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Changing Patterns of Financing Investment in Brazil

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The pattern of financing investment is changing in Brazil. During the 1970s it was based on the classical pattern that prevails in the early stages of development, that is on state and external financing. But in the second half of the 1980s the role of the private sector will probably increase.

This paper is divided into eight sections. In section 1 a model is developed showing that in the early stages of development, besides external finance, forced saving is imposed by the state and the resulting resources are used either to finance or subsidise private investment, or to finance state investment. In a second phase, after the basic stock of capital has been built up, the private sector, through regular increases in productivity and realisation of profits in the market, assumes a more important role in investment.

Section 2 analyses the fall of the capacity to save and to invest. Section 3 demonstrates that during the 1970s total investment was a function of external savings and state savings. The state not only invested directly, but was also responsible for financing and subsidising private investment. Section 4 is an analysis of the end of external financing as a source for financing investment early in 1979. Section 5 analyses the deterioration of public finance or the increasing loss of the capacity of the state to impose forced saving. The reduction of the fiscal burden, the artificial price controls of the state-owned corporations, the increase of the indebtedness of the state aggravated by higher interest rates, the pressure to diminish the public deficit and the political weakening of the state technobureaucracy are also examined in this section.

Section 6 is an analysis of the falling tendency of the rate of profit of state-owned, private national and multinational corporations. This fall is related to the adjustment process, to the loss of the capacity of the state to subsidise the private sector, and to the increase of the organic composition of capital or the reduction of the marginal output–capital relation due to capital-intensive import substitution investments. Section 7 presents a short analysis of the relation between wages and productivity. Finally, in section 8 there is a discussion of the more likely patterns of financing investment in the second half of the 1980s. Two questions are posed: what will the new pattern of investment be and what will its results be? Although there is a clear need to recover the saving and investment capacity of the state, it is not reasonable to try to return to the pattern of financing investments of the 1970s. The indebtedness of the state, the new strength of the private sector, the existence

TABLE 6 *Brazil: External Debt Indicator 1980–1986**

Year	*International reserves‡*	*Net Debt*	*Debt Burden/ Export* (per cent)	*Net debt/ GDP* (per cent)
1980	6.913	46.934	64.6	18.8
1981	7.507	53.904	71.5	19.5
1982	3.994	66.204	72.2	23.4
1983	4.563	76.756	67.8	36.8
1984	11.996	79.096	48.4	37.5
1985	10.482	85.375	46.4	38.8
1986†	6.856	97.944	53.6	37.5

Source: Banco Central do Brasil, 'Programa Economico', Nov/86 and FUNCEX.
* US $ Million.
† Preliminary estimates.
‡ International liquidity concept, defined or: gold reserves + SDR + IMF position + convertiable reserves.

of a financial market that did not exist before and of a much bigger stock of capital suggest a new strategy based on exporting manufactured goods and increasing the marginal output–capital relation.

SECTION 1

The basic variable in any process of industrialisation is the rate of investment or of accumulation of capital. Given the productivity of investment, which can be measured by the marginal product–capital relation, the rate of growth in the long run will depend on the rate of investment.

Investment is the result of decisions of private business firms, multinational corporations, state-owned corporations, and the state itself. Depending on the stage of development and on the industrialisation strategy adopted, investment will be held predominantly by one or two of these economic agents. In the early periods of development it is very frequent for the state and the state-owned corporations to assume a dominant role. This was the case of Japan and Germany. In other cases, local business enterprises start the process, and the state and the multinationals come into the picture later. In any case, the interplay of those three or four agents—if we separate the state from the state-owned corporations—is essential for understanding a given pattern of industrial development.

The rate of investment is defined by the ratio of total investment to gross domestic production (GDP). It depends in the long run on: (1) the capacity of business enterprises to finance themselves through high profit rates; (2) obtaining internal and external financing, including new capital; and (3), exclusively for the state, the capacity to promote forced saving. In the short run it also depends on the cyclical fluctuations of the expected rate of profit, which is directly related to the relation between aggregate supply and aggregate demand. The laws that govern short run economic processes are not the same as those that explain the long run processes, but short run investment decisons necessarily influence the long run. So, although we will not give priority to a short-run analysis, we will have to consider it. Although the decision to invest depends essentially on profit expectations, it also depends on the fear of losing market shares and on the danger of being defeated by technological competition. If the positive profit expectations or the negative fears related to the market share and to technological competition are strong, investment may be sustained in face of relatively high interest rates.

