BRAZIL'S INFLATION AND THE CRUZADO PLAN, 1985-1988

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Abstract. The Cruzado Plan (1986) and the Bresser Plan (1987) were price freezes, and both failed in stabilizing high inflation in Brazil. Yet, they involved quite different stabilization policies. The former was ambitious, and failed because it was victim of a populist implementation. The later was an interim policy, just aiming at dealing with an emergency situation. It should be followed by some reasonable solution for the foreign debt problem, a strong fiscal adjustment, and a new stabilization plan. I did not have political support for the two last initiatives, and resigned after seven months and a half in the Finance Ministry.

Inflation is chronic in Brazil. During the 70s, inflation was around 50 per cent a year; in 1979 it went up to 100 per cent and there it stayed for three years; then, in 1983, it increased to 200 per cent, maintaining this level for the following two years; 1986 was the year of the Cruzado Plan; its failure brought inflation to a new level of around 600 per cent, which was partially avoided in 1987 due to the so called "Bresser Plan". So, very high and increasing, although relatively stable for given periods, rates of inflation - 5, 10 and presently almost 20 per cent a month - characterized the 80s. This situation prevailed together with recession due to adjustment efforts in 1981, 1983 and, to a certain extent, 1987. The present year will probably take Brazil to new inflation records, while the economy plunges again into recession.

The acceleration of inflation in the last years took place while the Brazilian economy endures the most serious economic crisis of its industrial history. Income per capita has stagnated since 1980. The investment rate fell from 22/23 in the 70s to 16/17 percent of GDP in recent years. A structural financial disequilibrium of the public sector, whose basic component is an enormous public external debt, is behind the economic crisis. The acceleration of inflation in Brazil and its prevailing high levels are a symptom of this crisis, and are an indirect consequence of the fiscal crisis of the Brazilian State.

Luiz Carlos Bresser-Pereira ensina economia política na Fundação Getúlio Vargas, São Paulo In this lecture I will discuss inflation in Brazil, the direct causes that brought it and maintained it at such high levels. I will make a short survey of the theory of inertial inflation - a new theoretical paradigm originally developed by a group of Brazilian economists in the early 80s. And finally I will compare the two heterodox shocks - the Cruzado Plan and the Bresser Plan - that, respectively in 1986 and 1987, froze prices according to the theory of inertial inflation. I will stress then that, although apparently similar, both plans are very different in terms of objectives, characteristics, and conditions that prevailed when each one was introduced and outcomes.

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Looking at the monetary figures in the last two decades we will see that the money supply increased systematically less than the rate of inflation and did not provoke either the reduction of the interest rate or excess demand. Thus the monetarist theory about inflation does not help to explain either the acceleration or the maintenance of the level of inflation in Brazil. The same applies to a parent explanation based on the public deficit (defined as the operational Public Sector Borrowing Requirements - PSBR), as can be seen in Table 1. In 1983 it was drastically reduced while inflation soared. The public deficit or, more precisely, the structural financial unbalance of the public sector is the basic cause of the crisis of the Brazilian economy and it is behind the high level of inflation prevailing in the country, but it is a poor direct explanation for inflation in Brazil.

Table 1

Inflation and Public Deficit			
Year	Inflation	Public Deficit	
		(% GDP)	
1978	40.8%	-	
1979	77.2%	8.3%	
1980	110.2%	6.7%	
1981	95.2%	6.0%	
1982	99.7%	7.3%	
1983	211.0%	4.4%	
1984	223.8%	2.7%	
1985	235.1%	4.3%	
1986	65.0%	3.6%	
1987	415.8%	5.5%	

Sources: FGV (IGP - General Price Index) and Central Bank (Operational PRSB)

In the beginning of the 80s, the failure of the old theories to explain adequately inflation in Brazil motivated the development of a new theory. The Latin American structural theory of inflation developed in the 50s was a first step.

It stressed the chronic and endogenous character of inflation in Latin-American countries, but it could not explain the high rates of inflation in Brazil. As the Keynesian and the monetarist theories, it explained partially the acceleration of inflation, not its persistent maintenance in very high levels. In 1963 we have a second important step in the structuralist theory of inflation with Ignácio Rangel's book *A Inflação Brasileira*. Rangel was the first economist to make a comprehensive and compelling analysis of the endogenous character of the money supply, anticipating in seven years Kaldor's well known contribution on the subject (1970). It was a major criticism to the monetarist theory of inflation, arguing that the expansion of the money supply was rather a consequence than a cause of inflation. The structuralist theory of inflation, however, as well as the other theories was unable to explain the high rates of inflation prevailing in Brazil.

