

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Bacha, Edmar L.

# **Working Paper**

# Debt, stabilization and growth: brazilian based reflections

Texto para discussão, No. 139

### **Provided in Cooperation with:**

Departamento de Economia, Pontifícia Universidade Católica do Rio de Janeiro

Suggested Citation: Bacha, Edmar L. (1986): Debt, stabilization and growth: brazilian based reflections, Texto para discussão, No. 139, Pontifícia Universidade Católica do Rio de Janeiro (PUC-Rio), Departamento de Economia, Rio de Janeiro

This Version is available at: https://hdl.handle.net/10419/186386

### ${\bf Standard\text{-}Nutzungsbedingungen:}$

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



# DEPARTAMENTO DE ECONOMIA PUC/RJ

Outubro de 1986

TEXTO PARA DISCUSSÃO

Nº 139

DEBT, STABILIZATION AND GROWTH: BRAZILIAN-BASED REFLECTIONS

Edmar Lisba Bacha



**CINPEC** Esta publicação foi impressa com a colaboração da ANPEC e o apoio financeiro do PNPE



DEBT, STABILIZATION AND GROWTH: BRAZILIAN-BASED REFLECTIONS

Edmar Lisboa Bacha September 1986

# 1. INTRODUCTION [1]

This is an interim assessment of the Brazilian experience with external and domestic adjustment to the debt crisis of the ninety-eighties. Rather than a revision of facts and figures, what follows attempts mostly to call attention to some salient features of this important Latin American case.

We first review the external shocks of the early eighties and the external adjustment which followed. Attention is then shifted to the difficulties of domestic adjustment. The monetary reform program of February 1986 is reviewed next. The paper concludes with a brief discussion of the country's economic perspectives.

### 2. SHOCKS AND EXTERNAL ADJUSTMENT

The Brazilian economic miracle which started in 1968 was interrupted in 1973, by a combination of the first oil shock with

successful transformation in the trade position was guaranteed by both structural and relative-price measures. Thus, the emphasis on import substitution investment in oil since the early seventies allowed an increase in the share of domestically supplied oil in total domestic consumption from 20 to 40 percent between 1980 and 1984. At the same time, a significant devaluation of the real exchange rate, by 18 per cent between 1980 and January 1985 (CEMEI/FGV) propelled the desired short-term supply and demand adjustments.

The turn around of the trade figures was sufficiently strong to allow Brazil in 1984 to start paying the interest bill on its foreign debt without the need of "new" money. In fact, interest payments went up from \$6.3 billion in 1980 to \$10.1 billion in 1984. Nonetheless, Brazil's current account, which was a negative \$12.8 billion in 1980, shifted to a positive figure of \$166 million in 1984. On a flow basis, the external adjustment was thus completed in 1984, and this explains why Brazil could drag its feet on IMF's demands for additional domestic adjustment.

The successful completion of the external adjustment on a flow basis did not mean that Brazil's debt problem was solved. On the contrary, as a proportion of exports, interest payments were higher in 1984 than in 1980 (37.3 per cent as compared to 31.3 per cent). The ratio of net debt over exports, on the other hand, was up to 3.0 in 1984 from 2.3 in 1980 (Carpeiro). In other words, Brazil was able to solve its external liquidity problem,

Chronic inflation has been as important a part of Brazil's economic life as coffee beans used to be of its past. The most impressive thing about Brazilian inflation was not so much that it was so high, but that it did not accelerated rapidly, as both the Phillips curve and the German hyperinflation would lead one to believe. In fact, Brazilian economists of different persuasions were convinced that the country's virulent inflation had little to do with excess demand theories, of either the monetarist of the Keynesian variety. After a series of failed attempts at controlling Brazilian inflation through monetary stringency, even the IMF was finally conceding that in Brazil demand contraction was a very inefficient way of reducing inflation, because of the widespread backward looking indexation schemes, which characterized most nominal contracts in the country. Econometric exercises by Brazilian economists agreed in that a 10 percentage point increase in excess capacity would provoke a 10 percentage point reduction of inflation (Modiano; Cysne). This is in line with the Phillips curve results for the U.S. However, the U.S. would start from a inflation plateau of 10 per cent per year, while Brazil's hovered around 220 per cent per year. Hence, increasing unemployment by 10 percentage points would eliminaté U.S. inflation, but would reduce Brazil's to only 210 per cent.

The situation was one in which all economic agents, after a long learning period, had developed a myriad of formal and

per cent backward indexation at fixed six-month intervals. At any particular month, roughly 1/6 of the wage bill was due for readjustment. The exchange rate was a crawling peg, which went up daily, according to last month's inflation rate. (These minidevaluations were at times superseded by a mididevaluation, as in the second quarter of 1985, or more rarely by a maxidevaluation, as in December 1979 or February 1983.)

