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EXTERNAL DEBT, ECONOMIC GROWTH AND FISCAL ADJUSTMENT

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1. Introduction

1.1 In the debate on the external debt problem, most of the attention has focused on the aggregate analysis of what constraints the debt burden impinges on the economy's growth prospect. Given the relevance of the public sector foreign liabilities in most debtor countries, the existence of an important domestic transfer problem involving the need of a fiscal adjustment has been acknowledged, but its implications have not been properly considered either in the evaluation of the country's ability to service the debt or in the benefits of debt relief upon the debtor country's future growth prospects.

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[1] Portions of this paper have been discussed at the WIDER seminar on Medium to Long Run Prospects for Developing Countries, Helsinki, 11 August, 1988. The authors are thankful for helpful comments by participants in that seminar. They have benefited from informal discussions with Lance Taylor, Hollis Chenery, Pronab Sen, Ajit Singh, Mihir Rakshit and Juan Maria Caballero. Marcelo P.Abreu and Edmar Bacha made valuable suggestions after reading a previous version. Remaining mistakes are of course the authors' exclusive responsibility.

1.2 Either implicitly or explicitly it has been often considered that the required fiscal adjustment, however severe, is always feasible. But the recent experience of the majority of heavily indebted countries has shown that sizeable fiscal adjustments may prove to be extremely difficult to implement./[a] In the case of countries like Brazil, Argentina and Peru, the magnitude of the required fiscal adjustment seems to be large enough to be more than politically trivial to implement. One reason for so large requirement is the importance of public investment to crowding in private investment. Another one is the traditional use of public sources to fund development banks and other financial intermediaries which provide long run finance to private sector investors. Resumption of reasonably high economic growth rates involves thus not only allowing the public sector to finance its already large foreign debt service, but also to restore the importance of public sector savings. That suggests that due consideration of the fiscal constraint may lead to a quite different evaluation of the economy's ability to grow while sustaining the foreign debt service.

1.3 This paper aims at examining the role of fiscal adjustment in the analysis of the constraints to economic growth in debt-ridden developing economies. Section 2 presents a simple linear

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[a] Even ignoring the fact that the political economy of such fiscal adjustments may be rather different, depending upon how much of the adjustment is accomplished by means of increasing revenue and how much by reducing expenditures.

analytical framework which constitutes the basis for the discussion presented in the remaining sections. The linear model is used in section 3 to contrast different views on the growth constraints identified in the previous section. Section 4 explores the effects of removing some of the simplifications of the initial model and points to some immediate extensions of the results. Finally, section 5 presents an application of the analytical framework developed in the paper, using some stylized parameters for the Brazilian economy. Implications for the evaluation of the benefits of foreign debt reduction are presented and some conclusions drawn.

2. A Simple Linear Model

2.1 A simple linear model in the two-gap tradition of Chenery and Bruno [1962] may help to contrast distinct approaches to the determination of the sustainable debt service. First, consider the usual focusing on the balance of payments constraint. If D' is the change in net foreign debt, J is the total of interest payments on that debt, X^N is the value of net exports of goods and non-factor services and F the flow of net direct investment, one may write

$$J - X^N = F + D' \qquad (2.1)$$

Equation 2.1 for the balance of payments calls attention to the fact that the possibility of keeping current in interest payments depends on a combination of the country's capacity to transfer real resources abroad, with its ability to obtain foreign capital, either risk or loans./[3] Inasmuch as such abilities depend on a variety of factors ranging from the level of domestic absorption, future growth prospects, as well as on exogenous factors which influence the possibilities to raise foreign finance, it is useful to rewrite the above equation as shown below. Using small letters to express all variables as a proportion of potential GDP, and assuming, for the sake of simplicity, the real exchange rate to remain constant, one may write/[4]

$$j + a = u + f + d' \qquad (2.2)$$

where a is the level of domestic absorption and u is the capacity utilization.

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[3] It is assumed that that the current account position is simply equal to $X^N + J$, what means that the algebraic sum of unilateral transfers, dividends, etc is supposed to be zero.

[4] Although the assumption about the foreign exchange is only to simplify matters, it is unlikely that active policies aimed at real devaluations will be a major line of medium to long run policy issue for most large debtors. The main conclusion of Hughes and Singh [1988] that exchange rate policies do not help explain the differential economic performance of successful Asian and chaotic Latin American economies during the eighties supports this assumption.

2.2 This equation means that interest payments ($j > 0$) on the foreign debt can be sustained as long as the share of GDP absorbed domestically does not exceed the sum of output plus foreign savings. If, for example, contractual interest payments equal j_o, and there is a limit d' to the increase in foreign debt, a constraint such as

$$j \geq j_o \qquad (2.3)$$

could in principle be met provided

$$j_o \leq u - a + f + d' \qquad (2.3')$$

2.3 Given a level of capacity utilization, that might require some effort of fiscal adjustment aimed at keeping either a from crowding j out, or else j from crowding out a. The macroeconomic symptoms of the former are typically a shortage of foreign exchange, arrears and the like, whereas of the latter would typically be inflationary pressures, devaluation decreasing real wages and thus private consumption, possibly coupled with higher interest rates further decreasing investment.

