Growth prospects after stabilization: issues and challenges*

Dionísio Dias Carneiro**

Summary: 1. Introduction; 2. Growth constraints, the interest rate and the exchange rate; 3. Constrained growth in the 80s: a three gap view; 4. Conclusions and the challenges after stabilization.

1. Introduction

Is the defeat of inflation following a successful stabilization program sufficient to restore growth in the Brazilian economy? If international experience is useful to provide insights, the evidence is at best contradictory. There are cases like Mexico (see Lustig, 1992) in which the fall in inflation in the context of a successful Brady arrangement was able to reduce overall uncertainty thus increasing the country attractiveness to investors, both domestic and foreign. In other cases, like Bolivia (see Morales, 1992), the end of inflation and overindebtedness was not able to open the way to dramatically change the country's growth prospects. In Brazil, until very recently high inflation was not judged to impair the country's growth proneness, whereas stabilization carried the stigma of high costs in terms of either wage repression as in the mid-60s or politically unbearable growth recession as in the mid-70s. As a result, the political economy of inflation stabilization has always weighed heavily the scales of political support against inflation control and in favor of increasing the degree of indexation as a means to live with the illness rather than taking the strong medicine to fight it.

A change in prospects came in the second half of the 1980s, following the dramatic decrease in economic growth. In view of the high inflation rates (from 100 to 200 percent or more) in which recession started, there was scarcely any voice asking for more inflation as a means to accommodate conflicting claims. In hindsight, an inquiry on the reasons behind the slowdown of the Brazilian economy in the 80s has to face four main facts: the upsurge of inflation, the external debt crisis, the fall in investment, and the disappearance of public savings.

The objective of this paper is to bring these issues together under a minimally consistent analytical setting, so as to try and examine the prospects for economic growth following macroeconomic stabilization. It discusses issues bearing on the long run prospects for Brazilian economic growth between the second half of the 90s and the next decade, drawing lessons of the recent literature on the relationship between government expenditures and economic growth. Section 2 presents a brief description of an analytical model used as a guide in section 3 to the review of economic performance after the second oil crisis, with

* The author is grateful to Luciana Sá for general discussions and corrections of an early draft as well as for the use of joint research results especially in section 3, and thanks Marcos Almeida for research assistance. Errors are all mine.

** From PUC-Rio, Department of Economics.

special reference to the constraints which bound Brazilian economic growth. Section 4 summarizes the issues and challenges which will have to be faced to restoration of economic growth in a more durable basis than has been possible in the last upsurges of economic activity.

2. Growth constraints, the interest rate and the exchange rate

In spite of being one of the fastest growing economies in the world in the present century, it has become questionable in the recent years whether Brazilian growth prospects can be safely inferred from its past dynamism. In fact, per capita income has been multiplied by a factor of five between 1940 and 1980 in 1990 US dollars, whereas population was multiplied by three, but between 1980 and 1992 there was a fall in per capita income of around 7 percent, although population growth slowed down to 1.9 percent. Real GDP exhibited a rather steady annual average growth rate of 7 percent between 1940 and 1980 to grow only 1.2 percent per annum between 1980 to 1992.[1]

Political obstacles to the adoption of adequate stabilization policies is certainly one reason behind this dramatic change in economic performance. Long run adjustment following and adverse shock such as the oil shocks of the 70s usually may be helped by policies affecting interest rates and the real exchange rates so that the correct signals are transmitted to savers, investors, exporters as well as importers. In practical terms, however, the final movement of some macroeconomic variables are not obtained unless some measures are taken (nominal devaluations and cuts in public spending are the most common prescriptions) which contract the level of activity at least in the short run, although the purpose is to curtail domestic absorption. The difficulties associated with such policies are easily understood when one recalls what was the dominant view on the role public expenditures were expected to play in the restoration of economic growth following the first oil crisis.

In the second half of the 70s, federal government funds were abundantly used for the redirection of investment which was necessary to diversify exports as well as to encourage (through subsidies and tax expenditures) private investors to commit themselves with an ambitious investment program aimed at adjusting supply to the new prospects of energy prices. Such policies had of course a rather unfavorable impact on government finances. Thus the budget prospects worsened because of the fall in tax revenues, the increase in public investment requirements and finally, the growing public debt.

