

Hyperinflation

At the beginning of 1990 the Brazilian economy experienced hyperinflation for the first time in its history. The rate of inflation reached 56 percent in January, 73 percent in February, and 84 percent in March of that year. Yet this was a moderate hyperinflation, which the Collor Plan (see Chapter 13) was designed to try to curb. Hyperinflation in Brazil was the outcome of the fiscal crisis of the state. Here I provide a brief account of that fact.

The general conditions that gave rise to hyperinflation in Brazil were somewhat similar to those that had prevailed in countries that had previously experienced hyperinflation. Brazil was not defeated in a war and was not required to pay war reparations, but the combination of the foreign debt accumulation in the 1970s, the external shocks of 1979 (the second oil and the interest shocks), and the suspension of new external financing in 1982 had comparable consequences. Brazil, which in the 1970s had received around 2 percent of GDP in foreign savings, was now required to transfer real resources of 4 to 5 percent of its gross national product to the creditor countries.¹ The reduction in domestic investment was basically proportional to this transfer: the rate of investment, which had been around 22 percent of GDP in the 1970s, fell to around 17 percent in the 1980s.

There are also the fiscal consequences of the foreign debt. The debt, which in the mid-1970s was 50 percent private and 50 percent public, was almost fully nationalized during the 1981–1983 adjustment: by the end of the 1980s, 90 percent of the debt was the responsibility of the public sector. In the 1981–1983 stabilization program there was a strong effort to reduce the budget deficit, but this effort was defeated, first, by the high rates of interest paid by the state and, second, by the increase in the foreign and domestic public debt (see Chapter 5). With the suspension of foreign loans, deficit financing depended increasingly on domestic indebtedness and seigniorage. The consequence was a fiscal crisis: the budget deficit remained high (see Table 7.1); public domestic debt increased to around 50 percent of GDP; and domestic debt maturities became incredibly short (most of the domestic debt began to be financed on the overnight market). The state's creditworthiness collapsed. The fiscal crisis immobilized economic policy, transforming the government into a passive instrument validating inflation through fiscal deficits and inflationary financing.

Table 7.1 Public-Sector Accounts (percentage of GDP)

	Tax Collection	Personnel Expenditure	Public Deficit
1979	24.7	7.0	8.3
1980	24.7	6.3	6.7
1981	24.5	6.4	5.2
1982	25.0	7.0	6.2
1983	24.7	6.5	3.0
1984	21.4	5.5	3.1
1985	22.0	6.8	4.4
1986	25.0	7.2	3.6
1987	22.2	7.5	5.7
1988	19.8	7.2	4.8
1989	21.4	9.2	6.9
1990	25.9	9.2	-1.4

Sources: First two columns, IBGE, *Anuário Estatístico*, several issues; last column, Central Bank, *Brazil Economic Program*, several issues.

Note: The first two columns refer to the public sector in the strict sense; the last column includes state-owned corporations.

The strong yet incomplete adjustment program of 1981–1983 and the 1983 real devaluation of the local currency led, first, to a reduction of real wages and the aggravation of the distributive conflict (given the widespread conviction that income distribution was deeply uneven in Brazil) and, second, to a wage-price spiral. This wage-price spiral was engineered by an informal but effective agreement between the labor unions and the firms of the modern and oligopolistic industries (Nakano 1989).

The wage-price spiral had its origins in 1978–1979, when the first major strikes since 1964 took place, but it gained momentum only in 1985, after the transition to democracy had been completed. It did not lead to hyperinflation earlier for two reasons: first, the heterodox stabilization plans (in 1986, 1987, and 1989) pushed down inflation for a time; second, given the high degree of formal and informal indexation, inflation in Brazil has a strong inertial component.

Inertial inflation tends to be rigid downward because future inflation is strongly influenced by past inflation through indexation. But it also tends to hinder the acceleration of inflation as long as it avoids or postpones the dollarization of the economy. In the 1923 German hyperinflation, for instance, the dollarization of the economy led to an exchange rate–price spiral. Economic agents received the local currency in payment and immediately tried to buy dollars to protect their assets. Thus the real demand for dollars increased, and real devaluations of the local currency followed—continually leading to hyperinflation (Merkin 1982). In contrast, in Brazil economic agents could protect their financial assets by buying indexed bonds, mostly

Treasury bills financed daily on the overnight market. These bills (LFTs) represented a remunerated, interest-bearing quasi money and thus constituted a better alternative to buying dollars.

In fact, buying dollars was risky because the parallel exchange rate tended to be artificially high, and it fluctuated a great deal. At times, speculative attacks against the cruzado caused the premium of the parallel market exchange rate over the official rate to increase sharply. Inflation, however, did not follow immediately, given the low import coefficient of the Brazilian economy (less than 5 percent of GDP) and the dual exchange rate market. The official exchange rate was under strict government control, protecting the trade balance from the wild fluctuations of the parallel exchange rate. It was indexed following a crawling peg rule, with daily devaluation. The parallel exchange rate was market-determined. After each speculative attack the premium fell, imposing heavy losses on the last buyers.