It could be said that in the long run investment capacity depends on savings. Under conditions of full employment, this is true. Under the more common situation of unemployment, it will be investment, through the multiplier, that will determine income and aggregate savings. But even when there is full employment, I prefer to put saving in a subordinate position, as dependent on the capacity of the business enterprises to self-finance, on the availability of internal and external financing, and on the state capacity to impose forced saving.

The capacity of the business enterprises to finance their investments themselves depends on the size of the stock of capital and on the rate of profit.

As the total stock of capital is small in the first stages of development, that is the total capital–output relation is small, the rate of profit will have to be very high to permit the self-financing of investment. This rate of profit depends on: (1) the rate and type of technological progress; (2) the profit–wage ratio, that is the rate of surplus value; and (3) the role of primitive accumulation. We discussed the first two variables in an earlier work (Bresser Pereira, 1986). Primitive accumulation includes all forms of appropriation of surplus or of realisation of profits by capitalists outside the regular market process. Marx said that in the early stages of development, primitive accumulation was essential for building the basic stock of capital. Only after that would the surplus value mechanism, that presupposes an existing stock of capital, be able to work as a means of appropriation of surplus through market mechanisms (1867, chap. 24). Primitive accumulation is obtained in modern times through monopoly strategies and especially through state subsidies.

The availability of financing for the accumulation of capital depends, internally, on the existence of a rentier class and of a financial system to transfer savings from rentiers to the business enterprises.[1] Externally it depends on the availability of international credit and on the creditworthiness of the country. Since in the early stages of development the rentier class tends to be small, the state's forced saving, imposed through either taxes or inflation, is usually an important substitute.

Forced saving imposed by the state can be channelled to private business enterprises through financing by state-owned banks or through several kinds of subsidies (primitive accumulation). They may also be directly invested by the state or transfered to state owned corporations. In any circumstance, forced saving and primitive accumulation will have a decisive role in financing investment in the early stages of development, since the stock of capital in the hands of business enterprises and rentiers will be necessarily small in relation to production. After a certain period of development, given the increase in the total capital–output relation, these extra-market mechanisms will have less importance, and the process of capital accumulation will be able to proceed based on technical progress and the surplus value mechanism, extraordinary profits being eventually derived from innovation, speculation and monopoly power.

SECTION 2

In Brazil we can compare the pattern of investment financing in the 1970s and first half of the 1980s. During this period the rate of savings and of investment declined, while the rate of growth of output fluctuated sharply (Table 1).

The reduction in the savings rate is clearly related to the decline of external savings and especially of state savings. From a maximum of 31.7 per cent of GDP in 1975, total savings fell to 16.4 per cent in 1984; in this period external savings fell from 5.3 to −0.1 per cent, and state savings from 8.2 per cent of GDP to zero, while private savings remained relatively stable. Investment fell correspondingly from 31.7 per cent of the GDP in 1975 to 16.9 per cent in 1983. In this period private investment fell sharply while public investment showed a small decline. Since 1976 the rate of investment of the

TABLE 1 *Savings and investment in Brazil, 1970–1986*

Year	GDP (rate of growth)	Savings (percentage of GDP)				Investment (percentage of GDP)		
		Internal savings						
		Private	State	Total	External savings	Private sector	State	Total investment
1970	8.3			24.1	1.4			25.5
1971	11.3			23.3	2.7		26.0	
1972	12.1			23.5	2.6			26.1
1973	14.0	15.7	9.5	25.2	2.0	19.7	5.7	27.2
1974	9.0	15.4	8.1	23.5	6.7	19.6	8.0	30.2
1975	5.2	18.2	8.2	26.4	5.3	20.9	8.6	31.7
1976	10.1	16.2	7.1	23.3	3.8	16.1	10.5	27.1
1977	4.5	15.9	7.6	23.5	2.2	15.7	9.4	25.7
1978	4.7	15.6	7.6	−23.2	3.3	13.6	10.7	26.5
1979	7.2	12.8	5.7	17.5	4.5	8.2	14.0	22.0
1980	9.1	14.3	2.9	17.2	5.1	12.6	9.0	22.3
1981	−3.4	15.8	1.0	16.8	4.3	11.0	10.1	21.1
1982	0.9	15.1	0.3	15.4	5.8	12.3	8.9	21.2
1983	−2.5	14.3	−0.7	13.6	3.3	9.8	7.1	16.9
1984	5.7	16.5	–	16.5	−0.1	nd	7.4	16.4
1985	8.3	nd	nd	nd	nd	nd	nd	17.5*
1986	7.7*	nd	nd	nd	nd	nd	nd	19.0*

* Estimated.
Source: Getúlio Vargas Foundation.

public sector is consistently higher than its rate of savings, indicating the increasing indebtedness of the public sector.