2.4 Expression (2.3') may help to point out the logic of IMF-type financial policies attached to debt-rescheduling packages which have prevailed since August 1982. The typical debt-ridden

country may be not able to sustain full capacity (u = 1) because of non-competitive imports of intermediate inputs (and or food). In order to prevent a prolonged crisis, with low a (because of low u and negative or zero d'), from crowding j out, opening room for a generalized suspension of debt-related payments, financial packages are conceived which, while providing foreign exchange (i.e. higher f + d') in amounts sufficient to allow u = 1, require some sort of restrictive fiscal and monetary policies which hopefully act upon a so as to make it compatible with (2.3). Note that a successful adjustment package, as defined by Williamson [1983], should therefore allow u = 1 and, although keeping a under control, could in principle result in higher domestic consumption and investment thanks to higher GDP levels. In most debt-related stabilization experiences of the eighties, however, the result of fiscal restraint has been a low level of capacity utilization which not only implied low current levels of domestic absorption but also undermined growth prospects.[5]

2.5 In sharp contrast with that, the nature of fiscal adjustment which is commonly needed in order to restore the debtor

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[5] Cf. the early eighties stabilization experiences reviewed by Taylor [1988]. It may be noted that the long run consequences of the recessive adjustments are more serious in the measure that public investment cuts, promoted in name of fiscal restraint, led to permanent reductions in total investment due to complementarity between public and private investment in most developing economies.

country's growth capability in a way which is consistent with its new foreign debt constraints, has to do with increasing public savings to levels which are necessary not only to match public investment requirements but also to help finance a high rate of private investment.[4]

2.6 To take this point into account it may be helpful to start by defining public sector savings as the excess of government receipts (tax revenue plus return on public enterprises assets) over consumption and interest payments, distinguishing domestic from foreign debt:

$$s^{PUB} = t + r.k^{PUB} - c - q - h.j \qquad (2.4)$$

All variables are again expressed as a proportion of potential GDP: t is the tax burden, net of subsidies and transfers; r is the rate of return on public enterprises assets; c stands for total government consumption; q stands for interest payments on the total public sector internal debt and h.j for interest payments on the total public sector external debt. The parameter h is the share of the public sector in the total external debt. The value

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[4] In some highly indebted countries, after a long period of external adjustment, public sector savings have declined significantly. In Brazil in the mid-seventies, publicly generated savings -- state enterprises' included -- represented one third of total domestic savings. This high savings generation capacity within the public sector has practically diappeared in the mid-eighties. See Werneck (1987)

of public enterprises assets as a proportion of potential GDP is given by k^{PUB}.

2.7 One may now define variable z as

$$z = t + r.k^{PUB} - c - q \qquad (2.5)$$

and notice that the fiscal adjustment that is relevant here means a rise in z. That adjustment may stem either from an increase in the net tax burden t, or from a cutback in government consumption c or, still, from a reduction in interest payments q on the domestic debt. It may also come from a rise in the rate of return r on public enterprises assets, resulting from either lower production costs or from higher relative prices for the goods and services produced by those enterprises. Re-writing

$$z = s^{PUB} + h.j \qquad (2.6)$$

it is clear that the fiscal adjustment in z will depend upon the required raise in public sector savings as well as upon the behavior of interest payments on the public sector foreign debt. Suppose now that s^{PUB}_1 is the required value of these savings and that j is supposed to assume the value j_1. If the original position is given by

$$z_0 = s^{PUB}_0 + h.j_0$$

we may define the required fiscal adjustment as $z_1 - z_0$.

2.8 We may ask now what determines the required public sector savings. It will be simply assumed that it is determined by what is needed to close the economy's savings gap, given a growth rate target. In order to establish this, consider the economy's capital account writtten as a proportion of potential GDP and disregarding depreciation:

$$k.g = s^{PUB} + s^{PRI} + s^{FOR}$$

where k is the aggregate capital-output coefficient, g is the growth rate of potential GDP, k.g is of course the investment requirement, and s^{PRI} and s^{FOR} are, respectively, private and foreign savings, both measured as a proportion of potential GDP. Foreign savings, which are equal by definition to the balance of payments current account deficit, are matched by a combination of foreign direct investment and increase in foreign debt. That means that the above equation may be rewritten as

$$s^{PUB} = k.g - s^{PRI} - f - d' \qquad (2.7)$$

establishing the expression for the required public savings.

2.9 In order to analyse fiscal adjustment requirements, the value of s^{PUB} given by the equation above may be substituted into equation (2.6) leading to

$$z = k.g - s^{PRI} - f + h.j - d' \qquad (2.8)$$

2.10 Consider now the possibilities of steady state growth. Suppose s^{PRI}, f, k and h to be constant. There is a basic linear relationship between z and j, for each sustainable level of d' and each target rate of GDP growth g, as shown in figure 2.1. Without loss of generality, we may assume that for steady state growth,

$$d' = 0.$$

Thus, pairs (j,z) below the d'=0 locus correspond to increasing d, whereas pairs above it require decreasing debt to GDP ratios.

2.11 The determination of long run growth would thus depend on the specific closure to be given to the model. When the country's social compact requires a certain target rate of growth, and one may write

