## Inertial Inflation on the Eve of the Shock

In January 1986, it was dramatically confirmed that inflation, with a rate of 16.2 percent (IPCA) or 17.8 percent (IGP), had undergone a new acceleration. The fact that, in the last three years, inflation had stayed at an annual level of a little above 200 percent (corresponding to a monthly inflation of about 10 percent) had led many analysts, including government analysts, to imagine that this was the true level of present Brazilian inflation, around which monthly inflation rates would fluctuate. Actually, since the beginning of 1985, the level of inertial inflation in Brazil had already changed to an annual rate of almost 280 percent (an average of 12 percent per month). On the eve of the shock, after the accelerating factors that affected inflation in the second semester of 1985, this level was now nearly 350 percent a year (between 13 and 14 percent per month).

In 1985, a partial price freeze between April and July artificially lowered inflation for this period and altered the results for the year, helping to confirm the illusion that the real level of inflation continued to be a little above 200 percent. Actually, as we can see in Table 9.1, the annualized rate of inflation in terms of the IPCA between December 1984 and March 1985 (the previous government) was already 274.8 percent. It went down temporarily to 155.8 percent in the period of the sectorial price freeze, and then in the last six months (August 1985 to January 1986) rose to 305 percent. The results in terms of the IGP are similar, with the differences between the three periods more accentuated because of the greater weight of

Table 9.1 Inflation Annual Rates (%)

Periods	IPCA	IGP
December 1984 - March 1985	274.8	268.8
April 1985 - July 1985	155.8	149.6
August 1985 - January 1986	305.3	334.4
November 1985 - January 1986	360.2	453.7

Sources: FIBGE and Getúlio Vargas Foundation

intermediary goods. In the period after the freeze, annualized inflation rose to 334.4 percent in terms of the IGP.

Price freezes produce remarkable results while the controls are enforced. Even in an economy in which a chronic inflationary process has attained very high rates and is rooted deeply in the habits of the population, the results are spectacular. However, when the price freeze is partial and covers only some sectors, as soon as the controls are removed we have "corrective inflation" and the rate of inflation returns to the previous level. When the price freeze is partial, the "corrective inflation" becomes inevitable after some months in order to reestablish the struture of relative prices. We will have either shortages in the private sectors or an increase in the public sector deficit, if, as is usual, the prices of state-owned companies have been preferentially frozen. Therefore, the gains against inflation are temporary and, if the controlled sectors are able to recover the losses incurred during this period by increasing their profit margins, the final level of inflation may be even higher than the one previous to the partial freeze.<sup>2</sup>

The effect of a partial price freeze on the rate of inflation depends directly on the weight of these controlled prices in the overall price index and, indirectly, on their effect on the uncontrolled prices through increases in the cost of raw materials and in wages.

\_\_\_\_\_ 2 \_\_\_\_\_

The change in the inflation level during 1985 from 280 percent to about 350 percent is the result of three accelerating factors: (1) an increase in the average real wage rate considerably above the increase in productivity (about 10 percent); (2) an increase in agricultural prices beginning in October; and (3) pressures from demand caused by a great expansion of exports in many of the industrial sectors. A fourth factor—"corrective inflation" aimed at reestablishing profit margins and recovering the losses

suffered by the corporations during the freeze period—did not have its full effect because the government, through the CIP, only allowed a partial recovery of profit margins.

The increase in the monthly inflation level in 1985, from 12 percent to 13.5 percent, was not greater because two decelerating factors were neutralizing the above mentioned accelerating factors: (1) a reduction of the real interest rates, and (2) an increase in corporations' utilization of idle capacity. The first factor mainly reduced the variable costs and the second the fixed costs of the corporations, so that they did not have to pass on all of the increases in real wages to prices.

The acceleration of economic growth is a decelerating factor for inflation as long as there is idle capacity and, therefore, the possibility of reducing fixed costs. It turns into an accelerating factor for inflation (pressure from demand) when, as idle capacity and the reserve army of unemployed workers are exhausted, corporations begin to increase their profit margins and the workers their real wages. In the first three quarters of 1985, the acceleration of economic growth was a decelerating factor for inflation; in the last quarter of the year, as idle capacity and unemployment were declining, it became an accelerating factor for inflation.

3 -

The estimate of the inflation level on the eve of the shock at around 350 percent a year is, naturally, an approximation. If we annualize the inflation between November 1985 and February 1986, we will have an inflation of 360.2 percent according to the IPCA and of 453.7 percent according to the IGP. This last index shows the acceleration of inflation that occurred in the last quarter of 1985 more clearly because it reflects the increases in the prices of intermediary goods immediately. However, it exaggerates the increase of inflation, and thus cannot serve as a base for the definition of the new inflationary levels. On the other hand, the level of the inflation rate in January was clearly exceptional. For this reason, it seems to be more realistic to accept a trend level for inflation of 13.5 percent per month (corresponding to an annual inflation of 366.4 percent).

