marked Central Bank’s behaviour in the previous years still stood.

15 In December 1998, immediately before devaluation, the industry level of monthly production seasonably adjusted, according to IBGE data, reached the minimum of the 1997-1998 period, staying 8% below the maximum level before the Asian crisis of 1997 and 6% below the maximum level registered after the recovering from the Asian crisis and before the Russian crisis. In order to have an idea of the intensity of the recessive process that preceded devaluation in Brazil, it is worth recalling that this same level in December 1998 was 9% below the “peak” of December 1994 – four years before! -, at the very boom of the Real plan, and has never been reached again until the year 2000.

Fourthly, despite all fears in contrary that existed before devaluation, the “desindexation” of the economy turned out to be more advanced in Brazil than in Mexico. The decision to announce a nominal adjustment of the minimum wage of less than 5% in April, to start in May, still in the period of relative price turmoil associated with devaluation, was also a decisive issue in the maintenance of stability – in this case, represented by sustainability of annual inflation below one digit.

Lastly, even though the decision was announced when the panic had already been attenuated, the announcement of the inflation target regime, made in June, was another sign in favour of the expectations of the economic agents regarding a relatively well-behaved inflation.

The fact, though, is that *devaluation seems to have been relatively “cheap” for Brazil*. In other words, the Government firmly resisted to the devaluation pressures during many years because of the assumption that the inflationary repercussion of changing currency policy would be too elevated. After more than one year of the devaluation, with the country resuming growth and inflation staying below two digits and having taken a path of clear decline again – measured by the 12-month indicator –, it is valid to recognise that the cost of devaluation was actually low in Brazil.

It seems that there is no way to make a balanced analysis of the role of the IMF in the success of the economic policy without concluding that, in general terms, the IMF agreement and the economic policy that followed it were actually good for Brazil. The “liquidity mattress” represented by the US\$ 42 billion loan permitted Brazil to overcome dramatic circumstances; interest rates were elevated in the right moment and reduced in the right speed and intensity during 1999; the severe fiscal measures taken radically changed the economic context of the country – traditionally seen as reckless in fiscal matters; inflation did not increase substantially; and the country resumed growth, in seasonably adjusted terms, right after devaluation – even though the negative carry over inherited from 1998 kept this growth from being better in 1999.

On the other hand, the IMF also committed mistakes in the case of Brazil. Three of them were important at the time. The first was the clause with the reserve requirement established in the first agreement which, as we stressed, limited the room of authorities for initiatives in defence of the original parity before devaluation. Even though one might understand that it was difficult to lend US\$ 42 billions to a country with a negative background such as Brazil, objectively this limitation ended up contributing to the speculations against the continuity of the currency policy practiced until January 1999.

IMF's second mistake was having contributed to the paralysis that took over the authorities in the first weeks of the crisis, after devaluation. Regardless of eventual divergences that may have existed between the former Central Bank President and the Finance Minister, and the difficulty to implement a stabilisation program without having voted the fiscal measures of the adjustment, it seems that having stayed passively watching the daily increase of the dollar (in average, of more than 4,5% *per business day* between January 14 and 29) was a mistake, to which IMF's delay to re-establish the negotiations with the country also contributed.

Having let the dollar reach R\$ 2.00 again in the second half of 1999 – without revising the allowance to spend part of the reserves in the currency market – after having dropped to R\$ 1.65 following the initial overshooting was the third mistake, which explains in part the spasmodic inflation increase in the end of 1999. At the time, authorities hid themselves under the old saying that “with a fluctuating exchange rate regime, the exchange rate fluctuates”, when actually, as well stated by professor Ilan Goldfajn from PUC, Rio de Janeiro, for a country like Brazil, “a fluctuating exchange rate is good when it does not fluctuate”. It was obvious that a new round of dollar appreciation would trigger a new series of price increases and that economic authorities would like to avoid this. However, they found themselves with their hands tied because the terms of the intervention margin in the currency market had not been negotiated with the IMF yet. A better acceptance by the IMF of these rule changes – giving more power of manoeuvring to the Central Bank – would have been desirable. A prove of this is that the only announcement of the terms of this new agreement contributed to “break” the dollar's quotation, which closed at R\$ 1.79 at the end of the year.

Aside from these topic reflections, one relevant issue that is inserted in the future agenda of the country is the exchange rate regime that should be the “permanent” one in Brazil. The experience of controlled exchange rate traumatised the country in a certain way. On the other hand, as Paul Volcker reminded the Brazilians in one of his visits to the country in 1999, “pure free exchange rate is something for just two or three countries in the world” and, as already stated in this paper, this “purity” led to a high inflation in the second half of 1999 for not having halted the merely speculative demand pressure for dollars.

If the Brazilian experience with a (almost) fixed exchange rate was negative and if pure fluctuation also brought problems, what type of regime should be targeted for the future as a form to minimise the drawbacks associated to these two types of extreme regimes? This is an incipient debate in Brazil, but which will probably intensify in the next months or years and could lead to the adoption of some type of regime similar to Mexico's, with daily

forms of intervention by the authorities with the goal of reducing volatility.

