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# The Basis of the Minidevaluation Policy

### III INTRODUCTION

Brazil's exchange policy follows, in general terms, the purchasing power parity theory, which, in turn, had its inspiration in the teachings of the quantity theory of money. The central idea derives from the classical tenet of homogeneity: in the long run, an increase in all nominal prices does not cause any alteration in the real variables (relative prices, quantities produced and consumed) of the economic system.

The application of this principle to the case of an economy geared toward foreign countries can be understood in the following manner. In the first place, it is important to understand that what counts for the purposes of the balance on current account is the relation between the prices of domestic goods (that is, of the goods and services which do not enter directly into the flows of trade with the rest of the world, from the price of a haircut to the remuneration of labor), on the one hand, and the prices of international goods (importable and exportable goods), on the other. In the second place, it is known that the prices in national currency for international goods (given the prices in foreign currency and the prevailing commercial policy) basically depend on the exchange rate, which in turn is controlled by the monetary authorities.

Thus, given the exchange rate, domestic inflation (the persistent increase of all prices and of the cost of domestic goods) causes a change in the relative prices between domestic and international goods in such a way as to (1) discourage exports, due to the increase in production costs (in cruzeiros) of the exportable goods, while the export earnings of the same monetary unit remain constant (given the exchange rate and the prices in foreign currencies); and (2) encourage imports, as the costs and prices of the goods that compete with the imports grow while the cost of importation remains constant. This process causes deficits in the balance of current transactions, even if the country's terms of trade (in foreign currency) remain constant.

Under these conditions, the only way to neutralize the harmful effects of domestic inflation on the balance on current account is to devalue national currency in relation to foreign currency, thus avoiding changes in the relative price between domestic and international goods. It is at this point that the classical tenet of homogeneity comes into the picture: if all prices in cruzeiros, including that of the foreign currency, increase at the same rate, in the long run no change in the real variables of the economic system can be expected.

The concept of exchange devaluation capable of producing this neutrality is given by

$$\dot{\pi_t} = \dot{p_t} - \dot{q_t}$$

where

 $\pi_t$  = the rate of exchange devaluation

 $\dot{p_t}$  = the rate of domestic inflation

 $q_t$  = the rate of external inflation

This assumes constancy in (1) the terms of trade and (2) in the equilibrium level of the exchange rate.

It should be observed that, since the price changes are practically continuous in time, the policy must be conducted in such a manner as to avoid cumulative deficits during the intervals between exchange devaluations, i.e., the exchange must be devalued frequently and, therefore, at low rates.

It is obvious that the implementation of this criterion of economic policy requires certain precautions if serious errors in interpretation are to be avoided. Some of these problems will be discussed next.

# [II] THE REAL EXCHANGE RATE IN BRAZIL: 1968-1973

Considering the result obtained regarding the real exchange rate (in relation to the U.S. dollar), Brazitian exchange policy has very nearly followed the criterion discussed in the previous section. If we take as a basis the nominal exchange rate of the third quarter of 1968—the policy of minidevaluation was initiated in August of that year—it will be seen that the value of the dollar in terms of cruzeiros increased in such a way as to keep the real level of 1968 relatively constant.

Table 1 shows nominal exchange rates, and Table 2, real exchange rates. As can be seen in Table 2, the exchange rate was maintained in real terms between 3.62 in the third quarter of 1968—the highest of the period 1968-1973—and 3.24 in the fourth quarter of 1969—the lowest level of the whole period. As of 1970, however, a clear trend emerges to revalue the cruzeiro in real terms. For example, the real rate was persistently maintained below the values for 1968 and 1969. In fact, if we compare the values of the real exchange of 1972 and 1973 with that of 1968, an overvaluation of the cruzeiro in relation to the U.S. dollar on the order of 7 to 8 percent can be observed. Before asking ourselves about the effects of this revaluation, we must take into consideration some additional information.

It is evident that for the purpose of exchange policy the U.S. dollar is not the only relevant national currency. Due to the frequent exchange crises of the last few years, especially from 1971 on—and with the consequent devaluation of the U.S. dollar, particularly in relation to the German mark—commenting on overvaluation or undervaluation of the cruzeiro is a complex task. Inasmuch as there was an overvaluation of the cruzeiro in relation to the dollar, our currency was substantially undervalued in relation to the German mark, the Swiss franc, the French franc, the yen, the currencies of the Netherlands, and other European currencies. In relation to the mark, the undervaluation reaches significant figures: 20 percent and 30 percent, respectively, in 1972 and 1973 compared with 1970.