4

This high rate of inflation on the eve of the shock provoked a generalized fear that Brazil was entering an explosive inflationary spiral that would rapidly lead to hyperinflation. This fear, while understandable, did not

make sense. One of the characteristics of Brazilian inertial or autonomous inflation is its inflexibility, not only downward, but also upward. Inflation accelerates in Brazil, but slowly, by stages, rather than in an explosive and uncontrolled way as happens with classic hyperinflation.

This relative upward rigidity of Brazilian inflation was mostly because of generalized indexation, that is, to the existence of legal monetary correction, which, among other things, allowed the real exchange rate to remain constant (the nominal exchange rate was devalued daily according to the inflation rate). In Germany and other countries where hyperinflation has occurred through an inflationary spiral, there were real devaluations daily, and the flight to more stable foreign currencies was possible. It was these continuous real devaluations and large-scale flight that produced the explosive inflationary spiral and led to hyperinflation. The mechanism was simple. Given the then inflation, the government was obliged to increase the money supply in order to cover its growing obligations and to minimally maintain the liquidity of the system. Money placed in the hands of the public was immediately changed into dollars or other foreign currencies. The demand for dollars was so intense that it provoked daily real devaluations of the local currency. Real devaluations of the local currency were a very powerful accelerating factor for inflation because they raised the costs of imported goods and, via the propagating effects, domestic costs (Gerald Merkin 1982).

In the case of Brazil, the situation was completely different. The government was also forced to expand the money supply, but cruzeiros were not changed into dollars. Given the existence of an indexed financial market, the cruzeiros were applied in this market: they financed the public deficit. Also, the real exchange rate remained constant except for when there was a maxidevaluation, as happened in February 1983.

\_\_\_\_\_ 5 \_\_\_\_\_

Meanwhile, although we can remain reasonably calm about the small probability of an inflationary spiral, we should also be realistic enough to recognize that if inertial inflation is inflexible upwards, it is even more inflexible downwards. Because of this, it is completely unrealistic to imagine, as the then government seemed to do, that it is possible to return to a monthly inflation of 10 percent through the use of administrative price controls and a good administration of the stocks of agricultural products.<sup>3</sup> This strategy for fighting inflation is highly recommended, but its primary objective is not to reduce inflation, but to keep it under control, to prevent it from accelerating.

Actually, inertial inflation like Brazil's, which had already passed 300 percent, could not be fought with gradualist methods, be they orthodox or unorthodox. The only solution was a heterodox shock, the heroic policy for combatting inflation that we discussed in the last section of Chapter 3.

The gradualist orthodox policy is recommended by the IMF. It is based on fiscal and monetary contraction, cutting aggregate demand and leading the economy into a recession, which would provoke a reduction in real wages and in profit margins and, therefore, would decelerate inflation. The gradualist unorthodox policy is based on administrative control of prices, using a declining future inflation as a guideline.

Apart from the fact that the orthodox policy is inefficient because it is based on a generally incorrect diagnosis of inflation (demand inflation), both the orthodox and unorthodox gradualist policies are ineffective because, at this level of inflation, any supply shock cancels out all efforts to combat it through price controls, monetary and fiscal containment, or a combination of both these policies. An agricultural shock, a wage shock, a maxidevaluation, or "corrective inflation" measures cancel in one day what took months to attain.

This does not happen when inflation is much lower—at a level of 20 percent or 30 percent—because, at this level, the annual increase in productivity is an important instrument for decelerating inflation, and because the trade-off between unemployment and inflation is significant. Gradualist policies are effective as long as they make it possible that the increases in productivity are not immediately transformed into increases in nominal wages, but rather into reductions in costs and prices. One of the causes of inflationary deceleration in the central countries, beginning in 1980, was this capacity to take advantage of gains in productivity. However, it is clear that when inflation reaches levels above 300 percent, this utilization of the increases in productivity becomes marginal. If an orthodox policy is adopted, the loss in output necessary for a sensible effect on inflation is unbearable. It is also easily cancelled out by eventual offer or demand shocks.

6

If Brazilian inflation is inertial and has already passed the level of 300 percent, gradualist policies for combatting it, either orthodox or unorthodox, are ineffective. At this point, there is only one conclusion: only a heterodox shock can wipe out Brazilian inflation.