The macroeconomic logic of the two gap models in the tradition of Chenery-Bruno (1962) has been widely revived in the late 80s in order to analyze policy conflicts following the debt crisis. The addition of a fiscal gap has increased the model's usefulness as a tool for the policy analysis.[2] The usual criticism of the two and three gap approach, however, is that little attention, if any, is given to the role price corrections usually play in structural adjustment policies.

A model in the gap tradition yet making explicit the price movements and the adjustment of the gaps may be described in very simple terms. The idea of gaps derives from ex-

[1] In only six of the forty years, growth rate was below 4 percent, and only in 1942 there was a decline in GDP due to the war-time shortages. After 1980, GDP declined in 1983, 1988, 1990 and 1992.

[2] See for example, Bacha (1982, 1989), Carneiro & Werneck (1989) and Taylor (1993). Sá (1993) presents a rather complete review of the more recent literature.

istence of constraints (usually of financial nature, be it in foreign exchange or in domestic resources, public or private) to investment expenditures. In the short run (which may last long if the government somehow blocks the movement of prices) disequilibria between planned levels and actual levels of investment are solved by means of some "practical rule" which takes care of crowding out excess expenditures. Of course, the most common are inflationary finance and balance of payments crises due to shortages of foreign exchange.

The usual framework of three gaps may be easily grasped starting with the decomposition of total savings into its three components, private, public and foreign savings, the latter defined by the current account deficit. Macroeconomic equilibrium will be defined by equating total savings to total investment (private plus public). Total investment and its productivity then defines the maximum growth rate attainable in a given horizon, according to the (a) total availability of savings; (b) the possibilities of transfering savings between the public and the private sectors. This transfer is done by the available forms of deficit financing between the two "sectors". In the past experience of the Brazilian economy, different forms of financing have occurred. In the late 60s and early 70s, the public sector surplus resulting from the financial reforms was transferred to the private sector either by cheap credit or by direct subsidies generally implying negative interest rates and/or an overvalued currency. This means of course that allocation of public savings (either for public investment or to finance private investment) as well as of foreign exchange under control of the Central Bank was essentially administrative, with an eye on sectoral "priorities" and in anticipation of shortages. In the late 70s the private sector surplus was transferred to the public sector in the form of increasing public debt, with increasing interest rates.

One may assume that this long run equilibrium of macroeconomic flows in the domestic economy as being determined by interest rate (r) movements by means of two relationships, given the exchange rate (e) as well as policies determining the degree of openness, the level of productivity enhancing activities and so on summarized in the parameter Ω_i. The first relationship defines g_h, the maximum growth rate allowed by the fiscal constraint:

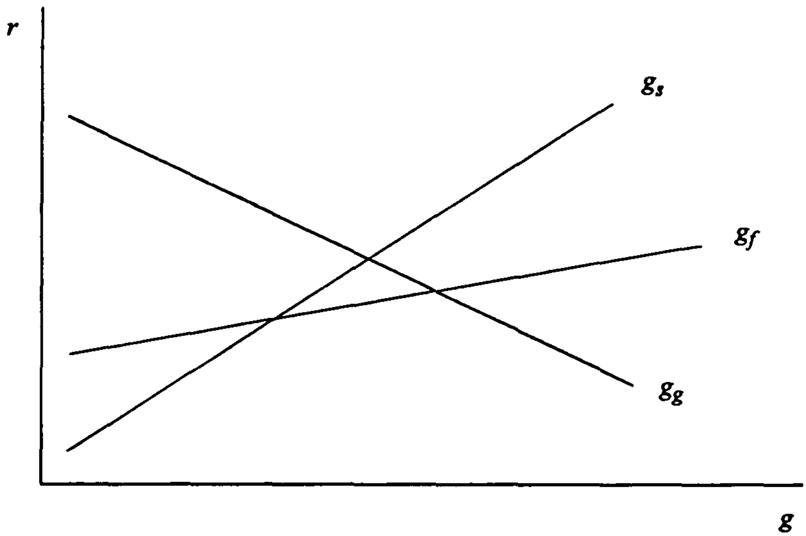
$$g_h = g_h(r,\ e;\ \Omega_1) \tag{1}$$

The second one, g_s, is the maximum growth rate consistent with the savings constraint:

$$g_s = g_s(r,\ e;\ \Omega_2) \tag{2}$$

It will be supposed that the effect on the real interest rates is negative on the fiscal constrained rate of growth defined by (1) since higher interest means that higher deficits are required so as to absorb private savings to finance public investment (as in the late 70s), whereas the effect of higher interest rates is positive on the savings-constrained rate of growth (2), since we keep constant the external interest rate and disconsider new external debt scenarios. In this case, higher domestic interest rates will draw a higher volume of foreign savings into the country.

The system formed by equations (1) and (2) defines thus for each level of real exchange rate e the values of the equilibrium growth rate and real interest rate consistent with the savings constraint and with the budget constraint. The figure illustrates the long run domestic equilibrium. Domestic equilibrium means here that total savings are sufficient to finance total investment (public plus private) and furthermore that the interest rate is consistent with the fiscal deficit to be financed. There is no guarantee, however, that at the real exchange



rate used to define both loci, the amount of foreign finance attracted by the combination of r and e will be sufficient to close the balance of payments. Thus, even if the government allocates resources disregarding price consistency, its current account surplus, as well as the foreign exchange under its control, pressures from an overvalued currency and/or from a real interest rate that is too low for flow consistency (possibly signalling an inconsistency between consumption and investment plans for the economy as a whole) are bound to be disruptive in the long run. In practice, failure to recognize the macroeconomic inconsistency of administrative allocation of savings and foreign exchange leads to the piling up of debt, domestic or external. Economic growth will then eventually be halted by either a Ponzi internal debt or an external payments crisis.

A third locus g_f could than be defined as the combination of growth rates and interest rates consistent with external equilibrium.

This locus, defined similarly to the previous two, would be increasing since higher growth rates requires higher imports of capital goods and *coeteris paribus* a higher interest rate to finance a higher current account deficit. Consistency between the interest rate and the exchange rate will occur only if the external constraints meet the other two at the same point. If at the domestic equilibrium interest rate, the growth rate warranted by the external constraint is smaller, and elasticities are not perverse, a real devaluation of the exchange rate would be necessary in order to promote general equilibrium.

This simple framework will next be applied in to analyze the movements of the constraints to economic growth of the Brazilian economy in the 80s.

3. Constrained growth in the 80s: a three gap view

Following the first oil crisis of the 70s and the ambitious investment program of the II National Development Plan aimed at long run supply adjustment, the Brazilian economic growth was made possible essentially by the availability of foreign finance and the use of a significant amount of public sector savings. In 1974, at the outset of the adjustment strategy, total public savings were of around 7 percent of GDP and net external debt was negligible, in view of the abundance of foreign finance. By the end of the Geisel government, the strain on government finance was clear as public savings had been cut to one half in 1979. With the second oil crisis and the increase in external lending rates to Brazil, domestic macroeconomic inconsistency led to an acute balance of payments crisis which forced the government in the early 80s to finally increase real interest rates and devalue the currency.[3] Tables 1 and 2 summarize the overall economic performance for the variables of interest here.

Table 1
Brazil: growth, inflation and investment

Periods	Growth rate	Inflation rate	Investment growth rate	Investment
1978	4.93	40.80	4.75	23.52
1979-80	8.24	93.00	6.52	22.83
1981-82	-1.96	97.44	-9.55	20.13
1983	-3.45	211.00	-16.10	16.84
1984-86	6.93	161.66	11.00	17.06
1987-89	2.26	933.79	-1.59	17.13

Source: IBGE — National Accounts Department.