If, in addition, we consider the fact that the Western European and Japanese markets already absorb a greater fraction of our exports than does the U.S. market, the unavoidable conclusion is that, at least in respect to the composition of our foreign markets, our exchange policy was not neutral. The overvaluation of the dollar in conjunction with the undervaluation of the currencies of Europe and Japan point in the direction of an orientation to (1) decrease the incentives for placing Brazilian products in the U.S. market and increase the competitiveness of American products in our market; and (2) increase the incentives for selling to Japanese and Western European markets and decrease them for purchasing from these markets.

This is the actual trend observed during the period, and markedly so during the year 1973; the share of the U.S. market, which absorbed an average of 27 percent of our exports during 1968–1972 (23 percent in 1972, the lowest figure of the period), decreased in 1973, when it did not even reach 20 percent. By contrast, the markets that absorbed most of

	(cruz	eiros per uni	it of foreign cur	rency)					
Year		U.S.A.	Germany	Belgium	France	lapan	×		
1968							<u>C.N.</u>	lialy	Netherlands
	-==	3.220 3.220 3.700	0.8088 0.8060	0.0648 0.0644	0.6544 0.6473	0.0088 0.0089	7.7341 7.6758	0.0051 0.0051	0.8909 0.8803
1969	2	3.830	0.9575 0.9575	0.0735 0.0763	0.7440 0.7740	0.0103 0.0107	8.8430 9.1345	0.0059	1.0173
	-= <u>=</u> >	4.000 4.050 4.150 4.250	0.9940 1.0117 1.0463 1.0840	0.0794 0.0805 0.0826 0.0805	0.8066 0.8150 0.7445 0.7196	0.0111 0.0112 0.0116	9.5776 9.6843 9.8898 9.802	0.0063 0.0064 0.0065	1.1013 1.1105 1.1502
0/61	-==	4.490 4.560 4.720	1.2257 1.2558 1.2995	0.0904 0.0918 0.0950	0.8103 0.8262	0.0125 0.0127	9.0024 10.8069 10.9239	0.0071 0.0071 0.0072	1.1037 1.2365 1.2579
1971	≥	4.950	1.3569	0.0996	0.8967	0.0138	11.2718 11.8493	0.0075 0.0079	1.3114 1.3761
	- = = <u>&gt;</u>	5.110 5.285 5.505 5.635	1.4077 1.5112 1.6591 1.7242	0.1029 0.1062 0.1170 0.1258	0.9267 0.9582 0.9954 1.0786	0.0142 0.0147 0.0164 0.0179	12.3503 12.7865 13.6799 14.3833	0.0082 0.0084 0.0089 0.0094	1.4214 1.4824 1.6325 1.7317

TABLE 1 Nominal Exchange Rates

	-	5.845	1.8450	0.1329	1.1624	0.0192	15.2893	0.0100	1.8299
	=	5.915	1.8742	0.1349	1.1825	0.0196	14.4562	0 0101	1 8641
	Ξ	6.025	1 2816	0 1262	1 2021				
			0.000		1707.1	0.0200	6700.41	0.0103	1.8618
	2	6.215	2.1899	0.1410	1.2126	0.0205	14.5934	0.0106	1 9755
1973							) )		0041.
		6.030	2.1247	0.1504	1.3279	0,0226	14,9405	0.0103	2 (1482
	=	6.100	2.5154	0 1655	1 4859	0,00,0	15 7500	0.010	
						C 770.0	700/01	10.00	2026.2
		6.160	2.5454	0.1669	1.4494	0.0231	14.8671	0.0109	2.4299
	2	6.220	2.3011	0.1505	1.3211	0 0222	14 4503	0.010.0	
1974					i i i			70.00	C70.7.7
	-	6.455	2.5584	0.1657	1.3549	0.0233	15.4532	0.0103	2.4040