$$g = g^{H} \qquad (2.9)$$

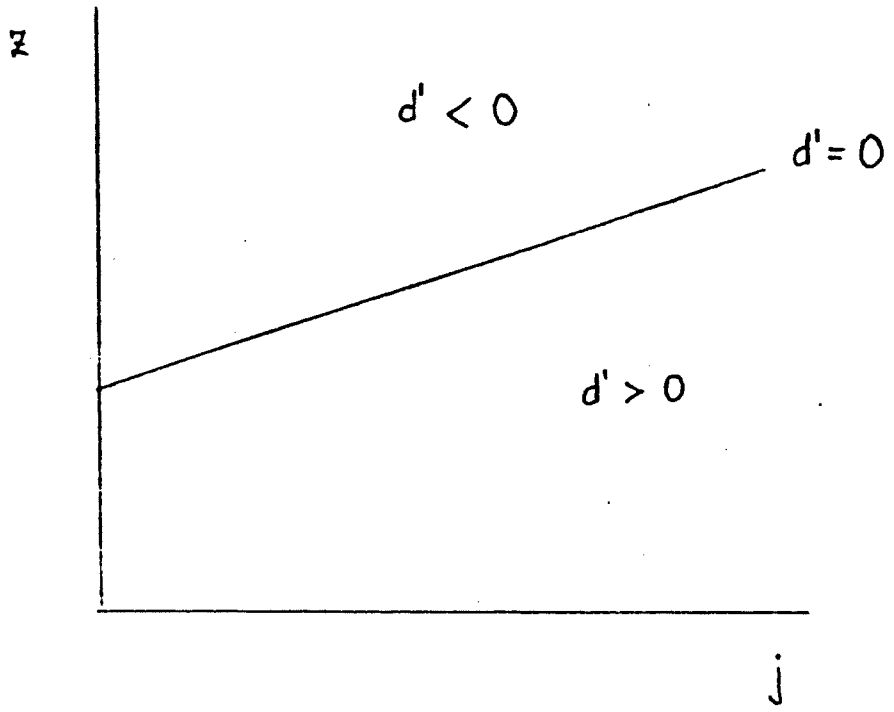

FIGURE 2.1

the model may be closed in at least three different ways. [i] Arrears and moratorium leading to some sort of debt relief are the means to endogenize j and this is certainly the case for a number of countries. [ii] Wherever inflationary finance is seen as a way to replace public savings obtained by taxation, gaps between required and feasible z for each j might be closed by means of a (sustainable) inflationary tax, hopefully not affecting private savings. [iii] Fiscal restructuring aiming at the required z, in order to recompose external payments and sustainable growth prospects, may be the route to restore macroeconomic consistency.

2.12 Similarly to what was previously done with j in (2.3) and g in (2.9), one may now explicitly consider the political and economic difficulties that impose an upper bound on the size of the fiscal adjustment./7 That may be taken into account establishing that

$$z \leq z^{MAX} \qquad (2.10)$$

2.13 If (2.9) is now rewritten as $g \geq g^{H}$ and substituted into (2.8), and the resulting constraint, as well as constraints (2.3) and (2.10), are jointly considered, it is possible to get an empty feasible set as shown in figure 2.2 below. And that seems to be

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7 For a discussion of the reasons behind the existence of a relevant upper bound to the fiscal adjustment in Brazil, see Bacha and Werneck [1988].