Table 2
Brazil: selected itens of the capital account
(as % of current prices GDP)

Periods	Public sector savings	Foreign savings	Gross investment
1978	5.06	3.47	23.03
1979-80	4.07	5.13	23.24
1981-82	2.84	5.12	22.09
1983	0.46	3.37	16.68
1984-86	0.94	0.69	18.01
1987-89	1.07	-0.34	23.32

Source: IBGE — National Accounts Department; Carneiro & Werneck (1993).

In an unpublished MA thesis, Luciana Sá (1993, chap. 3) uses a modified version of the three gap model with stylized parameters for the Brazilian economy developed in Carneiro

[3] The periods are analyzed in Carneiro (1989) and Carneiro & Modiano (1989). And the changes in the relative positions of the private and the public sector are analized in Carneiro & Werneck (1993).

& Werneck (1990) to check the changes in the constraints to economic growth, as Brazilian economic policy responded to the changes in the global economy in the 1980s. Table 3 summarizes her findings.

Table 3

Periods	Relevant constraint	Maximum public investment	Excess of public investment
1978	fiscal	5.7	2.5
1979/80*	foreign	-23.4	-
1981/82*	foreign	1.3	3.1
1983	fiscal	1.9	4.1
1984-86	fiscal	2.0	4.4
1987-89	fiscal	1.1	4.9

Source: Sá, 1993, chap. 3.
* Loss of foreign reserves in 1980 and 1982 is not considered as part of desired deficit financing.

The results of table 3 suggest that, as expected, public investment, the most important instrument government made use of for the promotion of economic growth, was bound by the fiscal constraint at the end of the Geisel government due to the strain investment expenditures and domestic debt posed on the public sector borrowing requirements. The calculated figures for 1979/80 reveal the implications of the radical change in the external scene, with the dramatic increase in interest rates and the doubling of oil prices for macroeconomic equilibrium. The strictness of the foreign constraints implied that, for macroeconomic equilibrium in the 1979-82 period, a radical reduction of public investment would be mandatory. Since most projects were close to maturity (a variable ignored in such simplified models), what actually happened was the deterioration of the economy's external position. After all, following the Mexican moratorium in 1982 it had to be "financed" by bridge loans and arrears.

These figures illustrate the limits to the growth promotion role of government as well as the role of accommodating changes in crucial prices for long run adjustment.

In the early 80s, after the second oil crisis, without much room in the budget to accommodate the conflicting claims for priority projects and without foreign exchange to finance further supply shifts, the Figueiredo government promoted a drastic change in relative prices through an increase in the real interest rate (1981) and an exchange rate devaluation (1983), and in response to the sudden shrinking of international finance following the Mexican default. Thus, in order to restore the economy's growth capability after 1983, it had to administer the dramatic recessive costs of the change in relative prices.

The excess of public investment over government savings was financed essentially by higher inflation as well as the nationalization of private sector external debt by the Central Bank up to 1985.[4] Then, in the second half of the 80s, the failure of repeated stabilization attempts from the Cruzado Plan in 1986 to the Collor Plans in 1990/91, based on increasingly

[4] See Carneiro (1986) on the nature of the adjustments of the economy following the two oil shocks and Carneiro & Werneck (1993) for the analysis of the effects of the disappearance of foreign finance on the composition of savings and investment in the 1980s.

discretionary intervention on private contracts, led to growing uncertainty in asset markets, a disruption of the pricing mechanisms, a total disarray in the public budget administration and finally a scarcity of private funds to finance public deficit on a voluntary basis.

There were other causes of the interruption of Brazilian long run economic growth performance, besides the above described financial inconsistencies. The economic debate on the nature of adjustment policies during the debt crisis by and large ignored that there was also a gap between the role that was expected from government institutions in the process of resource allocation in the economy and the role the Brazilian State in the post-1980 configuration has actually been able to play. Some of the consequences of this gap are reflected in the long run and can realistically be expected from the Brazilian State as a promoter of economic growth.