This increasing indebtedness of the public sector can be seen by the increase of the relation of financial costs to operational revenue of the state owned corporations, that went from an index of 100 in 1980 to an index of 237.39 in 1983 (see Rogério Furquin Werneck (1985: 12) based on SEST—Secretaria de Controle das Empresas Estatais—data). It can also be seen by the relation of the real public deficit (a variation of the public sector borrowing requirements—PSBR—during the year excluding monetary correction) to the GDP. It averaged 7 per cent of the GDP between 1979 and 1982 and fell to an average of 4 per cent of the GDP in the following four years (Table 5). The internal public debt, according to the Central Bank definition, increased 81 per cent in real (dollars) terms from December 1981 to December 1985, and the total debt, including the external debt, increased 78 per cent.

The basic question for the long term development of the country now is to know if a reasonable growth of the GDP of, say, 6 per cent per year, is compatible with this reduction of savings and investment, as well as with this increasing public debt. If it is not compatible, an additional question is to know if this decrease in savings and investment is reversible. To answer these questions we are going to examine the pattern of financing investment in Brazil in the 1970s and the 1980s.

SECTION 3

In Brazil during the 1970s, the process of financing investment followed the classical pattern of the early stages of development. Total investment was a direct function of external indebtedness and of state investment. If we take, for instance, the period 1974–1976, external savings accounted for 32 per cent of total savings, and state investment accounted for 30 per cent of total investments.

Actually the contribution of the state to investment was greater than 30 per cent, given the process of primitive accumulation. In addition to investing directly or through state-owned corporations, the state strongly subsidised private investment. There are no exact figures for these subsidies. During the 1970s there were many kinds of subsidies; export subsidies, credit subsidies, fiscal subsidies (tax incentives) for industrial sectors and for regions, and artificially low prices of goods and services produced by state-owned corporations. If we take only the cost of credit subsidies, they average 3.5 per cent of GDP during the period of 1980–1982 (World Bank (1984: 52). If we add to this the fiscal subsidies and the artificial low prices of state-owned corporations, especially the prices of steel and electric energy, we probably will have at least twice this figure: around 7 per cent of GDP for subsidies to the private sector. These subsidies as a whole represent primitive accumulation (since we are not considering consumption subsidies). They represented an addition to profits of the private sectors, and an indeterminate part of it—say 5 per cent—represented additional investment. Thus, aside from the 30 per cent share of investments directly conducted by the state and state-owned corporations, around 20 per cent of total investments were financed by primitive accumulation, that is, by state subsidies.

The participation of the state in the general process of promoting (financing in the broad sense of the expression) investment is, however, even larger, because it is necessary to include the specific financing of investments that, in Brasil, were done through the state and, in the 1970s, also through foreign borrowing. It is well known that the private financial system is—or was—unable to finance long term investment. Longer term industrial lending was carried out almost entirely through the BNDES (Banco Nacional de Desenvolvimento Economico e Social) system. According to the World Bank report on the Brazilian financial system, in 1978 the BNDES system disbursements were equivalent to 40 per cent of the industrial fixed capital formation (1984b: xix). Most of this credit was subsidised or carried low real interest rates when they were fully corrected by inflation.

SECTION 4

This pattern of investment, based on external and state financing, direct state investment and subsidised private investment, entered in crisis when the flow of net external financing was stopping in 1982, and when the state started losing its ability to impose forced saving. In fact the process of external indebtedness stopped being a source of funds for new investments early in 1979, when the increase of the total external debt became approximately equal to the payment of the interest, as can be seen by comparing the second and third columns of Table 2. From that point on, new loans were made only to pay interest. On the other hand, the inflow of real resources that during the 1970s averaged 2.1 per cent of the GDP per year, turned into an outflow in 1983, when the country started obtaining high trade surpluses.