2

In the beginning of the 80s a great intellectual effort took place in Brazil in order to develop a new paradigm about inflation. The result was the theory of inertial inflation, a neo-structuralist theory of inflation, based on the distributive conflict rather than on expectations, and on the clear separation among the accelerating, maintaining and validating factors behind inflation.

This separation seems today quite obvious, but it was not a few years ago. If one looks at the papers and the textbooks on inflation before 1983, one won't find anything about it. The previous theories tried to explain the acceleration of inflation. The models start always with the following assumption: prices are stable, the inflation rate is zero, and then something happens and inflation starts. "Let us assume that inflation is zero", the theories say, and then, in a given moment, we have a problem of excess demand, or the money supply increases faster than the national product, or organized labor is able to increase their wages above the increase of productivity, or monopolies and oligopolies increase their profit margins, or government decides to devaluate the national currency, or to correct prices of state owned enterprises that for some reason lagged behind - and in this moment inflation accelerates.

But in Brazil, in the beginning of the 80s - and still now - it was necessary to start from another sort of assumption. From the assumption, for instance, that inflation is at the level of 200 per cent a year, or at 10 per cent a month, or at any other high level. And, from this assumption, to ask ourselves what explains this level of inflation and what leads it to change.

⁻ A full statement of this theory and of its development, including the respective bibliography, can be found in my book with Yoshiaki Nakano, *The Theory of Inertial Inflation*, Boulder, Lynne Rienner Publisher, 1987. See also to this respect Werner Baer (1987). Three books published in Brazil include the more important papers about the theory of inertial inflation: Bresser-Pereira and Nakano (1984b), Francisco Lopes (1986) and Pérsio Arida, editor (1986).

The theory of inertial inflation will explain both phenomena. It is a mistake to think that it is just a theory explaining "the inertial component" of inflation. It is also a theory that tries to explain the accelerating factors of inflation, the supply and demand shocks, that can be endogenous or exogenous factors, but that certainly are much more powerful accelerating factors of inflation when inflation is relatively stabilized in high levels.

This does not mean that the theory of inertial inflation applies only to high inflation economies. You can also distinguish accelerating and maintaining factors of inflation in the United States, for instance, where inflation is around 4 per cent a year. You can also relate its causes to distributive conflict. But the rate of inflation is so small that the distinction is not relevant, or rather, much less relevant.

The idea of distributive conflict is essential to the theory of inertial inflation. It intends to have the status of an alternative proposition to the idea of expectations present in the Keynesian and monetarist theories. This does not mean that inertialists do not take in account expectations. Since Political Economy - the classical name of our science - is a social science, it deals with people and so with expectations. The inertialist theory just asserts that inflation expectations are essentially based on past inflation. The basic assumptions is that in the distributive conflict that characterizes capitalist economies every economic agent - every individual, every firm, every economic and social group - tries permanently to maintain - and if possible to increase - its income share through the administration of its prices.

If inflation is, for instance, at a level of 10 per cent a month, every economic agent will increase its prices in 10 per cent a month. But they will not do that in the same moment. They will do it in turns, one after the other. Let us suppose that there are only three agents in the economy. The first will increase its prices by 10 per cent in the first day of the month, the second in the tenth and the third in the twentieth of the month, always by ten per cent; and then is again the turn of the first economic agent to increase its prices by ten per cent. They are increasing their prices in turns because they are passing through cost increases to prices and because they do not coordinate their actions. Nobody can say who started the process. Inflation is an old and chronic problem in this model economy. Its inertial character, based on the distributive conflict, maintains it in a level of 10 per cent a month.

It is the same distributive conflict that explains the acceleration of inertial inflation. If one of this three economic agents is able to increase its prices by 12 per cent instead of 10 per cent - it does not matter if due to a demand push or cost push accelerating factor - the other two agents will have to do the same in order to avoid losses, or, in other words, in order to maintain their income share.

3

Today all these ideas seem quite obvious, but they were not in early 80s, when the theory of inertial inflation was being developed. At that time monetarist economists believed that in order to control the high rates of inflation in Brazil the only solution was to reduce the public deficit and the money supply, therefore cutting public and private aggregate demand. The big recessions of 1981 and 1983 were engineered on this theoretical basis. Due to the recessions and to the devaluation of the local currency, the balance of payment was adjusted, big trade surpluses emerged. Actually, as Antonio Barros de Castro and Pires de Souza underlined, theses surpluses were also a consequence of the huge investments of the 70s (1985). But, contrarily to the orthodox theory, inflation did not slow down. Due to the exchange rate devaluation decided in the beginning of the year, the rate of inflation doubled in 1983.