	(on th	ne basis of w	holesale price i	ndexes)					
Year		U.S.A.	Germany	Belgium	France	Netherlands	U.K.	ltalv	lapan
1968									
	-	3.4518	0.8775	0.0694	0.7094	0 9568	8 7368	0,0052	10000
	=	3.2780	0.8243	0.0654	0.6505	0.8986	7 8754		5600.0
	=	3.6186	0.9082	0.0720	0.7254	0.9980	нс /0. / 8 6 8 3 8	C:00.0	16000
	2	3.6117	0.8875	0.0719	0.7330	1 0026	0.0000	75000	0.0101
1969				1			06.00		00100
	_	3.7120	0.8996	0.0734	0.7663	0 9813	8 81:14	0.0053	
	=	3.7017	0.8943	0.0734	0 7702	0 0706		1000.0	0.0100
	≡	3.5690	0 8726	0.0708		D0 /6.0	2007.0	/ cnn.n	0.0099
	111				70/07	0.989/	8.4162	0.0056	0.0097
1970	2	3.2360	0.8607	0.0654	0.6325	0.8686	7.7011	0.0051	0.0088
	_	3.5336	0.9548	0.0721	0 7035	0.0550			
	1	1 4020	0.0557			00000	9610.0	V:00.0	0.0092
	= =		1006.0	0.0/14	0.6990	0.9573	8.4660	0.0057	0.0091
	Ξ	3.5683	0.9785	0.0723	0.7010	0.9809	8.7244	0.0058	
	2	3.6086	0.9932	0.0731	0.7030	0.9798	8 9936	0.0050	0.000
1971									C&NN.N
	_	3.3828	0.9671	0.0685	0.6783	0.9395	88181	0.0057	0000
	I	3.3137	0.9883	0.0669	0.6707	0 0735			1600.0
	11	3 4251	1 0410				0.1 043	9500.0	0.0090
				60/0°0	0.6689	0.9713	9.1108	0.0057	0.0095
	2	3.39/9	1.0466	0.0733	0.7043	1.0113	8.2560	0.0058	0.0100

TABLE 2 Real Exchange Rates

0.0101	0.0112
0.0101	0.0113
0.0100	0.0116
0.0101	0.0117
0.0060	0.0057
0.0059	0.0059
0.0058	0.0064
0.0059	0.0061
9.6323	8.5758
8.9050	8.7729
8.7494	8.2810
8.6393	8.0488
1.0174	1.0671
1.0029	1.2293
0.9793	1.2392
1.0167	1.1255
0.7288	0.7861
0.7272	0.8782
0.7152	0.8638
0.7152	0.8072
0.0748	0.0797
0.0746	0.0874
0.0728	0.0876
0.0750	0.0783
1.0793	1.1197
1.0683	1.3030
1.0349	1.2931
1.1760	1.1482
3.4193	3.2743
3.3834	3.3672
3.3439	3.4250
3.3623	3.4086
-=≡>	- = ≡ ≥
1972	1973

Brazil's products, especially in 1973, were those whose national currency was most undervalued versus the cruzeiro (vis-à-vis which we devalued more pronouncedly), i.e., the Dutch, the Japanese, and the German.

And it is here that we note the first disturbing element in the neutrality of our exchange policy: the dance of the national currency values. In the aggregate—on the basis of an index of the real exchange value of the cruzeiro in relation to the national currencies of our principal trade partners, that takes into account their relative participation in our exports during the period 1968–1973 (see footnote, Table 3), we can verify as shown in Table 3, that the cruzeiro remained quite stable between 1968 and 1972, and then underwent a real devaluation in 1973 of some 10 percent (compared with 1968).

It should be noted that 1973 was a particularly difficult year with regard to interpreting the values assigned to national currencies. Not only did they continue to fluctuate, but, more fundamentally, there was a profound change in relative prices in favor of basic products in general, which culminated in the increase of the petroleum price in October of that year. This leads us to the problem generated by changes in a country's terms of trade.