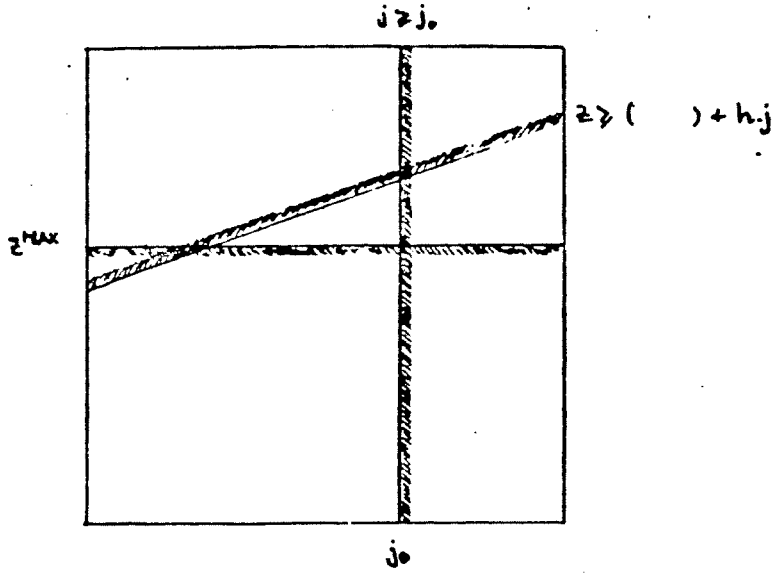

FIGURE 2.2

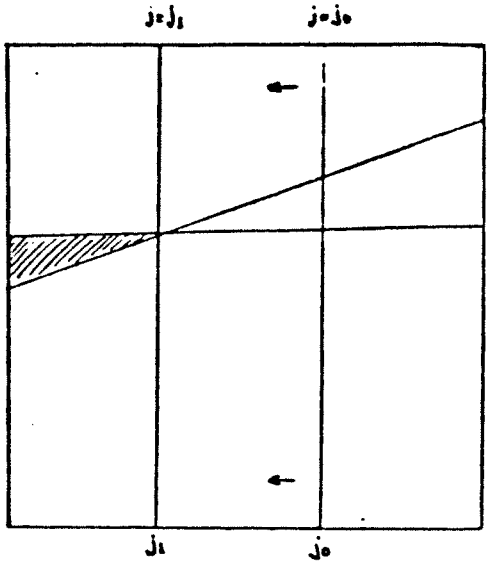

FIGURE 3.1

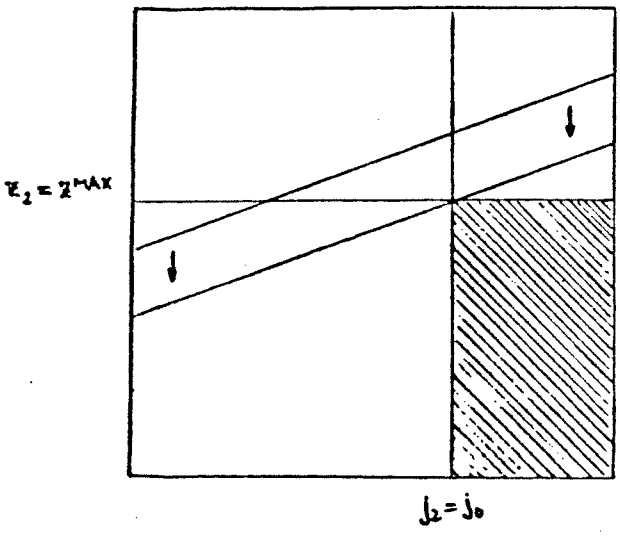

FIGURE 3.2

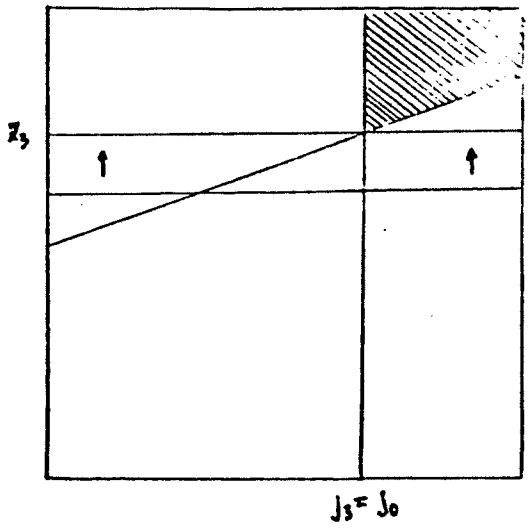

FIGURE 3.3

precisely the case that may be observed in some debt-ridden economies today. That means that some constraint will necessarily have to give.

3. "Right you are if you think you are"[a]

3.1 It is interesting to contrast different views of the problem resulting from distinct perceptions of what actually will have to give. The coexistence of those different perspectives of the problem has contributed to increase the complexity of the ongoing debate on the economic policy regarding debt constraints to economic growth.

3.2 One possibility would be to argue that what has to give is the first constraint relating to the minimum contractual interest payments value ($j \geq j_0$). In that case one would have a linear programming problem, as shown in figure 3.1. The interest payments on the external debt would be maximized subject to the constraints which bind the size of the fiscal adjustment. The optimal values would be j_1 and $z_1 = z^{MAX}$, and the implied fiscal adjustment would be given by $z^{MAX} - z_0$.

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[a] Apud L. Pirandello's "Cosi 'e se vi pare".

3.3 Another possibility would be to believe that what really has to give is the second constraint

$$z \geq (k.g^{H} - s^{FRI} - f - d') + h.j. \qquad (3.1)$$

The linear program would then be the one shown in figure 3.2. The target average annual growth rate g^{H} would have to be adjusted downwards in order to reduce the required fiscal adjustment. That adjustment would be maximized subjet to the maintenance of the contractual foreign debt interests and the upper bound on the fiscal adjustment. The optimal values would be $z_{2} = z^{MAX}$ and $j_{2} = j_{0}$. The fiscal adjustment would again be $z^{MAX} - z_{0}$, but the growth rate would be lower than in the first case and interest payments higher.

3.4 Finally, a third possibility would be to dismiss the upper bound on the fiscal adjustment and to believe that all that is involved is enough political will on the part of government. In that case the relevant linear programming model would be the one presented in figure 3.3. The idea would be to minimize the value of z, subject to the constraints concerning foreign interest payments and required fiscal adjustment. The optimal values would be z_{3} and $j_{3} = j_{0}$ and the fiscal adjustment would now be given by $z_{3} - z_{0}$.

3.5 Those results ilustrate the importance of the upper bound to the fiscal adjustment in the determination of the relevance of the trade-off between economic growth and interest payments on the foreign debt. To see the point more clearly one may substitute (2.8) in (2.10) above and get

$$g \leq (z^{MAX} + s^{PRI} + f + d' - h.j)/k \qquad (3.2)$$

Assuming, as before, that s^{PRI}, f, and d' are constant, the above constraint generates a linear trade-off between the growth rate g and interest payments j, for a given upper bound to the fiscal adjustment z^{MAX}, as shown in figure 3.4.

4. Some Extensions

4.1 The above analysis is certainly incomplete. If the only relevant constraint were one of those presented in figure 3.4, it would become hard to understand why the country would refrain from unilaterally imposing a drastic reduction in the interest payments on its foreign debt, particularly when there is a widespread belief that voluntary loans from private banks will not be restored, on a significant basis, for quite a long period. What prevents the adoption of such policy is the perception that it might lead to unwanted effects on the evolution of both the foreign exchange constraint (2.1) and the savings-fiscal adjustment constraint (3.2) above.