Either in the acceleration or in the maintenance of the level of the Brazilian inflation in the first half of the 80s money played passive role. The increase of the money supply always lagged behind the rate of inflation. The money supply increased in order to maintain the liquidity of the economic system. If the level of inflation was 10 per cent a month, and if the nominal money supply remained constant, the real money supply would decrease almost 10 per cent every month. This would lead the economy to recession.

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The necessary consequence of this type of theory about inflation is that the conventional tools - monetarist or Keynesian - to fight inflation will not work when high levels of inertial inflation prevail. The basic policy to control inflation will have to be an administrative one.

In these circumstances two alternatives of administrative policy are left to the policy maker: a gradual one, based on price controls aiming at a declining rate of inflation, or a price freeze, an heterodox shock. Nakano and I presented this alternative in a paper published in July 1984. We called the freeze "a heroic policy of administrative price controls and the total deindexation of the economy" (1984a: 104). A little later Francisco Lopes, whose contribution to the development of the theory of inertial inflation is essential, proposed formally the freeze and labeled it "heterodox shock" (1984). Almost in the same time two young and very bright economists, André Lara Resende (1984) e Pérsio Arida (1984) made the proposal the total indexation of the economy including the money. That was a very interesting and sophisticated alternative to the heterodox shock, based on the same assumption of a prevailing inertial inflation. Its implementation, however, was complicated and risky.

The new democratic government that took office in March 1985 inherited a high rate of inflation, around 11 per cent a month, but it was not ready to make a total freeze as the inertialists were proposing. Instead the new finance minister decided for a partial freeze. It was economically absurd. The government froze the prices of the state owned enterprises and of a few big oligopolistic private enterprises, while the other prices were kept free. It was impossible to maintain such policy for a long period of time. It would reduce the rate of inflation only for a few months. Dall'Acqua and I wrote a paper during the partial freeze, using as a tool the theory of inertial inflation, and forecasting that the corrective measures, that would necessarily come when the freeze became unbearable, would lead inflation to a higher level than before. Indeed, in the month before the partial freeze inflation was 12 per cent; it was reduced to around 7 per cent during the four months of the freeze (April to July); and in September 1985, exactly in the day the paper was being published, the government announced for August an inflation rate above 12 per cent. It was a significant demonstration of the predicting capacity of the theory.

Finally, in February 28, 1986, when inflation was clearly beginning a new period of acceleration, the government introduced the Cruzado Plan. It was designed by some of the economists that had participated in the development of the theory of inertial inflation (André Lara Resende, Edmar Bacha, Francisco Lopes, Pérsio Arida). Thus, it was technically very well designed. It profited the experience of the Austral Plan, which was introduced in Argentina a few months before based in the same theory. When the decision was taken the economic authorities were aware of the dimension of the public deficit and knew very well the devastating internal consequences of the external deficit, but the impression we have today is that they underestimated these two problems. Besides, in designing the plan two mistakes were made: an unrealistic expectation of "zero inflation" and a real wage increase of 8 per cent in the day of the freeze even though the increase of real wages during 1985 was already pushing inflation upwards.

These problems, however, could be corrected in the following months. The four economists above mentioned and Fernão Bracher, then the Central Bank Governor, indeed tried as much as they could, to curb the excess demand that began in April 1985. The other economic authorities, in a lesser degree, tried also to introduce the necessary corrections in the plan. But they did not get the necessary political support, including from the President, who was entirely bewildered - and so, immobilized - by the economic and political success of the Cruzado Plan. In May, for instance, the Finance Minister said that he was planning to start liberating prices, and immediately the President forbid any economic authority even to mention this idea. In July the strength of the "Cruzadinho" - a compulsory loan aiming to reduce aggregate demand and curtail the public deficit - was severely limited by a personal decision of the President.

During the first months the Cruzado Plan was very successful in controlling inflation. But as we now know, it was finally a failure, a big failure, not only

because it was unable to eradicate inflation, but also because it provoked deep instabilities and a sharp financial and economic crisis. The Brazilian economy before the Cruzado was fully indexed. So it was able to get along with high but almost stable rates of inflation. With the Cruzado the indexation system was eliminated. When inflation reappeared in December 1986, the legal interdiction of indexation provoked a financial crisis. Never the number of insolvencies and bankruptcies was so big in Brazil.