To the transfer of real resources that reached around 5 per cent of the GDP in 1984 and 1985, we should add the net outflow of foreign money represented by the excess of remittance of profits and dividends in relation to direct foreign investment (Table 3). This net outflow of foreign money reached 1,430 million dollars in 1986 and represented 0.5 per cent of GDP.

SECTION 5

The deterioration of public finance or its increasing inability to impose forced savings is the second negative factor contributing to the decrease of the rate of investment during the 1980s.

We can have a clear picture of this process of deterioration by analysing the fiscal burden. The net fiscal burden fell from 17.4 per cent of GDP in 1970 to 8.9 per cent in 1985 (Table 4). In 1971 the net fiscal burden reached a high of 17.6 per cent and has fallen since then. The deterioration of the fiscal burden accelerated in 1984 and 1985, when recession, monetarist policies and the acceleration of inflation caused respectively an increase of transfers to the private sector, an increase in the interest rate on the internal debt and a loss in tax revenues. On the other hand, fiscal subsidies that reached 3.6 per cent of GDP in 1980, fell to 1.6 per cent in 1985. The general explanation for this consistent fall in the fiscal burden is the acceleration of inflation. The inflationary tax is actually smaller than the loss of taxes due to

TABLE 2 *External debt and transfer of resources (US$ millions)*

Year	External debt	External debt increase	Interest	Transfer of real resources* (percentage GDP)
1970	6.049	—	—	−0.4
1971	7.947	1.898	302	−1.7
1972	11.026	3.079	359	−1.6
1973	13.962	2.936	514	−1.2
1974	18.871	4.909	652	−5.9
1975	24.186	5.315	1.498	−4.0
1976	30.970	6.784	1.809	−2.4
1977	36.736	5.776	2.103	−0.6
1978	50.143	13.407	2.696	−1.2
1979	53.986	3.843	4.185	−2.0
1980	62.765	8.779	6.311	−2.1
1981	71.878	9.113	9.161	−0.4
1982	83.265	11.387	11.353	−0.6
1983	91.632	8.367	9.555	2.3
1984	99.765	8.133	10.203	5.6
1985	100.773	1.008	9.589	5.2

* Transfer of real resources equals trade surplus account including real services.
Source: Central Bank and Batista (1987) for fourth column.

TABLE 3 *Foreign investment balance (US$ millions)*

	1983	*1984*	*1985*	*1986*
1. Direct investment (net)	664	1.077	710	70
2. Conversion of loans into investment	425	731	537	400
3. New investment (3 = 1 − 2)	239	346	173	−330
4. Remittance of profits and dividends	758	796	1.059	1.100
5. Net inflow of money (5 = 3 − 4)	−519	−450	−886	−1.430

Source: Cental Bank and Paulo Nogueira Batista (1987).

the inflation between the moment the tax is incurred and the moment it is paid. The indexation devices developed in Brazil were not able to avoid this financial loss for the state.

On the other hand, since 1979 the real public deficit has had a tendency to fall. The decrease of public deficit in 1981, 1983 and 1984 was clearly related to the adjustment process of the country (Table 5). Since the public deficit—or the increase of the public sector borrowing requirement—decreased, it could be said that public finances improved. But it also can be

TABLE 4 *Fiscal Burden (percentage of GDP)*

Year	*Gross fiscal burden*	*Transferences*					*Net fiscal burden (1–6)*
		Interests on internal public debt	*Social security and assistance*	*Fiscal subsidies*	*Others*	*Total (2+3+4+5)*	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1970	26.0	0.7	8.2	0.8	−1.1	8.6	17.4
1971	25.1	0.5	7.0	0.8	−0.8	7.5	17.6
1972	25.9	0.5	7.3	0.7	0.2	8.7	17.2
1973	26.3	0.5	7.0	1.2	1.6	10.3	16.0
1974	26.2	0.5	6.3	2.3	2.2	11.3	14.9
1975	26.3	0.4	7.0	2.8	0.8	11.0	15.3
1976	25.3	0.5	7.2	1.6	0.2	9.5	15.8
1977	25.6	0.5	7.3	1.5	1.6	10.9	14.7
1978	25.7	0.5	8.1	1.9	1.5	12.0	13.7
1979	24.3	0.5	7.7	1.9	0.6	10.7	13.6
1980	24.2	0.7	7.6	3.6	0.9	12.8	11.4
1981	24.4	1.1	8.2	2.7	1.1	13.1	11.3
1982	26.5	1.2	9.0	2.6	1.3	14.1	12.4
1983	24.9	1.9	8.3	2.6	1.5	14.3	10.6
1984	21.7	2.7	7.7	1.6	0.7	12.7	9.0
1985	22.2	3.7	7.1	1.6	0.9	13.3	8.9

Source: Central Bank.