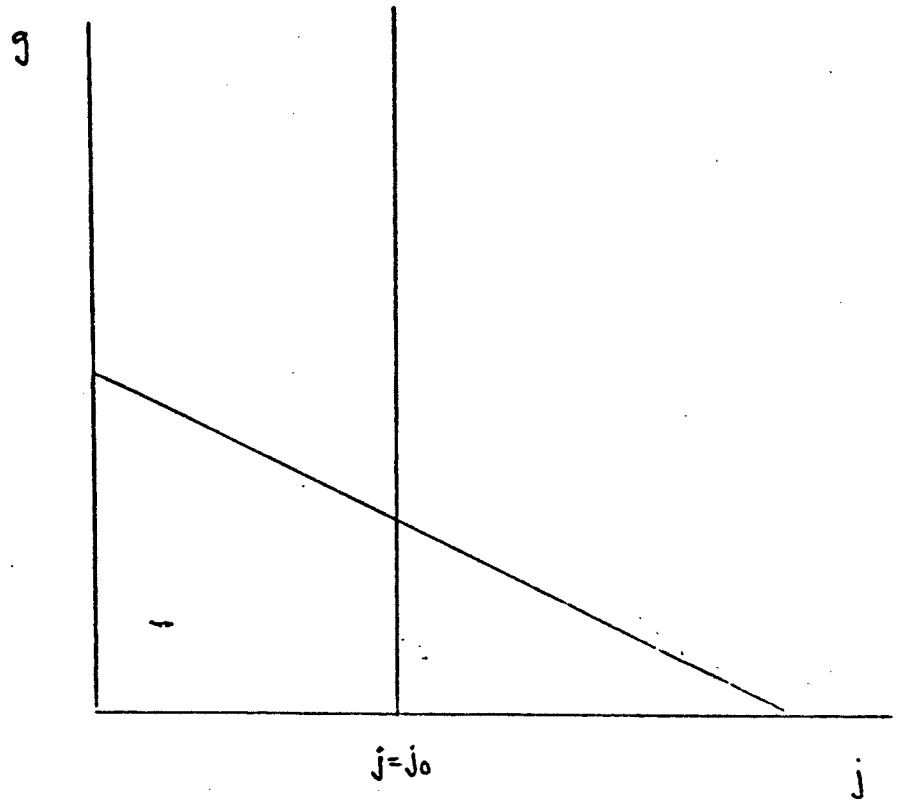

FIGURE 3.4

4.2 To take those effects into account one may rewrite (2.1) as shown below, where all variables are again expressed as proportions of potential GDP

$$j \leq x^N + f + d' \qquad (4.1)$$

and assume that net exports x^N depend negatively both on the GDP growth rate g and on the difference between contractual interest payments $j_\bullet$ and payments actually made j. The idea is that failure to pay contractual interest payments would turn it more difficult to sustain the net exports position due to marginal trade retaliation on the part of some of the most important industrial countries. Retaliation would be more serious the larger the the difference $j_\bullet - j$. It is therefore assumed that the partial derivatives

$$x^N_g < 0$$

and

$$x^N_j > 0 \quad \text{if} \quad j < j_\bullet$$

but

$$x^N_j = 0 \quad \text{if} \quad j \geq j_\bullet .$$

4.3 The possible effects of the loss of creditworthiness and further retaliations through multilateral agencies and official credit lines would also lead to the following assumptions about

the derivatives of f, the foreign direct investment flow, and d', the net-value of loans received from multilateral agencies and foreign governments:

$$f_j > 0 \quad \text{if } j < j_\infty$$

and

$$d'_j > 0 \quad \text{if } j < j_\infty$$

but

$$f_j = d'_j = 0 \quad \text{if } j \geq j_\infty .$$

4.4 Under these assumptions, how would constraint (4.1) look like in the (j,g) plane shown in figure 3.4 above? Differentiating the function that defining the boundary of that constraint one may write that[9]

if $j \geq j_\infty$, then $g_j < 0$,

but if $j < j_\infty$, then

$$g_j < 0 \quad \text{if} \quad x^N_j + f_j + d'_j < 1$$

and

$$g_j > 0 \quad \text{if} \quad x^N_j + f_j + d'_j > 1$$

4.5 Those results mean that the boundary of constraint (2.1) could be as shown in figure 4.1 below. Were it not for the negative effects of the unilateral reduction of interest payments

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[9] The differentiation of

$$j = x^N[g,(j_\infty - j)] + f(j_\infty - j) + d'(j_\infty - j)$$

leads to

$$g_j = (1 - x^N_j - f_j - d'_j)/x^N_m$$

below contractual values, the trade-off between g and j, from the point of view of the foreign exchange constraint, would be given by curve AB in the same figure. But because of those effects the curve will tend to be less steep for values of j below j_*, following the AC curve. More pessimistically, the boundary could even be as in curve AD, where the derivative eventually becomes positive.

4.6 As may be seen from above, that derivative will be positive when

$$x^N_j + f_j + d'_j > 1 \qquad (4.2)$$

The interpretation of (4.2) in economic terms is immediate. The variable j is expressed as a proportion of potential GDP. In principle, an unilateral reduction of interest payments amounting to (say) one percent of the GDP, would represent a slack in the foreign exchange constraint that could permit a higher growth rate. But part of that slack is offset by the negative effects on the foreign exchange constraint of the unilateral reduction in interest payments. Eventually, the sum of those effects, given by the left side the inequality above, could more than completely offset the direct foreign exchange gain of one percent of the GDP. In that case the net effect of the unilateral interest payments reduction would be negative.