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In the middle of this crisis I was appointed Finance Minister of Brazil, in April 1987². Inflation was accelerating every month, and reached 26 per cent in June. On the 12th of June I was responsible for the second price freeze of the Brazilian economy: the so-called "Bresser Plan", that I will call the 1987 Plan. It was again a heterodox shock, as the Cruzado Plan was based on the theory of inertial inflation. But it was a very different type of economic policy. It was different in terms of (1) its objectives, (2) its characteristics, (3) the conditions that prevailed when it was introduced, and (4) its outcomes. It is interesting to make a comparison between the two plans. Table 2 presents the rate of inflation in 1986 and 1987, but it is misleading to base the comparison only in the inflation rate outcomes.

Table 2

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Inflation in 1986 and 1987			
(%)			
Months	1986	1987	
January	15,01	16,82	
February	17,58	13,94	
March	-0,11	14,40	
April	0,78	20,96	
May	1,40	23,21	
June	1,27	26,06	
July	1,19	3,05	
August	1,68	6,36	
September	1,72	5,68	
October	1,90	9,18	
November	3,29	12,84	
December	7,27	14,14	

Source: IBGE (IPC - Consumer Price Index)

The objective of the Cruzado Plan was to eliminate inflation, was to achieve a zero rate of inflation. The statements of the authorities connected with the plan are very

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² The author was Finance Minister of Brazil between April 29 and December 20, 1987.

clear in this respect. And this was the main reason why they were not able to correct the unbalances in relative prices present in the day of the freeze. In the case of the 1987 Plan the objective was only to halt inflation, not to wipe it out, avoiding the clear danger of hyperinflation. We new very well that an emergency freeze made without fixing the exchange rate, without deindexing the economy, in a situation where relative prices were very much out of equilibrium, would never end with inflation. According to the predictions of the two economists that, with me, were more directly involved in defining the plan - Yoshiaki Nakano and Francisco Lopes -our forecast was that inflation would be back to around 10 per cent in December 1987.

Actually we had a broader objective. We intended, with the freeze and with a devaluation of the Cruzado, to overcome the deep economic and financial crisis that the beleaguered Brazilian economy was facing in the second quarter of 1987. And this objective was basically achieved. There was no intention in "solving definitively" the long term crisis of the Brazilian economy - a kind of fantasy that was very common during the Cruzado Plan - but the objective of overcoming the acute crisis of the moment was essential to the 1987 Plan.

The conditions of the economy in the beginning of 1986 were very different from the ones prevailing in the second quarter of 1987. In 1986 the process of growth started in 1984 was still going on. GDP increased 8 per cent in 1985. The balance of payments was in good shape. Trade surplus was around 1 billion dollars per month; current account was balanced. Investments, profits and wages and salaries were increasing. The only two major desiquilibria in current terms - the external debt is a desiquilibrium in stock or structural terms - were the public deficit and the fact that real wages were increasing at a faster rate than productivity, pressing inflation upwards.

In contrast, in April 1987 we were probably in the deepest economic and financial crisis Brazil ever experienced. During the week I took office, Celso Furtado, an outstanding Brazilian economist, and Olavo Setúbal, a leading banker and politician, said that Brazil had not faced such a crisis since at least 1931. It was not only that inflation was rising out control, but also that wages were down by more than 20 per cent since the peak of November 1986³, investment had collapsed, the economy was entering in recession, and small and medium size firms were breaking one after the other. Finally the situation of the balance of payments was terrible (see Table 3). The monthly trade surplus of 1 billion dollars had turned

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Real wages increased systematically during 1985 and up to November 1986, when they started falling. In July 1987 they partially recovered their former level.

Table 3

TRADE BALANCE IN 1986 AND 1987			
(US\$ millions)			
Month	1986	1987	
January	701	(35)	
February	628	328	
March	1137	302	
April	1292	502	
May	1340	961	
June	1071	1430	
July	1010	1457	
August	950	1429	
September	544	1497	
October	(79)	1193	
November	(32)	997	
December	(213)	1108	