TABLE 5 *Operational public deficit (PSBR) (percentage of GDP)*

1979	*1980*	*1981*	*1982*	*1983*	*1984*	*1985*	*1986*
8.3	6.7	6.0	7.3	4.4	2.7	4.3	2.9

Source: Central Bank.

said that the investment capacity of the state diminished. As can be seen in Table 4, the fiscal burden started decreasing early in 1977; Table 1 shows that the saving capacity of the state suffered a great decline in 1980. Its investment capacity followed in the same direction after some time, as the public deficit had to be put under control.

Actually the deterioration of the saving and investment capacity of the state began in 1975, when a large campaign against state interventionism was initiated by the bourgeoisie. Although the bourgeoisie was the main beneficiary of the authoritarian regime and of state interventionism, it began to be afraid of, or at least unhappy with, the power of the state technobureaucracy. The campaign against state interventionism was the first signal of the rupture of the alliance between the bourgeoisie and the technobureaucracy (see Bresser Pereira, 1978b and 1983). The basic economic reason for this rupture was the end of the 'miracle' (1967–1974), that is, the start of a process of deceleration or of a 'relative diminution of surplus' to be divided among the bourgeoisie and the technobureaucracy (see Bresser Pereira, 1978a). This political campaign was initiated after the Second National Development Plan had been launched, and was instrumental to its partial suspension beginning in 1976. The extremely ambitious targets of this plan depended on an increase in the saving capacity of the state—including of the increase the prices and profits of the state owned corporations—that the bourgeoisie was not ready to sustain.

The deterioration of the saving and investment capacity of the state was accentuated by the change of priorities after the democratisation process. The democratic government that took power in March 1985 established social expenditures as its top priority. Several social programmes aimed at the distribution of income have been started. Although the government made assurances that these social expenditures would not be made in substitution for investments, the maintenance of a reasonable level of public investment in 1985 was only possible due to an increase in the public deficit.

As the state lost part of its ability to impose forced saving, it reduced its subsidies to the private sector. In other words, the process of financing private investment through primitive accumulation started losing importance. As can be seen in Table 4, fiscal subsidies, which had reached 3.6 per cent of GDP in 1980, were down to 1.6 per cent in 1985.

A more long-term reason for the deterioration of the saving capacity of the state was the control of prices of the state-owned corporations. In fact the administration of prices of large corporations—mainly state-owned and multinational corporations—by the government was a constant in Brazil during the 1970s, but has been accentuated since August 1979[2], with the only exception of 1981 when prices were liberalised. The use of the Interministerial Price Council (CIP) as a device to control inflation was actually a powerful instrument for reducing the profits of state-owned corporations and of multinational corporations. Private national corporations have also been submitted to price controls, but, as they were smaller and politically more influential, they suffered less.

SECTION 6

The decrease in the profitability of state-owned corporations since 1978 is both a consequence and a cause of the deterioration of the saving and investment capacity of the state. Actually the profit rate of all corporations decreased sharply during this period (Table 6). There is a clear relation between corporations' loss of profitability and the economic cycle. The profit rate of the 1,000 largest corporations was lowest in 1983, the year of the deepest recession in the industrial history of Brazil. But the recovery of the profit rate in 1984 and 1985 is clearly insufficient. In 1985, a year of great economic expansion, the general rate of profit was almost one third of 1978 and half of 1979. For the state-owned and multinational corporations, this fall was related to price controls. For the private national corporations the influence of prices controls was less important, while the reduction of subsidies played a decisive role.

TABLE 6 *Rate of profit of the top thousand corporations (percentage of net worth)*

	Private	*State-owned*	*Multinational*	*Total*
1978	30.9	11.0	23.6	17.6
1979	23.2	8.8	12.6	13.4
1980	22.1	6.0	15.8	12.0
1981	13.6	7.1	11.8	10.8
1982	10.7	6.4	12.8	8.3
1983	7.6	2.6	9.1	4.7
1984	10.1	6.0	12.1	7.8
1985	11.1	4.0	11.1	6.9

Source: Getúlio Vargas Foundation, Grupo de Análise Contábil, in *Conjuntura Econômica*, November 1985.