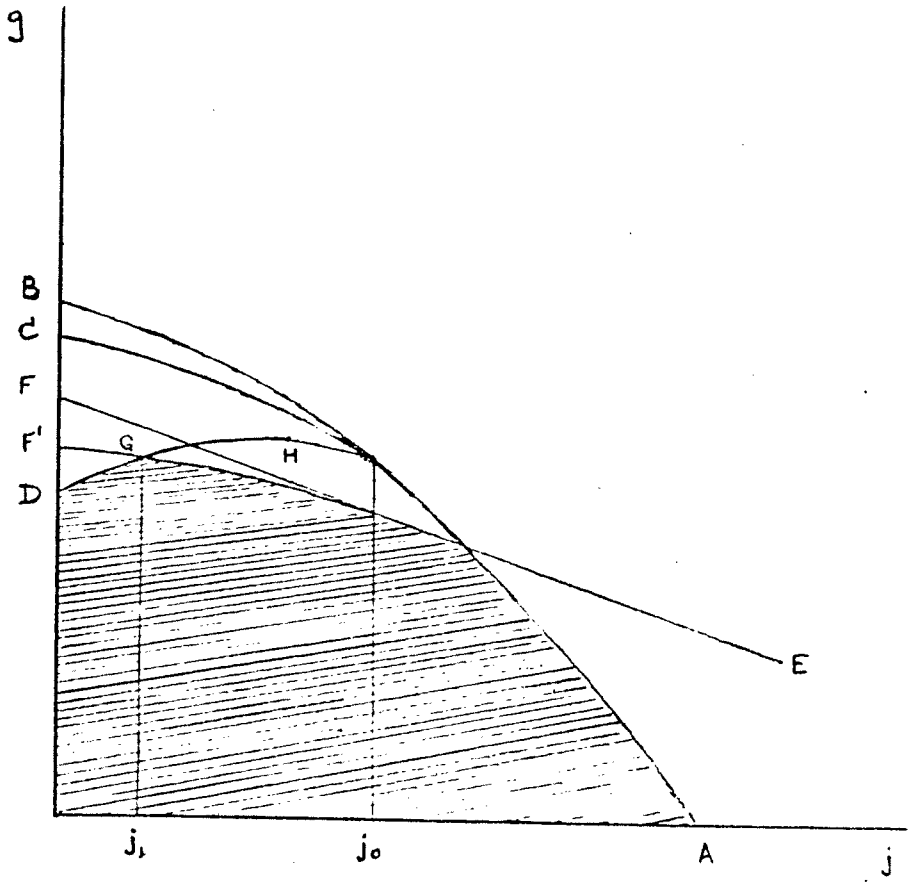

FIGURE 4.1

4.7 If the curve AD is the relevant foreign exchange boundary the feasible set will be given by the shaded area shown in figure 4.1. Note that the other constraint is now also different for j values below j_o, as a result of the negative effects of the unilateral interest payments reduction on foreign savings in (3.2). The relevant curve is no longer EF, but EF'. As (3.2) may be re-written as

$$g \leq [z^{MAX} + s^{PRI} + f(j_o - j) + d'(j_o - j) - h.j]/k \qquad (4.3)$$

the curve EF'will still be negatively sloped, as shown in figure 4.1, as long as

$$f_j + d'_j < h \qquad (4.4)$$

4.8 The GDP growth rate would be maximized at point G. In the case depicted the interest payments reduction ($j_o - j_1$) consistent with that maximization would stop short of cutting back those payments to zero. Note that a reduction of interest payments to a point to the left of j_1 would lead to less growth, if the shape of the foreign exchange constraint is as in AD. In point G, a further increase in the GDP growth rate would depend on breaking the resistance to a fiscal adjustment and, therefore, turning higher z^{MAX} values possible. This would mean shifting upwards the curve EF', given by constraint (4.3). Interesting enough, in that case the increase in the GDP growth rate would call for a smaller reduction in interest payments, since there would be a

displacement along the GH segment of the foreign exchange boundary.

4.9 An even more pessimistic view would lead one to argue that the negative effects of an unilateral reduction in interest payments are not properly described by the implicit assumption of a continuous process that generates a smooth curve as AD in figure 4.1. Instead, these effects would be better described by an assumption of a discontinuity in the the foreign exchange constraint boundary to the left of j_o, as shown in figure 4.2. For $j < j_o$ that boundary would be given by the curve D'D. In that case there would also be a discontinuity in the other constraint, as may be seen in the same figure, in result of the abrupt impact on foreign savings. For $j < j_o$, the boundary of this constraint would be the curve F'F. Under such conditions the economy could well end up with a lower GDP growth rate if interest payments were unilaterally reduced below j_o, than if payments had not been reduced.

4.10 Of course, there is ample room for controversy over the intensity of the negative effects on both constraints of an unilateral reduction in interest payments. Wide differences of judgement about the magnitude of x^N_j, f_j and d'_j have led to equally widely different stands on the ex-ante evaluation of the benefits of an unilateral approach to the foreign debt problem. The analytical framework developed above helps to better understand and identify the sources of such disagreement.