# [III] MINIDEVALUATION, TERMS OF TRADE, AND EQUILIBRIUM IN THE TRADE BALANCE

As mentioned above, the notion of neutrality characterizing minidevaluation adopted in Brazil also depends crucially on the hypothesis of constancy in the terms of trade. If a marked change occurs in the terms of trade, even if the rule of devaluing by the difference between domestic and foreign inflation is maintained, a trend toward a surplus in the case of gain or a trend toward a deficit in the trade balance in the case of loss in the country's terms of trade should be observed. In the first case, with a gain in the terms of trade, the economy will tend to adjust itself automatically to the new conditions through price and/or product increases (unless the authorities permit a new equilibrium to be reached via an exchange revaluation), thus decelerating the rhythm of devaluation imposed by the minidevaluation. In the second instance, the economy will tend to adjust itself through a drop in the inflationary rhythm and/or product growth (unless the new situation is sanctioned through an exchange devaluation).

To avoid adjusting the economy to external fluctuations through changes in price and product (and employment) levels, the exchange policy must perform two roles: one, to neutralize the harmful effects of domestic inflation on the trade balance for the given terms of trade; and two, to

	Į,	ira quarter	01 = 2061 10	() ()						
					1	-	2			Overall
Year		U.S.A.	Germany	Belgium	France	Netherlands	C.K.	Italy	Japan	INEGII
1968										
	-	95,40	96.61	96.38	97.79	95.87	94.88	98.24	94.05	96.35
	Ξ	90'06	90.75	90.83	89.67	90.03	90.72	92.98	90.09	90.70
	Ξ	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
	2	99.82	97.71	99.86	101.04	100.46	98.59	99.99	00.66	99.68
1969										
		102.59	99.04	101.94	105.63	98.32	101.50	99.99	99.00	101.18
	=	102.31	98.46	101.94	106.17	97.25	100.62	66'66	98.01	100.89
	Ξ	98.64	96.07	93.33	93.48	94.15	96.95	98.24	96.06	91.16
	:≥	89.44	94.76	90.83	87.19	87.03	88.71	89.47	87.12	89.43
1970										
	_	97.66	105.12	100.13	96.83	95.77	98.14	99.99	91.08	98.34
	. =	96.54	105.22	99.16	96.35	95.92	97.52	66.69	90.09	97.67
	: =	98.62	107.73	100.41	96.63	98.28	100.50	101.75	92.07	99.39
	:≥	99.74	109.35	101.52	96.90	98.17	103.60	103.50	94.05	100.60
1971										
		93.50	106,47	95.13	93.50	94,13	101.58	99.99	90.09	95.60
	-	91.59	108.81	92.91	92.45	92.53	101.19	98.24	89.10	94.31
	Ξ	94.94	114.71	98.47	92.20	97.32	104.95	99.99	94.05	98.28
	≥	93.91	115.23	101.80	97.08	101.33	95.10	101.75	99.00	100.10

 TABLE 3
 Real Exchange Rate Indexes

 (hind anisotar of 1968 = 100)

101.11         98.59         98.12         100.19         101.75         99.6           104.16         99.45         101.87         99.52         103.50         99.9           104.16         99.45         101.87         99.52         103.50         99.9           110.69         108.36         106.92         98.79         99.99         110.8           121.38         121.05         123.17         101.06         103.50         111.3           121.66         119.07         124.16         95.39         112.28         114.8           108.74         111.27         112.77         92.72         107.01         115.8	103.94 129.47 123.27 143.46 142.37 126.41	II 92.42 IV 92.93 I 90.50 II 93.06 II 93.06 II 94.66 IV 94.21	1973 1973 129.93 129.47 101.11 98.59 98.12 100.19 101.75 99.00 99.71 107.3 102.22 103.50 99.99 102.22	I         90.50         123.27         110.69         108.36         106.92         98.79         99.99         110.89         105.80           II         93.06         143.46         121.38         121.05         123.17         101.06         103.50         111.38         114.35           III         94.66         142.37         121.66         119.07         124.16         95.39         112.28         114.35         115.36           IV         94.21         126.41         108.74         111.27         112.77         92.72         107.01         115.86         107.15	NOTE: Weighted hutho addition
1         94.50         118.83           11         93.51         117.61           11         93.51         117.61           11         92.42         103.94           1V         92.93         129.47           1         90.50         123.27           11         93.06         142.37           11         94.66         142.37           11         94.21         126.41	1         94.50           11         93.51           11         92.93           12         92.93           1         92.93           1         92.93           1         92.93           1         92.93           1         92.93           1         92.93           1         92.93           1         93.66           11         93.06           11         93.06           11         94.66           11         94.66           11         94.66		1973		NOTE