First, it may be observed that besides the fall in public investment due to decreasing availability of public savings there was an increasing *inadequacy* of finance through the substitution of inflationary for non-inflationary sources in the financing of overall government deficit.[5] Moreover, inadequate budgeting policies and frustrated stabilization attempts led to growing inefficiency of public apparatus as a result of iniquous and uncertain rules for the definition of the public employees' pay, lack of commitment with long run projects and a general deterioration of public services have all played their role in the process of impairment of the Brazilian State as a *promoter of long term growth.*[6]

Secondly, the incentives policies which had been adopted since the late 60s (following the fiscal and institutional reforms of the military regime in 1964/65) had been based on the ability of the federal government to generate *a large primary surplus*. Furthermore, the financial reforms promoted by the military in 1964-67 had opened ample room for public debt growth.[7] This *domestic debt slack* gave rise to the creation of a variety of successful mechanisms for capturing private sector savings and concentrating financial power in the hands of State agencies. Cheap credit for private investors, easy finance for large government projects in the modernization of infrastructure (energy, transport and communication) and financial support for a variety of subsidies to foster private entrepreneurship in privileged sectors were all part and parcel of the instruments used to channel investment funds — private and public — to the priority projects picked by the federal government planning authorities. By the second half of the 1980s this slack had long been exhausted. The picture of a bankrupt State with difficulty to serve its debt was actually reinforced by an increase in the real interest necessary to finance government borrowing requirements and the aggravating effect devaluation had on the public deficit due to the size of the public debt denominated in foreign currencies.

Thirdly, protectionist trade barriers and sectoral complementarity, which had been a crucial element of the "intelligent State intervention" became, with the crisis of the 1980s, a big umbrella for inefficiency and abuse of market power, a widespread source of rent-seeking, regressive income transfers and corruption. In parallel, as growth prospects deteriorated, prospective earnings of investment projects and inflation aggravated. As the inflationary regime after the widespread short run indexation of financial assets became the rule, capital

---

[5] The facts behind the fall in public savings are analysed in Carneiro & Werneck (1993).

[6] These issues related to the vicious circle of worsening of State performance are explored in Werneck (1993).

[7] On the effects of the financial reforms of the 60s, see Sochaczewski (1980), Goldsmith (1986) and Carneiro & Bodin de Moraes (1988).

gains derived from the imperative of efficient cash management became a main source for profits. Surviving firms had to be managed like banks.

Political redemocratization that took place in the 80s could not be reconciled with the dismantling of the domestic industry protection and privatization of State enterprises. In the name of democracy, governmental institutions were auctioned among political parties supporting the Sarney government and thus politically organized pillage of the State finances led to an inconsistent budget, where nominal spending was determined by the convergence of interests behind the political coalition. On top of that, the new Constitution voted in 1988 crystallized the inconsistency between the decentralization of tax revenue (from the federal to the state and local government vaults) and the concentration of public expenditure commitments in the domain of federal agencies. In such a regime, real government spending ended up being determined *ex-post facto* by an increasingly narrower ability to raise non-inflationary finance plus the necessary acceleration of inflation required to collect seignorage from a shrinking real money stock. Indexation helped to accommodate higher and higher inflation, as well as to nurture the illusion that real values might be preserved under *any* rate of inflation.

4. Conclusions and the challenges after stabilization

The great recession of the 1980s left many challenges unresolved for the resumption of economic growth once stabilization is achieved. Most market-oriented interventions which involved the creation of monopoly power by means of protection barriers, subsidies, tax expenditures and cheap finance to top priority sectors tended to outlive their usefulness once the external environment changed and economic conditions no longer justified the same projects.

Political redemocratization in the 80s did not entail the dismantling of the policy instruments of domestic industry protection or any serious movement in the direction of privatization of State enterprises, except for a by and large isolated action of selling back to the private sector firms which had fallen under the control of the BNDES system due to non-performing loans.[8] In the name of democracy, governmental institutions were auctioned among political parties in exchange for support in Congress to the Sarney government, and by this means the politically organized pillage of the federal finances contributed to increase the inconsistency of the budget. Under the logic of political sharing of the spending power, nominal spending was determined by the convergence of interests behind the political coalition. Whenever there was a conflict between the need for immediate political support and the intention to balance the budget, the pressing need to accomodate political action ended up being more effective than the pressures for budget consistency.