Source: Finance Ministry

into a deficit, and the international reserves, that were around 3 billion dollars only, tended to disappear despite the moratoria declared in February on the interests related to long and medium term debt due to private banks. Indeed, in the day I took office the Central Bank estimated that, continuing the trend, the Brazilian reserves would be exhausted in August. So, the basic objective of the 1987 Plan was to reestablish the overall balance of the economy, by halting the acceleration of inflation and getting it somewhat down, by stopping the fall of wages, by avoiding the a deep recession, by reverting the financial crisis, by reequilibrating the balance of payments. And all these objectives have been achieved. Wages stopped going down and recovered moderately (see Table 6). Retailing sales and after September industrial sales increased in a limited but effective way, avoiding recession and the increase of unemployment (see Table 4). Aggregate demand was carefully managed in order to avoid the excess demand problem of the Cruzado Plan as well as recession. The bankruptcy wave ended. The external current account balanced. Inflation was sharply reduced, and then began to increase at a rate somewhat higher than expected. In December, instead of an inflation rate of 10 per cent - that could be explained by the fact that the exchange rate was not frozen and by the need and objective of reestablishing the equilibrium of relative prices that I followed very explicitly -, inflation was at 14 per cent. What explain this difference, besides an eventual underestimation of the distortions in relative prices in the day of the freeze, was the wage increases starting in September and the lack of confidence in the government's determination to cut the public deficit.

Table 4

Industrial Production in 1986 and 1987			
(Index: January 1986 = 100)			
Month	1986	1987	
January	100,0	100,0	
February	94,3	99,9	
March	96,2	103,7	
April	100,4	102,7	
May	104,8	103,8	
June	111,4	106,4	
July	120,9	105,9	
August	119,9	106,8	
September	126,4	112.0	
October	132,0	114,7	
November	116,7	106,8	
December	104,9	94,4	

Source: FIBGE (Transformation Industry)

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Actually the characteristics of the 1987 Plan were very different from the Cruzado Plan. First, the 1987 Plan was an emergency plan, while the Cruzado Plan was not. Second, in Cruzado Plan was introduced with a monetary reform, while the 1987 Plan, given its more modest objectives, was not. Third, the Cruzado Plan was based in the total deindexation of the economy, while the 1987 Plan maintained and completed the existing indexation system, since inflation was supposed to resume and since a priority was given to reestablish the overall equilibrium of the economy - an equilibrium to which the indexation system, in an inflationary situation, is essential. Forth, given the very low level of international reserves, the exchange rate was not frozen. On the contrary, a real devaluation of the exchange rate was assured in order to reestablish the equilibrium of the balance of payments. Fifth, while the freeze in the Cruzado Plan had no predetermined date to end, in the 1987 Plan it defined and fulfilled a term limit of three months. Finally, while for many people the Cruzado Plan seemed to be "the complete and final heterodox response to orthodox economic policy", it was very clear to us that the 1987 Plan was only an emergency measure, given inertial inflation and a financial crisis, and that we would have to recur immediately after the freeze to the conventional fiscal and monetary policies - that I do not agree in calling indiscriminately "orthodox" - in order to assure the macroeconomic equilibrium of the economy.

The decision of not undertaking the deindexation of the economy surprised many economists because, during the Cruzado Plan, it was common to hear the argument that "the cause of inertial inflation is the indexation of the economy". How, then, would it be possible to eliminate or to control inertial inflation without deindexating the economy? The answer to this question is simple. The maintaining factor of inertial inflation is indeed the capacity of each economic agent to pass on cost increases to prices. Formal or informal indexation is the mechanism that guarantees this transmission process. But this does not mean that the cause of high rates of inflation is indexation. If inflation is monthly near zero, indexation will maintain inflation at this level; if it is around 10 or 20 per cent a month, it will also maintain inflation at this level. So, if prices are frozen and inflation is immediately reduced to a level near zero, the fact that formal indexation is not eliminated will not accelerate inflation again; it will maintain inflation in its new level around zero.

Certainly the formal indexation represents a continuous danger, because prices become rigid downwards, and so every supply or demand shock will provoke an automatic acceleration of inflation, since compensating reductions in other prices - due to productivity increases, for instance - will be much more difficult to materialize. But, as the 1987 Plan was an emergency measure, as we knew that inflation would resume due to the need of reequilibrating relative prices after the shock, we decided not to eliminate formal indexation.

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It was more important in that moment to reestablish the overall equilibrium of the economy, assuring a reasonable rate of profit in the different sectors, than to artificially curb inflation during a certain period at the cost of profound economic distortions. When I decided for the freeze I knew that relative prices were fully unbalanced; that some prices were very low and other very high; that some business firms were making big losses and other big profits. I assigned priority to the reestablishment of the equilibrium of the economy in relation to achieving the full control of inflation.