However, there are important obstacles to the adoption of a heterodox shock. In the first place, there is a lack of understanding of the nature of

the Brazilian inflationary process. There is not yet a proper understanding of the inertial character of inflation. The government still insists on relating inflation to the public deficit and the increase in the money supply while both these phenomena have mainly been factors that sanction inflation, which is proceeding inertially and autonomously. Many officials do not clearly understand that, because of the distributive conflict and indexation, past inflation tends automatically to reproduce itself in the present. As the readjustments of prices are not synchronized, the economic agents have no other alternative than to pass on their cost increases to prices. Otherwise, they would lose their relative participation in the national income.

Second, lack of synchronization in the readjustment of prices, especially of wages, greatly complicates the choice of a D Day for the heterodox shock to freeze prices and wages. The alternative of creating a formula for the conversion of all wages to the average on D Day is theoretically correct but politically difficult to implement (Modiano 1986). In Argentina, where wages were increased monthly, the choice of the fifteenth of the month as the D Day satisfied all the needs for relative distributive neutrality. In Brazil, we either could have fused a conversion formula for wages or we would have had to wait for much higher inflation levels than the then present ones for the shock to be successful.

An increase in the inflation level is necessary for another reason. Because a policy of a general freeze of prices, wages, and the exchange rate presents certain risks, it demands a lot of political determination and popular collaboration. In other words, it demands general indignation against inflation, which, because of the mechanism of indexation, still is not strong in Brazil.<sup>4</sup>

It is also important to point out that the inflation rate can be broken down into three components: inertial, demand, and supply shocks. Obviously, if the price system is subject to a supply shock or demand pressure, these must be assimilated or removed for a heterodox shock to be successful. In this situation, the demand presssures are still weak, but the forecasts of bad harvests due to draught in the southern states generated an agricultural price shock at the beginning of 1986. This means that the price system is still absorbing the shock that provoked the disequilibrium in the structure of relative prices.

This fact can be observed in the wide dispersion of the sectorial rate of inflation. When inflation was essentially inertial in the second semester of 1984, the standard deviation of the rate of sectorial inflation was about 20.0, but, at beginning of 1986, it reached 52.0, thus showing the effects of the shock. Therefore, it is necessary to wait some months in order to

reestablish the equilibrium of the structure of relative prices. Then we will have more viable conditions for a heterodox shock.

Finally, there is the misgiving that a heterodox shock would be accompanied by a serious recession, as happened in Argentina. Actually, this risk does exist. It is difficult to imagine getting rid of inflation without any sacrifices. Although the government deficit is a result rather than a cause of inflation, it should be reduced. An exchange devaluation should take place on the eve of the D Day. Interest rates should be kept at relatively high levels in order to avoid the flight of capital. But it is necessary to consider that the situation of Brazil is very different from that of Argentina. Brazil's industrial complex is very solid, its export surplus has structural characteristics, its public sector borrowing requirements (operational public deficit) are smaller, and the risk of capital flight much less. Therefore, there is no reason to fear a strong recession in Brazil.

7

The great problem of the Brazilian government in these next months will be to continue its gradualist administrative policy of fighting inflation, even though it knows that the results of this kind of policy are limited, given the high level of inflation. At the same time, it must prepare for a heterodox shock.

The government has a few factors in its favor, especially the large trade surplus, the successful negotiations of the foreign debt, a fiscal reform that allows for a reduction of the operational public deficit, and the improvement of the financial situation of the state-owned corporations. Meanwhile, there is no need for pessimism or alarmism. Inflation has moved to a higher level, but it is not out of control. It is a cause for concern and keeps the government and society under strain, but it can be tamed.

February 1986

 Notes	

<sup>1.</sup> IGP is the general price index calculated by the Getúlio Vargas Foundation traditionally used as the measure of inflation and indexation in Brazil, except for wage indexation. IPCA is the amplified consumer price index calculated by the Brazilian Institute of Geography and Statistics (IBGE). The IPCA has replaced the INPC, the national consumer price index,

and the IGP as the basis for official indexation in Brazil since November 1985. The INPC measures cost-of-living increases for families earning up to five minimum wages, and the IPCA for families earning up to thirty minimum wages. Starting in March 1986, the IPCA was replaced by the IPC, the consumer price index. The objective of this substitution was not to include about fifteen days of the inflation in February in the calculation of the inflation in March.

- 2. See Luiz Bresser Pereira and Fernando Maida Dall'Acqua (1985) for a more complete and formal development of this argument.
- 3. This chapter was originally written in February 1986, a few days before the shock.
- 4. This indignation began to be shown at the beginning of 1986. See, for example, Geraldo Forbes, "O santo guerreiro e o dragão da maldade", in O Estado de São Paulo, 2 February 1986.