The 1988 Constitution contributed to crystallize the inconsistency, by decreeing a decentralization of tax revenue (from the federal to the state and local government vaults) whereas maintaining the concentration of public expenditure commitments in the domain of federal agencies, since no reform in responsibilities was associated with the decentralization of command over tax receipts. In such a regime, real government spending ended up being determined *ex-post facto* by an increasingly narrower ability to raise non-inflationary fi-

[8] From 1987 to 1989 the BNDES sold 10 firms to the private sector amounting to a total revenue of US$464 million (Mello, 1993).

nance plus the necessary acceleration of inflation required to collect seignorage from a shrinking real money stock. Indexation helped to accommodate higher and higher inflation as well as to nurture the illusion that real values might be preserved under *any* rate of inflation.

The generalized insatisfactory outcome of governmental action in the 80s as witnessed by growth, inflation and balance of payments performance shook the confidence of believers in the role of government in the allocation of investment. At the same time, the visible deterioration of the quality of public services increased the popularity of proposals for a smaller and less active State. Such proposals focused on issues such as the privatization of State enterprises, deregulation of economic activity, de-repression of external trade and liberalization of external financial relations, besides of course the adoption of measures to enhance those State activities related to the provision of public education, public health and urban security.

The victory of Fernando Collor in the 1989 presidential elections, with a reformist speech encompassing several of these issues, and the depth of the institutional reforms contained in the legislation sent to Congress following his inaugural speech were to a large extent overshadowed later on by the failures of the stabilization attempts in 1990 and 1991, as well as by the corruption scandals which led to his impeachment in 1992. But the content of the liberalizing reforms were taken up by his reluctant vice-president Itamar Franco, and the issues pertaining to the transformation of the Brazilian State into a smaller and a more efficient supplier of government services have been incorporated in almost all party programs in Brazil nowadays and will certainly be an important issue in the political agenda of the years to come.

The claim for the need to reform the modes and means of State intervention gained strength, of course, as difficulties in financing traditional government functions such as basic education, the judiciary, public health and security attained a climax during a period of deficit repression in 1991/92. De-repression that came in the fiscal years of 1993 and 1994 contributed to enhance the visibility of the inconsistencies between the role the Brazilian State is expected to play and its ability to do the jobs it must do.

In a recent paper jointly written with Rogério F. Werneck and Marcelo P. Abreu (Abreu, Carneiro & Werneck, 1994) we adopted the view that, in the next phase of Brazilian economic growth, the role of public spending will experience substantial qualitative change. As in the recent trend of the so-called new growth literature, attention was directed to the various (endogenous) ways to incorporate technical progress, both through traditional investment and through the accumulation of human capital by means of better government spending. In that paper, among the parameters defined under the portmanteau variable Ω in section 2, a policy variable was introduced to identify the government expenditures (both classified as consumption or investment which have the property of enhancing investment productivity). Using stylized parameters for the Brazilian economy, we examined the nature of the choice involved in changing the quality of government spending when we consider explicitly the overall consistency of the economy in terms of the three constraints discussed in section 2.

Two tentative conclusions are motivated from that exercise which are important to the discussion of growth-oriented policy choices. First, that the fiscal-oriented growth planner is likely to be fooled if he tries to adopt growth-oriented expenditures to maximize the rate of economic growth when there may be other binding constraints to economic growth. This is the case because the growth-maximizing productivity-enhancing expenditures may be un-

derestimated if the budget-minded planner takes long run growth to be bound by the fiscal constraint when the savings constraint is the actual limitation to economic growth, as it seems to be the case of the Brazilian economy in the most likely post-stabilization scenarios. Pressures for higher consumption will be the most likely consequences of better redistribution of growth benefits and this will certainly be against the idea of higher private savings, while we have seen what happenned to the public sector's contribution to savings in the past years.[9]

The second observation is that the chances that the growth planner will be overlooking the "correct constraint" are higher if the exchange rate and the interest rate are not consistent with growth equilibrium. In a stabilized environment, not only these crucial prices are more visible and therefore more likely to be close to their "long run equilibrium", but also it may be easier for policy-makers to design their spending and taxing policies with an eye on long run issues such as the incentives to save, the level of technical training of the working force, the firms' expenditures in research and development and so on.