I had very present in my mind the unbalances in relative prices that prevailed during the Cruzado Plan and the deep crisis that followed its failure. The financial crisis was particularly serious. The number of "concordatas" and bankruptcies in the first semester of 1987 does not have parallel in the history of Brazil (see Table 5). They were essentially a consequence of the acceleration of inflation while the whole indexation system had been eliminated. It was essential not to repeat the same mistake. Ten days after the Cruzado Plan I wrote a column in *Folha de S. Paulo* saying that if government did not succeed in balancing relative prices, if it insisted in keeping inflation down to zero at the cost of maintaining the distortions in relative prices the plan would fail (1986). There is no doubt today that, besides excess demand, the other cause of the failure of the Cruzado Plan was the fact that

relative prices were kept out of equilibrium. Actually the distortions of relative prices increased instead of decreasing in 1986.

Table 5

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Insolvencies and Bankruptcies in 1986 and 1987			
(in São Paulo)			
Month	1986	1987	
January	204	169	
February	197	194	
March	195	262	
April	225	338	
May	214	451	
June	136	538	
July	176	540	
August	176	397	
September	138	331	
October	179	309	
November	144	302	
December	146	311	
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Source: Associação Comercial de São Paulo (filled insolvencies and bankruptcies)

Thus, after the freeze a priority was given to reestablish the equilibrium of relative prices. The distortions in June 12 1987 were much bigger than in February 28, 1986. So, the corrections would have to be sizable. And these corrections would certainly accelerate inflation, because they would be only upwards. For sure, there were in the day of the freeze prices "behind" and prices "ahead". Thus, the correct policy would be to increase some prices and to decrease others. But this is practically impossible because there is no way of identifying the prices above the equilibrium level. Businessmen never acknowledge that their prices are high. They protest strongly only when their prices are low, are below the equilibrium level. Therefore it was very clear that inflation would accelerate again after the freeze. Our hope was that it would level out, around December, at approximately 10 per cent. This would be the cost of reequilibrating relative prices - a cost that had to be paid.

The same kind of reasoning - the priority to reequilibrating relative prices - was behind the decision of not freezing the exchange rate. The midi-devaluation in the day of the freeze and the maintenance of the mini-devaluations in the following days were certainly accelerating factors of inflation. But we had no other alternative, given the low level of Brazilian reserves. While they were around 7.1 billion dollars in the day of the Cruzado Plan, they were near 3 billion dollars - and with a downward trend - in June 1987. What was considered was slowing down the daily mini-devaluations of the Cruzado. But even this was impossible. When I insisted in slowing down the mini-devaluations the external sector director of the

Central Bank - a very competent economist - answered that this was too dangerous; that he would only do that if he was authorized to start selling the small Brazilian gold reserves. At this point I gave up. I agreed to maintain the mini-devaluations according to the effective rate of inflation, and not according to a projected lower rate of inflation.

8

Besides trying to reestablish the microeconomic balance of the economy through the correction of relative prices, we were also concerned with the macroeconomic equilibrium of the economy. In the design and in the administration of the 1987 Plan we kept always in mind the failure of the Cruzado Plan in controlling aggregate demand. We were determined not to repeat the same mistake.

Wage policy was essential in this respect. One of the basic reasons of the failure of the Cruzado Plan was the real wage increase in the day of the freeze and in the following months. So we were very careful about wage policy, so careful that we were misunderstood. Our objective was to put a halt on the sharp decrease of real wages of the last five months and to partially recover the losses. The reduction had been above 20 per cent from the peak of November 1987. Since this peak had been proved inconsistent with macroeconomic equilibrium we aimed at a recuperation of around 10 per cent. In order to achieve this objective, given (1) that in June 30 wage earners would receive the last "gatilho" (trigger) 20 percent, (2) that in this month inflation would go down from around 25 per cent to less than 5 per cent in July (actually the inflation of June was 26 percent and the inflation of July, 3 per cent), and (3) that workers tend to spend the wages received in the end of each month in the next month, we decided that the inflation of June should not be considered in the new wage indexation system. We were sure that real wages would stop decreasing and start increasing. And indeed this happened, as all series of data about real wages in Brazil, including the one collected by SEADE/DIEESE, demonstrated later (see Table 6). In that moment, however, I could support my arguments only theoretically. And these arguments were not always understood by the workers, by journalists, by federal judges and by many economists. After all they are all wage or salary earners. In consequence, workers protested against "wage compression" (arrocho salarial) and pressed for a recuperation of real wages, confusing the losses they had suffered between November 1986 and June 1987 with the 1987 Plan. These workers' reaction was one of the causes behind the acceleration of inflation to a level above the one expected when the 1987 Plan was defined.