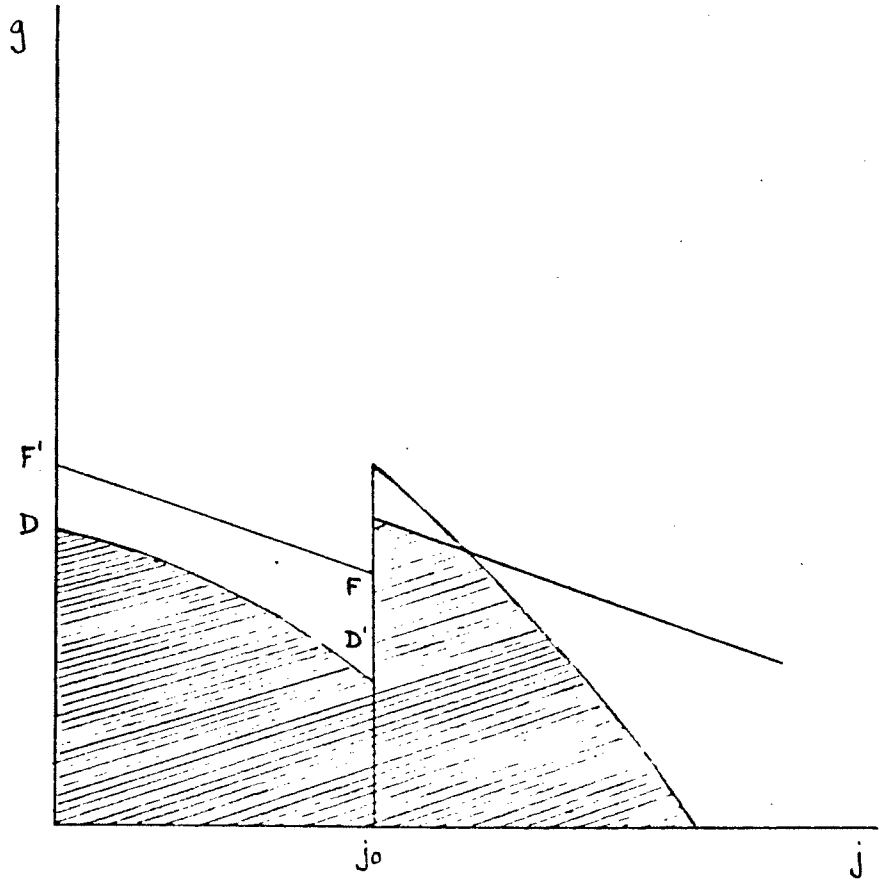

FIGURE 4.2

5. The Benefits of Debt Reduction: Implications of Some Stylized Parameters for the Brazilian Economy

5.1 The developments of the international situation concerning the growth prospects for highly indebted countries since 1982 have led to an increasingly generalized perception that some form of debt reduction may be necessary to restore world economic growth at more satisfactory rates. The above analysis may be useful for quantitative explorations of the effects of debt relief schemes.

5.2 The adoption of plausible values for k, s^{PRI}, f, d' and h allows a sensitivity analysis of the relevance of the trade-off between growth and interest payments for different hipotheses about the feasible fiscal adjustment z^{max} using stylized parameters for the Brazilian economy. Making k, the aggregate capital coefficient, equal to 3.5, attributing to $s^{PRI} + f + d'$, the sum of private and foreign savings as a proportion of potential GDP, a value of 17%, and considering the public sector share in the foreign debt to be 80%, one obtains the graph shown in figure 5.1.

5.3 Each of the four trade-off loci corresponds to a distinct hypothesis about z^{max}. In the lowest one z^{max} is equal to 4% and in the highest one it is equal to 10% of GDP. In the two loci in-between z^{max} is equal to 6 and 8% of the GDP. It has to be borne

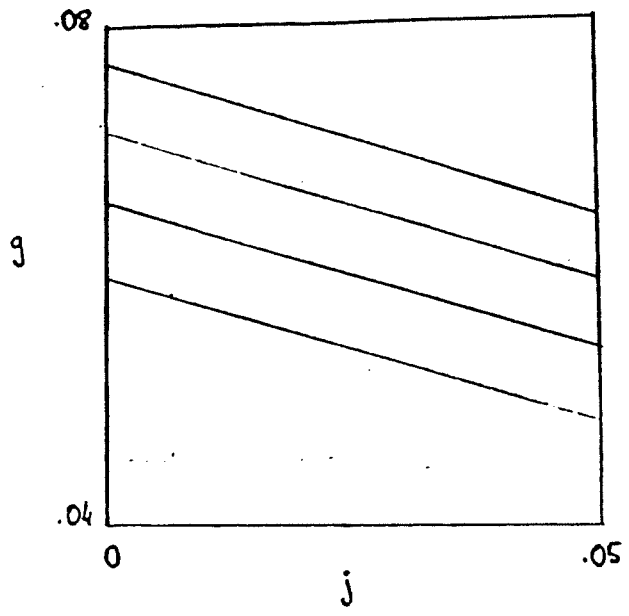

FIGURE 5.1

in mind that a rough estimate of the actual value of z in the Brazilian economy for the late eighties would be 3.3% of GDP. That means that that a z^{max} value of 6% implies a maximum feasible fiscal adjustment of 2.7%, and so on. As interest payments on the external debt are currently around 3.5% of the GDP, the trade-off between those payments and economic growth would be relevant for growth rates above approximately 5%, depending upon how pessimist one is entitled to be about the feasible fiscal adjustment.

5.4 The 7% historical average annual growth rate that the Brazilian economy was able to sustain from 1940 to 1980 has also been considered the rate required to keep employment growing in line with the still fast expansion of the working force in the country. As may be seen in figure 5.1, the conciliation of the maintenance of the full payment of interests on foreign debt with the resumption of the 7% economic growth rate assumes a z^{max} value near 10%, i.e. a fiscal adjustment of near 6.7%, which is certainly too optimistic.