Industrial prices responded swiftly to domestic wage and import price pressures, with roughly constant mark-ups. It was the lagged wage adjustment which made inflation jump to a new plateau, rather than accelerate continuously, when a supply shock occurred, as caused by OPEC, a crop failure, or a maxidevaluation.

In this context, maxidevaluations are inflationary — but they work. Costs go up, but the relative attractiveness of exporting or replacing imports increase. Industrialized Brazil reacts as expected, expanding exports and replacing imports. The trade balance improves at the cost of a higher inflationary plateau. This had been the experience of Brazil since the mid-sixties. The conclusion is unavoidable that inflation jumped from 100 to 220 per cent per year mostly as a consequence of the February 1983 maxidevaluation, which was forced on the government by the need to produce the megatrade surpluses of the subsequent periods.

sector debt service, both domestic and foreign, is taken care of. But consider the following qualitative argument. Since the early eighties, the Brazilian government offered the private sector the opportunity to prepay its foreign debts through the deposit of an equivalent amount in cruzeiros to a special account at the Central Bank. Facilities also existed to provide subsidized domestic credit to private firms anxious to get rid of their foreign currency denominated debts. The propensity to use these facilities increased enormously after 1982, as the real devaluation of the cruzèiro significantly raised the cost of carrying foreign debt. Thus, foreign currency deposits in the Monetary Authorities were equal to the monetary base in December 1982; in the following period, the ratio between them changed markedly. During the second half of 1984, the foreign currency deposits in the Monetary Authorities became nearly three times as high as the monetary base.

As the private firms deposit in the Monetary Authorities the cruzeiro equivalent of its foreign debt, the Brazilian government loses the opportunity to finance itself through the inflation tax. In fact, the government exchanges with the private sector an interest-free cruzeiro liability for an interest paying dollar liability. When it extends cheaper domestic credit to replace private foreign debt, the government loses future revenue to the tune of the negative interest rate differential embedded in this subsidized financial intermediation. In both cases, the government budget is burdened by new expensive financial

The critical nature of Brazil's budged deficit problem is revealed by the fact that in 1985 the federal government paid \$12 billion of foreign and domestic interest. This is equal to no less than one half of its total tax intake. The fact that non-interest spending was not larger than the tax intake itself was of little help, except to ensure that the value of the government non-monetary liabilities would grow by no more than the interest rate on its outstanding debt. Both social spending and government infrastructure investment are well below requirements. Hence, the fiscal crisis of the Brazilian state poses an unusual challenge for economic policy makers in the near future.

### 4. THE CRUZADO PLAN

The monetary reform program, known as Cruzado Plan, which was implanted in February 28, 1986, derived from the conception that inertia was the single most important explanation for Brazil's high inflation rate. Neither Keynesian gradualism nor monetarist shock treatment were up to the task of dealing with inertial inflation. For both were based on demand contraction, a very indirect and costly way to break the social contracts sustaining inflationary inertia. A radical rupture with the past, through a comprehensive monetary reform program, was required to cope with the problem (Arida and Lara Resende; Lopes). Four interrelated sets of measures were adopted; the introduction of a

average real value in the old currency [3]

Consider now the problem of preserving "neutrality" for debt instruments with fixed nominal interest rates. Supposedly, the parties of this contract shared an inflation expectation at the time in which this contract was signed, which was based on currently observed inflation rates. With the sudden elimination of inflation, a corresponding deflator needed to be adopted for these interest rates in order to preserve neutrality in the relationship between creditors and debtors. This was achieved by converting future cruzeiros into cruzados at a daily depreciating rate, equal to the observed inflation in cruzeiros during the three previous months. By contrast, debt contracts with a "monetary correction" or indexation clause (plus a real interest rate on top of it) had their values updated according to the price level change observed between the date of their last readjustment and the day of the Reform, also ensuring a neutral conversion of capital values. Afterwards, however, no additional "monetary corrections" were allowed for short-term financial instruments.

The outlawing of short-term indexation combined with the fixing of the exchange rate between the cruzado and the dollar, and the daily devaluation of the cruzeiro vis-a-vis the cruzado, to guarantee that government debt service would stop increasing with inflation (Less than 20 per cent of the indexed domestic debt was longer than one year, which was the period beyond which

## 5. ECONOMIC PERSPECTIVES

The Brazilian economy is booming again, after the recession interlude of 1981-84. Viewed from a distance, the country would seem to be have been able to combine the best of all possible worlds, simultaneously achieving record rates of GDP growth, inflation stabilization, and steady trade surpluses.

However, it is not all roses. Fixed investment rates are well below required for the maintenance of 7-8 per cent GDP growth, which Brazilians are aiming for. The fiscal position of the State is very shaky, even without the required expansion of social expenditures and infrastructure investment. Firms' complaints against the freeze and violations thereof are increasing. Labor unions' wage demands are hardly in consonance with a regime of price stability. Consumers' lines at food stores are increasing and supply shortages mounting. Some of these problems are short-term, and require the introduction of aggregate demand control measures and the establishment of a consensual incomes policy in lieu of the price freeze. Others are medium term, and require both a fiscal reform and an alleviation of the burden of external debt service. A Constitutional Assembly will be elected on November 15, 1986. After that, current short and medium term economic problems will need to be tackled with new innovative domestic and foreign initiatives.