4

During the Cruzado Plan wages were indexed according to a trigger system. They were increased whenever inflation reached an accumulated rate of 20 percent.

Table 6

Average Real Wages in 1986 and 1987			
(Index: 100 in January 1986)			
Month	1986	1987	
January	100,0	94,3	
February	92,9	89,2	
March	98,8	85,9	
April	106,4	79,8	
May	105,6	74,6	
June	96,2	69,5	
July	111,0	68,5	
August	111,5	68,9	
September	103,2	69,3	
October	109,9	71,9	
November	108,2	71,6	
December	95,2	74,3	

Source: SEADE/DIEESE

The workers' pressure to increase real wages, however, was not the only reason why inflation in December was 14 instead of the forecasted 10 per cent. The inability of the Government in controlling wages and salaries of public officials and employees of the state owned enterprises was certainly a cause of this disparity. After the raise that the employees of Banco do Brasil received in September, the private sector followed the lead giving generous nominal wage increases to their workers in October and November. It became clear then that populism is not only a fault of politicians. The businessmen also are ready to raise nominal wages if they are able to pass on the increase in costs to prices.

There is, however, another major reason for the acceleration of inflation to a level above the forecasted. Already in August, certainly in September the private sector lost confidence upon the government's determination in controlling the public deficit. The basic strategy of the Macroeconomic Control Plan published in July in order to overcome the long run crisis of the Brazilian economy - a crisis that keeps its income per capita stagnated since 1980 - was to recuperate the saving capacity of the State, was to fight the public deficit. According to the inertial theory of inflation, the relation between public deficit and inflation tends to be indirect. It is only direct when it conduces to excess demand. Businessmen, people in general, however, influenced by conventional theories of inflation, make a direct relation between public deficit and inflation. So, when in August the press start saying that the government would not be able to cut public deficit to the 3 per cent of GDP defined in the Macroeconomic Control Plan, businessmen lost confidence in economic policy and began to increase their prices more than the strictly necessary, or, in other words, began to increase their profit margins. The consequence was the

acceleration of inflation. In September the huge wage increase given to the employees of Banco do Brasil and, in October, to the military and public functionaries confirmed the predictions that the public deficit target would not be attained. It was in October that I decided to leave the government, a decision that I was finally able to accomplish in December.

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The basic factor behind the structural crisis that characterizes the Brazilian economy in the 80s is the public sector's financial desiquilibrium. The State is virtually broken, bankrupted in Brazil. The fiscal crisis of the State has not only a "flow" aspect - the public deficit, the sharp decrease of its savings ability - but also a "stock" character: the public internal and particularly the public external debt. More than 80 per cent of the huge Brazilian external debt is public. Only the interests on this part of the debt represent 2.3 per cent of GDP.

The origins of this structural desiquilibrium of the public finances are to be found (1) in the "growth cum debt" policy of the 70s, (2) in the increase of the international interest rate in the end of the 70s, (3) in the pressure to devaluate the local currency in order to face the balance of payment problems, (4) in the subsidies and incentives to the private sector defined in the 70s (when public finances where still healthy) and maintained through the 80s (what means that the burden of the adjustment process fell almost entirely on the public sector), (5) in the practice of holding down the prices of the state owned enterprises aiming to control inflation, (6) in the decrease of the fiscal burden due to the acceleration of inflation. The basic although indirect cause of the acceleration of inflation since the end of the 70s is the fiscal crisis of the state, whose main aspect is the external public debt.

Income per capita is practically stagnated in Brazil since 1980; income per capita in Latin America was in 1987 at the same level of 1976. The basic common fact behind this structural crisis is the external debt transformed into a fiscal crisis. Inflation accelerated in Brazil whenever was necessary to devaluate the currency, or, more generally, when, after a period of holding down artificially some prices, particularly public prices, "corrective inflation" - the correction of relative prices - become unavoidable. In other words, inflation accelerated in Brazil whenever the external debt and the fiscal crisis of the State required changes or corrections of relative prices.

When I decided for the emergency price shock of June 12, I was convinced that later a new shock would be probably needed in order to control effectively inflation. Around October this need became evident. But it was also very clear to me that a new price shock would be meaningless - actually it would be a signal of irresponsibility - if it was not accompanied of two others "shocks": an external debt shock and a fiscal shock.