1972

vergined by the relative importance of each country in Brazil's total exports for the period 1968-1973: U.S.A., 25.3; Germany, 9.0; Netherlands, 7.0; Italy, 6.5; Japan, 5.0; England, 4.5; France, 4.0; Belgium, 3.0.

prevent disequilibrium in the trade balance from spreading out into inflationary pressures in the case of improvement, or into deflationary pressures on the product and employment levels in the case of deterioration in the terms of trade. In the latter case, the exchange policy in effect simply sanctions a change in the terms of trade, thus avoiding a more "painful" adjustment process in the classical mold of the gold standard. This simple consideration inevitably leads to the following questions: Was the level of exchange in August 1968 (the beginning of minidevaluation policy) one of equilibrium? Was the exchange rate of 3.63 cruzeiros per dollar at that time consistent with the constellation of relative prices (prices of domestic and international goods, on the one hand, and the terms of trade, on the other) and therefore with equilibrium in the trade balance (in view of the country's trade policy)?

Unfortunately, this is the type of problem for which there is no definite answer. However, judging by the behavior of the country's trade balance from 1968 to 1970, which showed a surplus throughout the period (26, 318, and 231 million dollars in 1968, 1969, and 1970, respectively), we can conclude with some assurance that the exchange rate of 3.63 was one of relative equilibrium at the time. It is obvious that these surpluses and even the extraordinary performance of exports during that period cannot be credited solely to the exchange policy. The system of export incentives (actually an indirect means of increasing the rate of exchange for exporters of manufactures) and the improvement in the terms of trade are important factors in the explanation of the phenomenon.

It is also clear that simply to maintain the real exchange rate for 1968 is not enough to guarantee continuing equilibrium in the trade balance for subsequent years. Changes in the terms of trade—like those in Brazil during the last few years, can cause serious imbalances in international trading. In any event, this is the message that is conveyed: A healthy exchange policy not only requires that the unfavorable impact of the domestic inflation on the trade balance be neutralized (the very reason for the existence of the Brazilian system of minidevaluation), but also—and more fundamentally—that the *level of equilibrium* of the rate be identified, which in turn, among other factors, is directly connected with the fluctuations in the country's terms of trade. This distinction is all the more important the more sudden and lasting the changes in trade relations are, and, therefore, the greater the disequilibrium in international markets.

In this respect, the years 1973 and 1974 are very illustrative. The 1973 picture can be briefly characterized thus:

 On the one hand, we can observe an extraordinary increase in the dollar prices of our main export products. In fact, judging by the available statistics, the index of the terms of trade records a strong gain for the year. (It should be noted that, although the petroleum price increase started in October, its effects were only felt in 1974).

2. On the other hand, the economy was in a phase of high activity, of easy liquidity—caused primarily by a massive inflow of financial resources from abroad—with high levels of aggregate expenditures and therefore strong inflationary pressure.

In view of this picture alone, the real exchange equilibrium would certainly not be the one of the real 1968 level. In order to adjust to the new level of equilibrium, either (1) a higher level of domestic inflation than that set as a goal by the authorities should be permitted; or, alternatively, (2) the exchange rate should be relatively revalued.

The path which was actually followed in general was as follows. On the one hand, a small revaluation (in February of 1973) of the cruzeiro in relation to the U.S. dollar was opted for; it was followed by a cautious policy of minidevaluation, so that—despite the four devaluations of that year—the nominal exchange rate at the end of 1973 was exactly the same as the one observed in December 1972. On the other hand, a policy of quantitative control was also adopted for export products whose prices had been speculatively increased in the international market, such as soybeans and its by-products.

Still, in spite of the great expansion of the means of payment, the records of the trade balance show a surplus on the order of 200 million dollars compared with 1972 (when a deficit of some 200 million dollars was recorded). It is clear that in view of such a picture, these economic policy measures could have been accompanied by a greater control of the aggregate expenditure through the instruments of monetary and fiscal policy. (In truth, it should be added that during the whole period the country's monetary policy was conditioned by a massive inflow of foreign exchange.)

In any event, the 1973 example seems to show that exchange policy can and must be manipulated not only in regard to the difference between domestic and foreign inflation, but also in relation to changes in the real phenomena which affect the balance of current transactions.