Monetaria. Rio de Janeiro: Editora Campus, 1986

Modiano, E., "Salarios, precos e cambio: multiplicadores dos choques numa economia indexada", Pesquisa e Planejamênto Economico, 15(1), April 1985: 1-32.

Tobin, J., "Diagnosing inflation: a taxonomy", in M.J. Flanders and A. Razin (eds.), Development in a Inflationary World. Academic Press, 1981: 19-29.

- 79. Werneck, R.F. "Uma Análise do Financiamento e dos Investimentos das Empresas Estatais Federais no Brasil, 1980-83".
- 80. Bacha, E. e P. Malan, "Brazil's Debt: From the Miracle to the Fund".
- 81. Lara Resende, A. "A Moeda Indexada: Nem Mágica nem Panacéia".
- 82. Bacha, E. "O Fim da Inflação no Reino de Lisarb".
- 83. Abreu, M.P. "A Divida Pública Externa do Brasil, 1824-1931".
- 84. Arida, P. "Economic Stabilization in Brazil".
- 85. Arida, P. e A. Lara Resende; "Inertial Inflation and Monetary Reform in Brazil".
- 86. Carneiro, D.D.; "O Conceito de Liquidez e o Comportamento de Alguns Indicadores para a Economia Brasileira".
- 87. Arida, P. "Macroeconomic Issues for Latin America".
- 88. Carreiro, D.D. "Growth Perspectives for Indebted Latin America: A Note on Major Issues".
- 89. Correa do Lago, L.A. "O Surgimento da Escravidão e a Transição para o Traba lho Livre no Brasil: Um Modelo Teórico Simples e uma Visão de Longo Prazo".
- 90. Lopes, F.L. e E. Modiano; "Determinantes Externos e Internos da Atividade E corômica no Brasil".
- 91. Werneck, R.L.F. "A Questão do Controle da Necessidade de Financiamento das Empresas Estatais e o Orçamento de Dispêndios Globais da SEST".
- 92. Fraga Neto, A. "German Reparations and the Brazilian Debt Crisis: A Comparative Study of International Lending and Adjustment".
- 93. Werneck, R.L.F. "Empresas Estatais, Controle de Preços e Contenção de Impor tações".
- 94. Modiano, E.M. "O Repasse Gradual: Da Inflação Passada aos Preços Futuros".
- 95. Fraga Neto, A. "Price Uncertainty and the Exchange-Rate Risk Premium".
- 96. Fraga Neto, A. "Indexation and Inflation in Brazil".
  - 97. Bacha, E. "The Future Role of the International Monetary Fund in Latin Ameri ca: Issues and Proposals".
  - 98. Fraga Neto, A. e A. Lara-Resende; "Déficit, Dívida e Ajustamento: Uma Nota sobre o Caso Brasileiro".
  - 99. Modiano, E.M. "A Inflação e a Moeda Indexada".
  - 100. Bacha, E.L. e R.E. Feinberg; "The World Bank and Structural Adjustment in Latin America".
- 101. Camargo, J.M. "NRB Products Boom and Industrial Growth in Brazil: 1967-1980".

- 126. Amadeo, E.J. "On Money Wages: Keynesian and Monetarist Critiques of Keynes's Closure of the Labor Market"
- 127. Abreu, M.P. "Política Social no Brasil: A Relevância dos Paradigmas Históri cos e Comparativos".
- 128. Moraes, Pedro B. e Luis Serven. "Dollarization and Credibility: An Analysis of the Mexican Experience".
- 129. Lopes, Francisco. "Inflation and External Debt Problems in Latin America".
- 130. Abreu, M.P. e Fritsch, W. "Exogenous Determinants of Trade and Debt Paiterns in Latin America".
- 131. Bacha, E.L."A Inércia e o Conflito: O Plano Cruzado e Seus Desafios".
- 132. Dutt, A.K. "Growth, Distribution and Technological Change".
- 133. Wernack, R.L.F. "Retomada do Crescimento e Esforço de Poupança: Limitações e Possibilidades".
- 134. Modiano, E.M. "Mitos e Fatos sobre o Setor Público Brasileiro".
- 135. Moraes, P.B. "The Brazilian Stabilization Program of 1964: Price Guidelines cum Credit Restrictions".
- 136. Camargo, J.M. "Ajuste Estrutural e Distribuição da Renda".
- 137. Saldanha, F. "Fixprice Analysis of Labor-Managed Economies".
- 138. Carneiro, D. "Stabilization Policies and Adjustment: The Brazilian Economy in the Eighties".



UD.