5.5 The analytical scheme presented in this paper gives rise to a characterization of the constraints which bind a country's economic growth in actual situations. It serves the purpose of assessing the benefits of debt reduction as well as of singling out the relationship between debt reduction and fiscal adjustment. In particular, it was shown that when public savings are needed to complement private and foreign savings in order to sustain a

Plots of z for
q = 7%, 6.5% and 5%

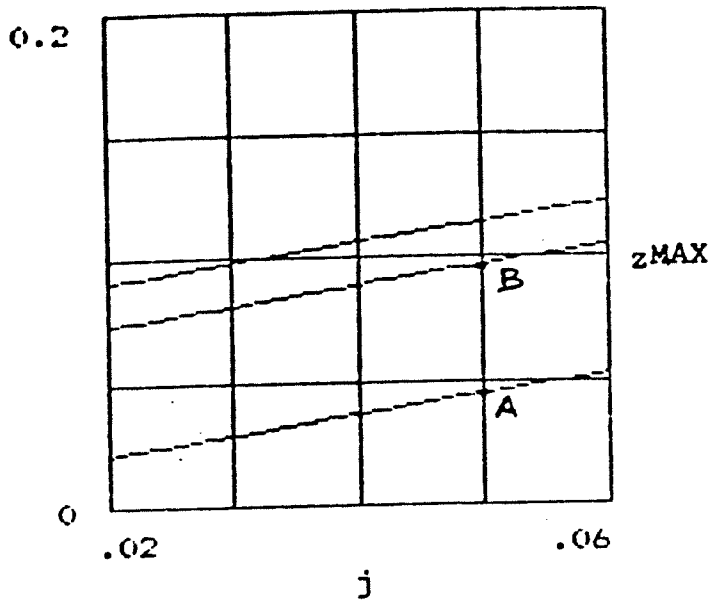

FIGURE 5.2

Plots of z for
q = 7%, 5.4% and 5.1%

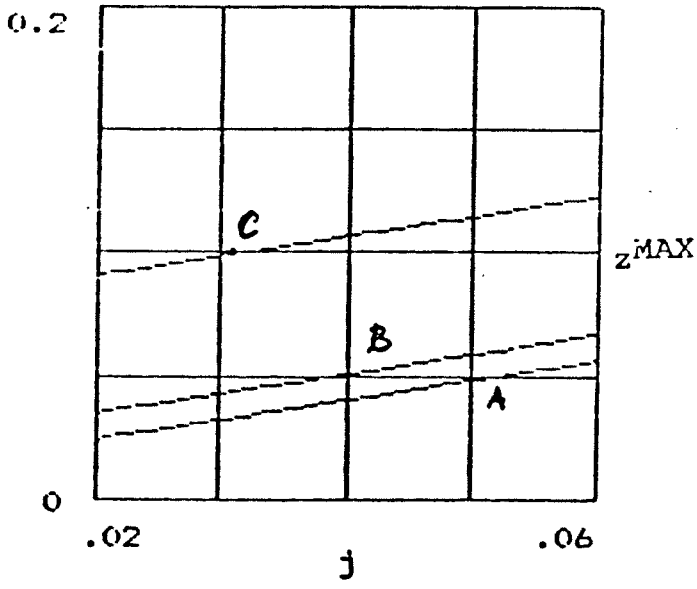

FIGURE 5.3

target growth rate, a given reduction in interest payments might result in substantially higher economic growth only if fiscal adjustment which manages to increase public savings is politically feasible, so that the savings-fiscal adjustment constraint may be satisfied. This condition is likely to be even more relevant for those countries which, during the painful process of debt rescheduling of the mid eighties, the public sector absorbed a large portion of the private sector's external debt.

5.6 The variable z, was defined as the sum of public savings plus government's interest payments on account of its foreign debt, expressed as a fraction of potential GDP. Its required value was shown to be a function of g, the sustainable target rate of growth, and j, the country's total payments of interest to foreign creditors, also as a proportion of GDP. In figure 5.2, using stylized parameters for the Brazilian economy three loci of z as a function of j, corresponding to 5%, 6.5% and 7% annual growth rates are plotted to illustrate the conclusions. In the vertical axis, z^{MAX}, the feasible limit to fiscal adjustment was taken as 10% of GDP.

5.7 Suppose contractual interest payments, before debt reduction, were at 5% of GDP, while the political limit to fiscal adjustment in the considered time horizon is such that z cannot be greater than 10% of GDP. Then using the same parameters behind the loci described in figure 5.2 a rate of growth of 5.1% would be

compatible with a value of 5% for z. Fiscal adjustment alone would take the economy to a path of 6.5% annual growth while making the same interest payments of 5% of GDP. The degree of fiscal adjustment may me measured vertically along the line defined by j = 5% on figure 5.2, and amounts to 5% of GDP.

5.8 If interest payments were reduced from 5% to 4% of GDP, on fig 5.3 displacement from A to B illustrates a gain in economic growth by virtue of debt reduction alone. From A to B, a higher sustained economic growth from 5.1 to 5.4% is achieved with a reduction in interest payments by 1% of GDP, and no fiscal adjustment. From B to C, sustainable increase in growth rates (from 5.4% to 7%) is achieved now by means of a combination of a further reduction in interest payments, equivalent to an additional 1% of GDP, with a fiscal adjustment making full use of the political limits represented by z^{MAX}.

5.9 Finally, one can't help making two observations on the recent behaviour of the Brazilian economy in the recent years which are underlined by the analysis made in this paper. First, the strong recovery of 1984-86 was made possible without any fiscal adjustment because investment requirements were certainly rather low due to a low level of capacity utilization (u) prevailing at the initial conditions, due to the effects of the recession of 1981-83.[10] It was short-lived because higher rates

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[10] On this point, see Carneiro [1987].

of income growth and capacity utilization were not accompanied by an adequate expansion of public savings. On the other hand, one can hardly overemphasize the limited effect of the unilateral suspension of payments in 1987 in relaxing the country's active constraints to economic growth. The above analysis stresses thus the role of fiscal adjustment even in a strategy of unilateral debt reduction.

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