For all corporations this fall of profitability can probably be explained by an increase of the organic composition of capital or a reduction of the marginal output–capital relation. This reduction was especially accentuated in the case of the state-owned corporations, but can be generalized for all corporations. The strategy of the Second National Development Plan was basically to complete the import substitution process in the area of basic inputs and capital goods. These large import substitution investments in the area of oil, electric energy, steel, non-ferrous metals, petrochemicals, paper and cellulose, and also the export-oriented mining investments (especially iron) are highly capital-intensive, and so led to an increase of the organic composition of capital. In the first stage they represent capital-using technical progress, defined by the reduction of the marginal output–capital relation, and make the rate of profit decline (see Bresser Pereira, 1986). Only in the second stage, after these import substitution projects have been carried out can export-oriented manufacturing investments be put forth. Technical progress then tends to become neutral or even capital-saving, and the output–capital relation and the rate of profit increase again. Antonio Barros de Castro (1985) and Jorge Chame Batista (1987) demonstrated that the Second National Development Plan, launched in 1974, contrary to many superficial analyses, was a bold and successful strategy to consolidate Brazilian industrial development at a moment of world-wide economic recession and crisis. The large trade surpluses after 1983 are in large part due to the great investment projects of the Plan. But the cost was not only the increase of the external debt, but also the increase of the organic composition of capital and the fall of the rate of profits.

SECTION 7

Finally, in order to understand not only the deterioration of the saving and investment capacity of the state, but also of the whole economy, we have to consider the relation between the behaviour of real average wages and productivity. Per capita income is taken as a proxy for productivity.

As can be seen in Table 7 and more easily in Fig. 1, during the 'miracle' between 1970 and 1974, productivity increased very rapidly and wages

TABLE 7 *Wages and productivity (1970 = 100)*

	Average real wage	*Productivity**
1970	100	100
1971	102	109
1972	106	118
1973	111	130
1974	111	139
1975	120	143
1976	127	152
1977	129	157
1978	139	160
1979	142	165
1980	137	176
1981	133	171
1982	152	169
1983	134	159
1984†	115	162

* Productivity = increase in per capita income.
† Data for the first semester of 1984.
Source: Domingo Zurron Ocio (1986) for average real wage and Getúlio Vargas Foundation for productivity.

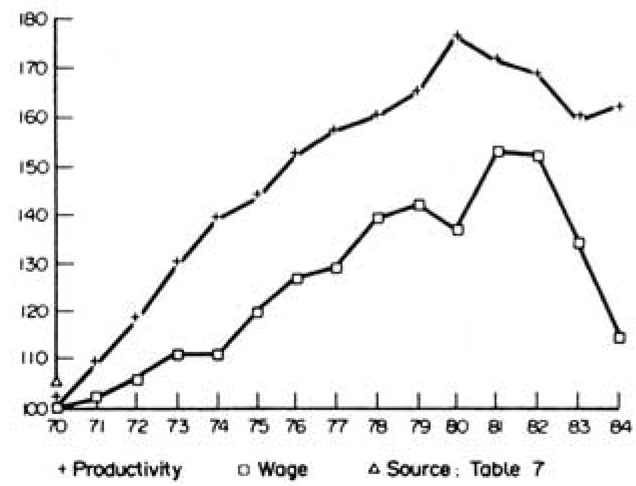

FIG 1 *Wages and productivity*

increased at a much slower pace. The consequent increase in the rate of surplus value certainly resulted in an increasing rate of profits. From 1974 to 1978 the rate of the increase of productivity slowed down and wages increased their rate of growth. As a consequence, both rates increased at approximately the same rate. The years 1979 and 1980 were a transition period. After 1980 productivity started decreasing up to 1983 and wages followed in the same direction with a 1-year delay. The rate of profit, that had probably stabilized during 1974–1979, started decreasing in this last year, or, as the data in Table 6 show, had already been declining since 1978.