Indexation of the economy delayed hyperinflation but did not avoid it. Inflation tended to accelerate continually, but its acceleration happened by shifting from one level or plateau to another (higher) and was interrupted by price freezes, starting in 1986 with the Cruzado Plan. However, after the breakdown of the Cruzado Plan and particularly of the Summer Plan (January 1989), inflation accelerated very rapidly because these plans helped to disorganize the economy (see Table 7.2).² Confidence in the indexation system, which was already very low, collapsed with the Summer Plan because conventional indexation is based on past inflation, and past inflation was no longer a good proxy for present inflation. With the bankruptcy of the indexation system, the price system lost its basic anchor. Inflation began to accelerate in a spiral fashion (see Table 7.3).³

Table 7.2 Annual Inflation Rate

	Percentage	Year	Percentage
1970	19.3	1980	110.2
1971	19.5	1981	95.1
1972	15.8	1982	99.7
1973	15.5	1983	211.0
1974	34.6	1984	223.8
1975	29.4	1985	235.1
1976	46.2	1986	65.0
1977	38.8	1987	415.8
1978	40.8	1988	1,037.6
1979	77.2	1989	1,782.9
		1990	1,477.0

Source: IGP/FGV, General Price Index; *Conjuntura Econômica*, Getúlio Vargas Foundation, Rio de Janeiro, several issues.

Table 7.3 Monthly Inflation Rate (percentage)

	1986	1987	1988	1989	1990
January	17.8	12.0	19.1	36.6	71.9
February	22.4	14.1	17.6	11.8	71.7
March	-1.0	15.0	18.2	4.2	81.3
April	-0.6	20.1	20.3	5.2	11.3
May	0.3	27.7	19.5	12.8	9.1
June	0.5	25.9	20.8	26.8	9.0
July	0.6	9.3	21.5	37.9	13.0
August	1.3	4.5	22.9	36.5	12.9
September	1.1	8.0	25.8	38.9	11.7
October	1.4	11.2	27.6	39.7	14.2
November	2.5	14.5	28.0	44.3	17.4
December	7.6	15.9	28.9	49.4	16.5

Source: IGP/FGV.

As the financial market lost confidence in Treasury bills, the government increased its interest rate. The result was an increase in the budget deficit and a perverse additional loss of credit of Treasury bills. The successive plans changed the inflationary behavior of economic agents, introducing new destabilizing factors into the economy. Agents anticipated possible government actions, such as freezes or domestic debt repudiation, by increasing prices and promoting capital flight.

As inflation accelerated every month, expectations that acceleration would continue assumed a self-fulfilling character. The economy was heading toward hyperinflation, which materialized in early 1990.

The Summer Plan was designed to have a very orthodox monetary policy. Thus interest rates were raised to extremely high levels, reaching 16 percent a month in real terms during the first two months of the plan. Subsequently, as economic agents realized the unpleasant arithmetic involved (the high interest rate would be paid primarily by the state itself, thereby dramatically increasing the interest component of the deficit), the rate of interest was reduced but remained very high.

The fiscal crisis of the state finally became evident to everybody. The government faced increasing difficulty with financing its deficit, whose interest component was now overwhelming (see Table 5.3). The suspension of payments of interest related to the foreign debt in August 1989 helped very little because the expectations of economic agents were already clear: hyperinflation and some form of cancellation of the domestic debt were viewed as highly probable.

During 1989 economic agents worked under these two expectations, trying to anticipate the more likely government action. They strove to pro-

protect their financial assets by selling their Treasury bills (“running away from the overnight”), but they had limited alternatives because the price of other assets—including the dollar on the parallel market—greatly increased. The premium on the parallel market exchange rate over the official rate, which had been around 25 percent, exceeded 150 percent several times during 1989.⁴

The money supply, which is usually endogenous, in this case was fully passive, increasing automatically as the nominal demand for money increased. When inflation is high and chronic (inertial), the money supply is endogenous—thus validating price increases—because the alternative to trying to keep it frozen while prices are soaring is a serious liquidity crisis. The government is supposed to finance its deficit on the overnight market. Speculation with Treasury bills was rampant. Financial intermediaries would often buy Treasury bills without having a final buyer for them. In such a situation the normal procedure would be for financial intermediaries to finance themselves on the money market. But because they usually lacked the credit to do so, the Central Bank would repurchase the Treasury bills. This repurchase, practiced in the early 1980s, became the rule in 1986. Paradoxically, this was a sound policy because it reduced speculation and lowered the state’s interest burden. But the consequence was that the money supply became fully passive. Whenever economic agents fled from Treasury bills, leaving the financial intermediaries without reserves, the Central Bank would automatically repurchase the bills without cost to the intermediary. Hyperinflation was the necessary outcome of these events: the official inflation rate (Consumer Price Index) was 53 percent in December, 56 percent in January, 73 percent in February, and 84 percent in March.