What about the year 1974? Here the picture changes radically. On the one hand, we have a simply frightful figure: a 2.5 billion dollar deficit—for the first half of the year alone—in our trade balance. If we add to this amount the deficit on current account, we will reach a figure greater than the total export value during the same period (a 3.7 billion dollar deficit against 3.1 billion exported, figures published in the *Conjuntura* of August 1974). Judging by the official estimates, it can be surmised that the picture for the second half of the year alone is no more encouraging: a trade deficit on the order of 5 billion dollars. It is a fact that the increase in the price of

oil is greatly responsible for this imbalance. But the problem is not only oil. The drop in relative, if not absolute, prices and in the exports of our main products--except cocoa and sugar (the drop in total value exported, in terms of basic products, was about 125 million dollars in the first half of the year), as well as sharp increases in the importation of machinery and equipment and products other than oil (possibly for speculative accumulation of stocks) help explain the phenomenon. In sum, everything indicates that there was a substantial deterioration in the country's terms of trade. (According to the speech of the Minister of Finance published in the newspaper *O Estado de São Paulo* of November 30, 1974, the average price in dollars of our imports increased by 53 percent between January and September of 1974).

On the other hand, a policy of rigid control of liquidity was started as of the second quarter. in conjunction with an attempt—proved of short duration—to ease price controls. This culminated in a reduction of real liquidity, accompanied by high monthly inflation rates. The drop in real liquidity and the "sanitization" of the capital market (to use an expression of the present Minister of Finance), on the one hand, stemmed the rise in the general price index during the third quarter and, on the other, caused a retraction of aggregate expenditure, thus breaking up the rhythm of economic activity. This, in turn, has caused fears of recession and a drop in employment.

Under these conditions, adjustment in the trade balance will be achieved either through a dornestic depression, with a falling off in growth rates of product and employment and/or of prices, or alternatively, through an exchange devaluation. In any event, to maintain the policy of devaluation solely through the difference between domestic and external inflation is to accept the first adjustment mechanism, that is, to allow equilibrium to restore itself automatically through the drop in the level of economic activity within the framework of the classical mechanism of the gold standard. In fact, we are faced with a classical problem of political economy: a drop in product growth and a severe deficit in the balance on current account.

In such a situation, insofar as it is desirable to maintain business activity and employment at a high level, we should follow an expansionist monetary and fiscal policy combined with a fairly substantial exchange devaluation in order to attain a balance on both the internal and the external fronts. Unfortunately, this does not seem to have been the path followed by the monetary authorities. From the standpoint of aggregate expenditure, both monetary and fiscal policies have been contraction-oriented. According to official sources, at the same time that the (nominal) expansion rate of the means of payment was below the inflation rate, the records of the Treasury indicate a cash surplus of about 4 billion cruzeiros for the year 1974. If this trend prevails, it will be very difficult to maintain an annual growth rate of around 6–7 percent in 1975. And it can be clearly seen that if the instruments of economic policy are not vigorously activated in order to prevent such a situation, the results could be even considerably worse.

# **IV THE OPTIONS OF ECONOMIC POLICY**

Should an expansionist fiscal and monetary policy be pursued, an evaluation of foreign economic policy alternatives must consider the following alternatives as well:

### a. Import Substitution

In view of the country's imports agenda, a substitution policy will inevitably concentrate on the areas of machinery and equipment and of basic imports. It would seem that the greatest problem lies in the area of machinery and equipment: which types, and at what pace, could we substitute without impairing the future efficiency of the industry, itself geared toward exportation? Past experience seems to indicate that this task will be difficult to accomplish and can only be successful over the longer range. Even in the area of basic resources (for example, the petroleum of Campos) the solution will necessarily be one of medium range. Unless it is acceptable to lose reserves or to increase the external debt, that is, to try to gain time, the effort of import substitution is an inefficient means of eliminating, at short range, the fundamental disequilibrium in the balance of current transactions.

# b. Tariff and Non-Tariff Barriers

Although these instruments are efficient with respect to import control, they are quite inefficient from the standpoint of allocation, that is, they can seriously impair the effort to improve the competitive position of the export sector—not to mention the possibility of retaliation on the part of our commercial partners. With regard to exports, the shoe case shows that the existing incentives already appear excessive from the viewpoint of the international community. In any event, the tariff instrument can, in the short run, inhibit importation and that is what is actually being done by the government.