Therefore, during the 15 years that we are examining, only in the first 4 years (1970–1974) was the profit–wage, or the productivity–wage, relation highly favorable for capital. Since 1975 the relation between capital and labor has seemed to be more or less balanced. The decrease of the rate of profit since 1978 cannot be explained by wage increases above productivity.

SECTION 8

To sum up, since the end of the 1970s the Brazilian economy has been faced with a strong deterioration in its capacity to save and invest. The deterioration of the capacity to save is related to the loss of the ability of the state to impose forced savings and to subsidise the private sector, to the diminution of the fiscal burden, to the need for external adjustment and reduction of the public deficit, to the decrease of the profit rate caused by the deceleration of the growth rate, by the imposition of price controls in order to fight inflation, and by the increase of the organic composition of capital derived from the import substitution investments of the Second Development Plan.

The deterioration of the investment capacity of the economy is also related to the end, since 1979, of the inflow of net external resources aimed at effectively financing new investments.

The question now is to know, first, what the pattern of investments will be in the second part of the 1980s, after the transition crisis of the first half, and, second, if this new pattern will be able to produce an acceptable rate of growth.

Rogério Furquin Werneck (1986) has developed a model for analysing the various alternatives conducive to an increase in the total rate of saving in the country from the 16 per cent of GDP prevailing in 1984 to 24 per cent. This rate would be necessary to assure a growth rate of 7 per cent of the GDP in the following year (marginal output–capital relation of 0.3). Theoretically he shows that an increase of the rate of savings can originate from: (1) an increase of the propensity to save of the capitalists and the workers, and a concentration of income benefiting the capitalists; (2) an increase of the fiscal burden and an increase of the investment–consumption relation of the state; (3) an increase of the profit rate of the state-owned corporations; (4) a reduction of the interest rate on the external debt and on the public internal debt, including the debt of the state owned corporations (1986: 11). After making several simulations with these variables, and after partially dismissing the Keynesian proposition that investment creates its own savings, he concluded that:

> The recovery of the average rate of growth observed between the end of World War II and the end of the 1970s will necessarily require that the public sector again assume its historical role as an important gatherer of resources for financing investments. The lack of realism implicit in the idea that the increase in the saving effort can be the basic responsibility of the private sector was demonstrated (1986: 29).

Werneck's conclusions are basically correct. There is no doubt that it is unrealistic to base the Brazilian strategy of development exclusively on an increase of the saving propensity of the private sector. Given the impossibility of recourse to external finance, the increase of the saving and investment capacity of the state, through increasing the fiscal burden, controlling consumption expenditures (wages of civil servants), and setting realistic prices for the state-owned corporations, is a more efficient and socially more equitable strategy for assuring the required increase of savings. Thus the establishment of the National Development Fund in July 1986, and the increase of taxes decided on by the government in December 1985 and November 1986 are measures taken in the correct direction.

It is important, however, not to try to return to the pattern of investment that has prevailed since the 1950s and that had its final moment in the strategy of the Second National Development Plan. This idea, almost explicit in Werneck's analysis, is not realistic.

The Brazil of the 1980s is very different from the Brazil of the previous three decades. The indebtedness of the state is very high today. The internal debt of state, including state-owned corporations, represents 48.1 per cent of GDP in 1985. The private sector on the other hand, is capitalised. If we take the 550 corporations studied in 'Biggest and Best' of *Exame* (São Paulo, Editora Abril, September 1986), the rate of general indebtedness decreased from 57.1 per cent of the total assets in 1981 to 46.3 per cent in 1985. Since the end of the 1970s, Ignácio Rangel (1978) has been insisting that it is essential to transfer the excess savings existing in the private sector, where idle capacity prevails, to the public sector where there are great opportunities for investment. In order to achieve this objective, he could have proposed an increase of the fiscal burden, but instead he insists on the privatisation of the public utilities. This strategy may also be unrealistic, but it emphasises the existence of unused savings capacity in the private sector that could be put to work either through the increase of the fiscal burden or opening new profitable opportunities for investment in the private sector.

On the other hand, it is not reasonable to dismiss an improvement of the marginal output–capital as easily as Werneck does (1986: 3). The large import substitution investments of the 1970s lowered the output–capital relation. In order to establish a basic stock of capital it is necessary to lower this relation or to increase the marginal capital–output relation. The resultant increase of the total capital–output relation sometimes cannot be detected in the national accounts, not only because the measurements of the stock of capital are imprecise, but also because the depreciation of capital made by accountants is larger than the real depreciation. As the more important, highly capital-intensive, import-substitution investments have been made, it is reasonable to admit that the marginal output–capital relation will increase. It is true that large investments will have to be made in hydroelectric energy, steel, and non-ferrous metals, but it is reasonable to expect that the emphasis of new investments, especially in the private sector, will be on export-oriented industries with low capital-intensity and a high output–capital relation.