Finally, it is worth reflecting over the potentialities of the Brazilian economy and the long term effects of the modernisation which the Brazilian enterprises went through in the past 10 years (Franco [1999b]; Moreira [1999]). Despite the different economic policies applied in the period, there is a common denominator in the evolution of the Brazilian economy since 1990: the adoption of policies vaguely denominated “market friendly” and the modernisation of Brazilian companies. In the first half of the decade this was dimmed, however, by truly impressive levels of inflation – the price variation rate in 12 months, measured by the General Price Index of Fundação Getulio Vargas, was 5154%, when the Real Plan was adopted in June 1994. In the following years, inflation dropped drastically but public debt increased and the external deficit – which practically did not exist in 1994 – became a major problem. In 1999, measures were taken in order to correct these two unbalances but inflation increased and income per capita dropped once again.

From 2000 on, though, Brazil has all the conditions to initiate an expansion cycle such as it has not had since the 1970s, even though circumstances point to lower rates. The two unbalances – fiscal and external – mentioned above are starting to fade out, inflation is going down again and in the official scenario the combination of a lower country-risk and decreasing domestic interest rates can stimulate growth, improve revenues, deepen the fiscal adjustment, provide new drops in the risk indicators and generate a virtuous cycle of growth and reduction of risk premium.

In this case, the permanence of an expressive inflow of foreign direct investment (FDI) could gradually reduce the external vulnerability of the country. The evolution of FDI flow is one of the most impressive transformations observed in the Brazilian economy in the last 5 years. Even without counting the portfolio inflows and discounting the Brazilian investment outflows, FDI's net inflow in the country, which had been in average around US\$ 1 billion a year for the 1980-1994 period, went up to US\$ 3 billions in 1995, US\$ 10 billions in 1996, US\$ 16 billions in 1997, US\$ 23 billions in 1998, and US\$ 28 billions in 1999. The perspective is that the continuity of a net inflow of external long-term resources of around 3% of GDP would finance most of the current account deficit and, also, would allow for a drop in the indicators of Net External Debt/Exports and Net External Debt/GDP. Even though the amplified external debt – which includes the foreign capital stock in the country – may not vary substantially, its composition change, with the change of external debt for long-term investment, would make the country less vulnerable to the abrupt fluctuations in the international finance scenario. With inflation – if Government intentions prevail – going back to

Appendix
Brazil: Economic Indicators

	1993	1994	1995	1996	1997	1998	1999	2000/a
GDP (US\$ billion) /b	429,7	543,1	705,5	775,8	801,6	775,7	556,8	635
GDP Growth (%)	4,9	5,9	4,2	2,7	3,6	-0,1	1,0	3,5
Investment (% GDP, 1980 constant prices)	14,4	15,3	16,7	16,5	18,4	18,0	17,0	17,5
Investment (% GDP, 1990 constant prices)	18,5	20,0	20,6	20,3	21,5	21,3	19,0	19,6
GDP Deflator (%)	1996,2	2240,2	77,6	17,4	7,1	4,3	11,3	11,0
Real Interest Rate (%) /c	7,1	24,4	33,1	16,6	16,4	26,5	4,7	10,5
Unemployment – IBGE (%)	5,3	5,1	4,6	5,4	5,7	7,6	7,6	7,8
Current Account Deficit (% GDP)	0,1	0,2	2,5	3,1	4,2	4,3	4,4	4,0
National Accounts (% GDP, current prices)								
Final Consumption	77,8	77,5	79,5	81,0	80,9	81,4	n.a.	n.a.
Private	60,1	59,6	59,9	62,5	63,1	63,6	n.a.	n.a.
Government	17,7	17,9	19,6	18,5	17,9	17,8	n.a.	n.a.
Gross Capital Formation	20,9	22,2	22,3	20,9	21,7	21,3	n.a.	n.a.
Investment	19,3	20,8	20,5	19,3	19,9	19,9	n.a.	n.a.
Change of Inventories	1,6	1,4	1,7	1,7	1,8	1,4	n.a.	n.a.
Goods and Non-factors Services	1,4	0,4	-1,8	-1,9	-2,6	-2,7	n.a.	n.a.
Exports	10,5	9,5	7,7	7,0	7,6	7,4	n.a.	n.a.
Imports	9,1	9,2	9,5	8,9	10,2	10,1	n.a.	n.a.
Total	100,0	100,0	100,0	100,0	100,0	100,0	n.a.	n.a.

/a Author's forecast.

/b GDP divided by the average exchange rate (R\$/US\$).

/c Gross rate (SELIC). Deflator: "Centered IGP".

n.a. = not available.

Sources: IBGE and IPEA.

international levels, public debt resuming a declining trajectory – as a percentage of GDP, current account deficit controlled in approximately 3% of GDP, and in a scenario of no major crises in the international scene – which is the “big if”-, the country would gather the conditions to stand out in the performance expected for the emerging economies in the next years.

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