It is obvious that no instrument compares favorably with an efficient exchange rate policy. For the short term, devaluation is an efficient means of eliminating the deficit in current transactions; it inhibits imports while providing new incentives for exports without creating any problems of a political nature on the international scene. Further, it compares favorably with other methods by not being discriminatory with respect to import and export plans and is therefore more efficient from an allocation viewpoint.

This preference in no way implies that an abrupt exchange devaluation is being advocated. It would suffice that the devaluations be carried out at short intervals, in such a manner as to overcome the difference between domestic and foreign inflation for a certain time period, thus placing the exchange at a level more consistent with the equilibrium of the trade balance, which should be maintained under the already consolidated minidevaluation policy. This in no way compromises that policy; it only strengthens it insofar as it avoids persistent and cumulative deficits in the balance of current transactions.

While this set of policy instruments-expansion of liquidity and of government expenditures combined with exchange devaluation----helps to minimize the retreat in the pace of economic activity and maintain a relative ease in the balance of current transactions, it also causes some undesirable effects. Accelerating the process of exchange devaluation will certainly exert some upward pressure on the general price index. In fact, this appears unavoidable. As we have seen, if one wishes to avoid larger devaluations, the equilibrium of the trade balance demands slower growth in production and/or prices. This can lead to the following situation: As prices and the inflation rate show a certain downward inflexibility, the adjustment process usually operates through drops in the output rate, which, in turn, can lead to a more expansionist monetary and fiscal policy in the process of salvaging the employment level. This, again, generates strong inflationary pressures and still larger deficits in the balance on current account. Thus, avoidance of sharper exchange devaluations in correcting an external maladjustment can result in the disquieting situation of higher inflation rates and a larger trade deficit, the worst of both worlds.

In addition, the question of the external debt in cruzeiros arises. As the private sector is already emerging from a liquidity crisis, and not unscathed, it would be very difficult for the system as a whole to survive a more rapid devaluation (greater than that which is already anticipated) without a new crisis, this time generated by the necessity of larger reimbursements in cruzeiros to pay for the commitments in foreign currencies. In fact, the problem here could only be by-passed if simultaneously with the exchange devaluation one or a set of the following measures would be taken: (1) Decreasing income tax on remittances abroad, which has already been implemented; and (2) creating a special fund through which the government would directly subsidize interest and amortization payments by means of a "financial exchange rate" which would be lower than the commercial one (something similar to a "backward withholding rate").

## **[V] FINAL COMMENTS**

Here is the principal message of this study. The minidevaluation policy adopted by Brazil is essentially the application of the purchasing power parity theory, which, in turn, was inspired by the teachings of the quantitative theory of money. It upholds the spirit of a system of fixed exchange rates, except for the fact that it neutralizes the unfavorable impact of domestic inflation on the balance of current transactions. Hence, there is a twofold role that exchange policy can play: (1) neutralizing the harmful effects of domestic inflation on the trade balance due to the changes in relative prices of domestic goods, on the one hand, and of international goods, on the other, provided the terms of trade remain constant; and (2) avoiding the disequilibrium in the trade balance generated by changes in the terms of trade, which results in inflationary pressures in the case of gain, or in deflationary pressures on production and employment in the case of deterioration in the terms of trade.

Although they are obvious, it is worthwhile to emphasize these basic factors underlying the Brazilian system of minidevaluation, especially at a particularly difficult moment like the present one in Brazil. Finally, it must be pointed out that we have deliberately omitted some of the other aspects of the problem, especially in regard to the capital account. Here the policy of minidevaluation can be understood as an incentive to attract financial resources: if the policy is carried out so that devaluation occurs through the difference between domestic and foreign inflation, the indexation rate on the cruzeiro counterpart of the external debt is necessarily smaller than that applicable to domestic values. Thus, since the capital market abroad does not anticipate external inflation through a rise in the nominal interest rate, the Brazilian businessman is provided with an incentive to obtain resources in the foreign capital market. This aspect of the problem is important and complex, and itself merits a research endeavor, which we hope to undertake in the near future.