Therefore, even in a model which ignores the need for intertemporal consistency, the intuition of a small scope for growth planning using public investment as the main lever of government policy directed to economic growth is thus apparent. Besides, in the Brazilian starting situation of the middle of the 1990s, recovery of the role of the State in investment, which is similar to the experience in the mid-70s, would require a fiscal adjustment which seems far from realistic in view of the present claims for government consumption in items such as security, health and education. Even after a successful stabilization, therefore, the possibilities of restoring public savings to their level in the mid-70s seem virtually impossible.

A few arguments may be given in the direction. First, with the privatization of public enterprises, the end of public monopolies in oil and telecommunications, and a reform of the law which regulates the concession on public services, the provision of public services from the administration of highways and main railroads to ports and telecommunications will be left to the private sector. The role of *public investment* will thus in all likelihood radically change, being confined to those areas where complementarity between private and public capital is unequivocal. In this context, one may imagine public investment requirement to be determined by the level and content of private investment and not the other way around, as it happened in the past experience as described, for example, in Carneiro & Werneck (1989).

Secondly, there are movements which seem strong in the public opinion to reinforce the recovery government expenditures in education, public health, environment, urban security, and science and technology, as well as a radical shift in the level of the decision process of such expenditures from the central government to state and local spheres. As a consequence of the decentralization of spending public power from the federal level to state and local governments, which started with the 1988 Constitution but gained political strength with the mega-inflationary experience thereafter, a large portion of this decentralized expenditures will replace traditional public investment which is implemented in the federal government's firms.

On the savings side, personal savings are likely to be directed mainly to finance private acquisition of homes and other durable consumption goods, which were left behind in the ten years of extremely high inflation in which the provision of credit to the families virtually collapsed. Thus the fraction of private savings which will be channelled to the financing of

---

[9] See section 3 and Carneiro & Werneck (1993, op. cit.).

productive capital accumulation is likely to be composed of two sources: institutional funds such as pension funds and the technical reserves of insurance companies, and retained profits. A smaller domestic savings rate is thus more likely to occur after stabilization. Growth rates will probably be constrained by savings in this scenario.

In the arena of the possibilities of growth following successful stabilizations, the conclusion to draw is that Brazil is certainly much closer to the Mexican than either to the Bolivian or even the Argentine case, in the sense that there is more growth-proneness from the part of the private sector than in the case of either Bolivia or Argentina. Similarly to the Argentine case, there seems however to be a lot of ground to be gained in the domain of productivity enhancing if successful privatization occurs in infrastructure sectors such as ports and telecommunications.

Furthermore, in the years of high inflation, a strong financial system emerged to provide services of indexed substitutes for the means of money which accumulated a substantial knowledge of risk allocation, and of international transactions in world financial markets which can be converted into an efficient system for the intermediation of savings and investment without the need of the guiding hand of the State in project analysis, nor the harnessing of forced private savings for government State agencies as in the previous growth experience.

As it was argued above that in the past experience of fast growth, given the dominant role Brazilian government played in the post-64 stabilization recovery, private investment followed the lead up to the great recession of the late 80s/early 90s. The efforts for unleashing the economy from the external constraint meant stretching the tasks of the public sector beyond both its financial and managerial capability.

The second movement for adjusting the economy's investment to its domestic means, due to the disappearance of external finance, required drastically curtailing public investment on an attempt at alleviating the stringency of the fiscal constraint. Restrictions to public investment meant then that private investments had to depend on their own sources both of motivation and of finance.

Finally it has been noted that the incentives policies which had been adopted since the late 60s (following the fiscal and institutional reforms of the military regime in 1964/65) had been based on the ability of the federal government to generate a large primary surplus plus a wide room for debt growth. Most incentives to private savings and investment will now be made possible not from the potential surplus, but from the inadequacy of the present tax system to operate in a stable environment. In a new tax system, more compatible with low inflation, there is more ample room for concern with the economic efficiency than with revenue generation to support priority projects. In a more stable environment there is significant slack space also for the growth of public debt, once the uncertainties of high inflation and the dangers of debt repudiation are eliminated from the horizon of wealth-holders.