In the last 20 years Brazil has developed an internationally competitive manufacturing industry. In 1967 it accounted for around 6 per cent of the total Brazilian exports; now it accounts for 10 times more. Brazilian exports of manufactured goods, accounting for 0.35 per cent of the exports of manufactured goods for the world, for 5.03 per cent of the developing countries and of 33.34 per cent of the ALADI countries in 1973, increased their share respectively to 0.69, 6.33 and 54.88 per cent in 1982. (Cf. J. C. Batista, 1987, based on United Nations statistics.) This extraordinary increase in the export of manufactured goods in relation to other Latin American countries is a basic explanation for the superior long term performance of the Brazilian economy in relation to these countries. On the other hand, the more modest increase in relation to the exports of all developing countries results from the successful export strategies of countries like Korea, Taiwan, Singapore and Hong Kong.

Concomitant to the recovery of the saving capacity of the state, a basic strategy for the Brazilian economy that will increase private savings and principally will increase the output–capital relation is the stimulation of exports of manufactured goods. The usual argument that this strategy leads to concentration of income is incorrect. Several studies have demonstrated that, being less capital-intensive, investments in export-oriented manufacturing industries are compatible with a more equitable distribution of income than import substitution investments (see Ian M.D. Little, 1982: 142).

Besides that, Brazil has to face up to its large external debt. Since the debt cannot increase indefinitely by the amount of interest due each year, a given transfer of real resources is unavoidable. What is important to Brazil is to negotiate a reduction of the interest rate—specifically a reduction of the spreads—and to be able to obtain large trade surpluses, to allow simultaneously payment of part of the interest on the external debt and growth of the GDP. Only an export-oriented strategy will be able to achieve this goal.

Finally, it should be considered that in the next decade international trade will probably continue to grow at a higher rate than the growth rate of the industrialised countries. Brazil, paying lower wages, has a competitive advantage that can and must be profited from in order to increase internal employment and to obtain external surpluses. As the demand for more specialised labour increases, real wages will tend to increase internally. The pressure for the increase of productivity that is essential for economic growth will be stronger, as the profits of the Brazilian manufacturing industry depend on its international competitiveness.

The state-owned corporations will continue to have an important role in channelling investment, but the private national and multinational corporations will probably increase their role. The state, which initially financed and subsidised private investment, is now in debt and, through open market operations, is being financed by the private sector. An adequate objective of economic policy would be to restore the capacity of the state and of the state-owned corporations to self-finance their investments, while the private national and multinational corporations should have a profit rate sufficiently attractive to stimulate their investments. The financial systems that finance the state today would give priority to financing private investment. As long as private business enterprises feel stimulated to invest, savings will appear to finance investments.

To sum up, an adequate rate of growth for the Brazilian economy will be possible as long as the state recovers part of its saving and investment capacity, but also as long as private business enterprises have profitable opportunities for investments and their investments are oriented to sectors with a higher output–capital relation. Primitive accumulation, that is the complex system of subsidies that was essential in the first stages of Brazilian industrial development, can now have a definitively secondary role. There is already in Brazil a basic stock of capital that permits investment and growth to be based on relative surplus value, that is on profits regularly realised in the market by a private sector that incorporates technical progress systematically.

NOTES

1. Joseph Schumpeter gave a decisive role to finance in the investment decision (1911). Kalecki (1933) and Keynes (1937) also gave the financial system a crucial role in the increase of investment. A recent debate of post-Keynesian economists (Asimakopulos, 1983, 1986; Kregel 1984–1985, 1986; Paul Davidson, 1986) follows the same line. For underdeveloped countries the role of external finance has been recognized since the first studies on development economics in the 1940s. In this paper we are taking for granted the role of finance, and emphasising the role of primitive accumulation and forced saving in the early stages of development.
2. In this month Antonio Delfim Netto, who was responsible for the creation of the Inter-Ministerial Price Council (CIP) in 1986, became Minister of Planning.

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