In other words, in order to control inertial inflation a price shock is still the best alternative. But it will fail if, at the same time, the basic causes behind the acceleration of inflation are not faced. In Brazil theses causes are structural, they have a stock character: the financial desiquilibrium of the state, whose basic component is the public external debt. So, heroic solutions, radical solutions, solutions that involve political will and courage are necessary.

It is not enough to fight the public deficit curtailing current state expenditures, firing idle public employees, as many conventional (and conservative) analyses suggest every day in the Brazilian press. Either Brazil is able, dramatically, in a very radical way, (1) to reduce its external debt, profiting the existence of a discount in the secondary markets and using its capacity of taking unilateral decisions, (2) to increase the net fiscal burden, increasing taxes and eliminating subsides and incentives, and (3) to reduce current expenditures, or Brazil will not end with inflation and economic stagnation. Brazil faces today the more serious economic crisis of its industrial history. A structural crisis based on an external debt that cannot be devaluated by inflation. Never before, in the last one hundred years, income per capita remained stagnant for so many years. There is little hope that the market, according to the dynamics of the economic cycle, will solve this crisis. That is why heroic economic measures are necessary, measures that only a statesman - a man with vision and courage - is able to take.

But, in order to enact a new price shock and end with inflation, besides reducing dramatically the external debt and the public deficit, it is necessary a third element: a social pact.

I always have been very skeptical about a social pact in Brazil, because first you need a political pact - a broader agreement between the main political forces in the country regarding, besides wages, social reforms. In Spain, for instances, the workers only agreed to firm a social pact, limiting their wage increases, after a political pact was defined and they obtained the guarantee of minimum social reforms. But, anyway, it is quite clear today that either you have a social pact in Brazil, or it will be impossible to control inflation. When the Cruzado Plan was decided I observed that a kind of social pact was implicit, given the enormous popular support it obtained. But an implicit social pact is not enough; it is necessary an explicit one. The Cruzado Plan failed in large measure because there was not an explicit social pact and workers were able to increase their nominal and real wages.

desiquilibrium will only be solved through taxation on capital and a reduction of the external debt. Her analysis is consistent with the theory of inertial inflation. It should, however, pay more attention to the role of corrective inflation, particularly to the exchange rate devaluations, in the explanation of the acceleration of inflation in Brazil since 1979.

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A very interesting analysis of the relations between the public deficit, the external debt and the acceleration of inflation in Brazil was made recently by Eliana Cardoso (1988). According to her view inflation accelerated in Brazil due to the reversion from external financing of the public deficit to its internal financing. The consequence was the increase in the real interest rates, which provoked the acceleration of inflation. Thus, the fiscal desiquilibrium will only be solved through taxation on capital and a reduction of the external debt. Her analysis is consistent with the theory of inertial inflation. It should

In the 1987 Plan workers have been only able to increase nominal wages, but anyway this was a basic cause of the acceleration of inflation, since real wages only did not increase after October because inflation followed or at least accelerated simultaneously with the increase of nominal wages.

The 1986 Cruzado Plan and the 1987 Plan, as the Argentinean 1985 Austral Plan were not able to control inflation, while the 1985 price shock in Israel was successful. This happened because Israel did not have an external debt like Brazil or Argentina, and because it was able to control the public deficit in a much more effective way; but a third basic reason why the heterodox shock succeeded in Israel was the political and social pact the Israeli have been able to firm.

In my last week as Finance Minister I had a very interesting conversation with Mr. Shimon Perez, then visiting Brazil, a conversation that strengthened my decision to resign. He was Prime Minister of Israel in the moment of the shock, when inflation was around 1.000 per cent a year. In this position he - and not the Finance Minister - took personally the responsibility of getting to a social or political pact - a pact involving the workers, the businessmen and the government. Each part would have to make a sacrifice. The workers accepted a wage decrease; the businessmen, a price control and an income policy; the government, a reduction of the public deficit. The negotiations inside the government, among the ministers, were very difficult. After 29 hours of discussions, with the presence of the Prime Minister, the budget was finally reduced as necessary. My decision to resign was strengthened in that moment because it was then very clear to me that a similar social and political pact in Brazil would be impossible with President José Sarney as head of state. I was aware that Israel, in contrast with Brazil or Argentina, counted with a very favorable factor to help the price freeze: instead of transferring it is a net absorber of real external resources. But anyway it was clear in the case of Israel that the success in controlling inflation was not only the result of a competent combination of heterodox and conventional economic policies, but also the outcome of an effective political leadership.

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