References

Abreu, M. de P.; Carneiro, D. D. & Werneck, R. L. F. *Government and economic growth: a three-gap view of the long-run prospects of the Brazilian economy.* Helsinky, Finland, Wider-World Institute for Development Economics Research, United Nations University, 1994.

Bacha, E. Crescimento com oferta limitada de divisas: uma reavaliação do modelo de dois hiatos. *Pesquisa e Planejamento Econômico.* Rio de Janeiro, 1982.

———. A three-gap model of foreign transfer and the GDP growth rate in developing countries. Rio de Janeiro, PUC-Rio, Departamento de Economia, 1989. (Texto para Discussão, 221.)

Carneiro, D. D. & Modiano, E. M. Ajuste externo e desequilíbrio interno: 1980-1984. In: Abreu, M. P. (org.). *A ordem do progresso.* Rio de Janeiro, Campus, 1990.

———; Garcia, M. G. P. & Werneck, R. L. F. Strengthening the financial sector: the case of Brazil. Rio de Janeiro, PUC-Rio, Departamento de Economia, Sept. 1993. (Texto para Discussão, 407.)

——— & Bodin de Moraes, P. La inflación y la evolución del sistema financiero brasileño. In: Massad, C. & Zahler, R. *Deuda interna y estabilidad financiera.* Santiago, Cepal-Grupo Editor Latinoamericano, 1988.

——— & Werneck, R. L. F. Brazil: growth exercises for the nineties. Rio de Janeiro, PUC-Rio, Departamento de Economia, 1989. (Texto para Discussão, 226.)

——— & ———. Public savings, private investment and growth resumption in Brazil. National Bureau of Economic Research (NBER) Conference, 1990.

——— & ———. Obstacles to investment resumption in Brazil. In: Bacha, E. (ed.). *Savings and investment requirements for the resumption of growth in Latin America.* Washington, D. C., Interamerican Development Bank, 1993. chap. 2.

Chenery, H. & Bruno, M. Development alternatives in an open economy: the case of Israel. *Economic Journal,* 1962.

Goldsmith, R. W. *Brasil, 1850-1984: desenvolvimento financeiro sob um século de inflação.* São Paulo, Harper & Row do Brasil, 1986.

Lustig, N. *Mexico: the remaking of an economy.* Washington, D. C., Brookings, 1992.

Mankiw, G.; Romer, D. & Weil, D. A contribution of the empirics of economic growth. *Quarterly Journal of Economics,* May 1992.

Mello, M. F. Privatização e ajuste fiscal. Rio de Janeiro, PUC-Rio, Departamento de Economia. 1993. mimeog.

Morales, J. A. Inflation stabilization and external shocks: a case study of Bolivia. Universidad Catolica Boliviana, Instituto de Investigaciones Socio-económicas, 1992. mimeog. (Documento de Trabajo, 92-08.)

Passos, M. V. O mercado segurador brasileiro: evolução, análise e perspectivas. Rio de Janeiro, PUC-Rio, Departamento de Economia, 1992. (B. A. monograph.)

Romer, P. M. Capital accumulation in the theory of long run growth. In: Barro, Robert J. (ed.). *Modern business cycle theory.* Harvard University Press, 1989.

Sá, L. C. M. Restrições ao crescimento da economia brasileira: exercícios com modelos de três hiatos. Rio de Janeiro, PUC-Rio, Departamento de Economia, 1993. (MA thesis.)

Sochaczewski, A. C. *Desenvolvimento econômico e financeiro do Brasil.* 1980.

Werneck, R. L. F. Government failure and wretched statecraft: lessons from the Brazilian vicious circle. Rio de Janeiro, PUC-Rio, Departamento de Economia, 1993. (Texto para Discussão, 325.)

Taylor, L. (ed.). *The rocky road to reform: income distribution, politics and adjustment in the developing world.* Cambridge, The MIT Press, 1993.