Hyperinflation in Latin America

ELIANA A. CARDOSO

No single economic panacea can solve the problem of rampant inflation. Successful disinflation requires a mix of fiscal reform with falling deficits, control over money growth, and a policy for wages and prices.

High inflation in Latin America poses a threat to the infant democracies there. It erodes the purchasing power of wages, creates an intense feeling of insecurity, and undermines popular support for constitutional governments. Much has been said about the costs of stabilization. The costs of continuing high inflation such as exists today in Argentina, Brazil, and Peru are not any smaller. While everything is indexed—including wages, prices, interest rates, taxes, and accounting systems—for the lower classes, whose subsistence is not protected, accelerating inflation has a profound social impact. In Brazil and Peru, escalating social and political conflicts over historically high inflation rates suggest that the mixture of inflation and inequitable distribution makes for an unstable policy mix. Conventional wisdom maintains that, since stabilization policies are unpopular because they cut down standards of living, they present a problem for governments dependent on consent rather than on coercion. Surprisingly, high inflation today is a bigger threat to democracy than stabilization policies. Results of a poll in Peru in October 1988 showed that 75 percent of respondents favored the adoption of an agreement with the International Monetary Fund (IMF).

Inflation also threatens sustained growth. Uncertainty creates short horizons for production decisions and a tendency to concentrate assets on inflation hedging. The economic structure that results emphasizes finance at the expense of production. Capital flight, a phenomenon that has been endemic in Argentina, has

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January-February 1989/Challenge 11
made its first appearance in Brazil in the past few years. While in Argentina capital traditionally fled into bank deposits in Miami or dollars in cash, in Brazil capital flight has meant the creation of an ever more perfect domestic money market. The government has $35 billion of domestic debt outstanding, and this debt has an effective maturity of one day. Since it is indexed, it is, in principle, sheltered against the risk of inflation. But when the public loses confidence in the government’s ability or willingness to pay full indexation, there will be flight from “overnight” financial instruments to real assets and to the dollar, which sets off hyperinflation. And hyperinflation means economic and social chaos. Whether Argentina, Brazil, and Peru will experience the ultimate extreme of hyperinflation still remains to be seen.

Why is inflation so high in Latin America and what can be done to stop it? There are basically two schools of thought:

- According to the oldest explanation, monetarism, inflation is the result of overspending: inflation in Latin America is caused by large budget deficits financed by money creation. To stop inflation, budget deficits must be cut.

- The opposing view, structuralism, maintains that budget deficits simply do not matter. The causes of inflation are in supply shortages, bottlenecks, and inconsistent claims of different groups in society trying to get a larger share of the pie. For structuralists, incomes policy is the answer to stop inflation.

Both diagnoses of inflation are incomplete, and thus their medicines are necessarily flawed and invariably fail. However, it is possible to integrate the two interpretations and design a program that would actually stop inflation.

At the outset, it is useful to examine the numbers in context. Although high in comparison with inflation in industrialized countries, inflation rates in Latin America have differed widely over time and among countries. Overall, they increased substantially during the early 1980s. The most notorious experience was Bolivian hyperinflation, when prices increased by 12,000 percent in 1985. Albeit the Bolivian case is an extreme example, triple-digit inflation rates have been a persistent phenomenon in Argentina and Brazil. Table 1 divides the Latin American countries (except Cuba and Nicaragua) into three groups. During the 28 years between 1960 and 1987, the group of high-inflation countries has experienced average inflation rates greater than 30 percent per year. All of these countries are found below the equator. The group of low-inflation countries had, on average, inflation rates below 10 percent during the last 28 years. Located in Central America, they are among the poorest countries of Latin America, except for Venezuela and Panama. Projections for 1988 show that for many of them inflation is rising.

### Table 1: Inflation Rates in Latin America, 1960–88

<table>
<thead>
<tr>
<th>Period</th>
<th>Argentina</th>
<th>Bolivia</th>
<th>Brazil</th>
<th>Chile</th>
<th>Peru</th>
<th>Uruguay</th>
<th>Weighted Average</th>
<th>Colombia</th>
<th>Costa Rica</th>
<th>Ecuador</th>
<th>Mexico</th>
<th>Paraguay</th>
<th>Weighted Average</th>
<th>Dominican</th>
<th>El Salvador</th>
<th>Guatemala</th>
<th>Haiti</th>
<th>Honduras</th>
<th>Panama</th>
<th>Venezuela</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960–69</td>
<td>22.9</td>
<td>6.3</td>
<td>45.8</td>
<td>25.1</td>
<td>9.8</td>
<td>50.1</td>
<td>36.6</td>
<td>11.2</td>
<td>2.0</td>
<td>4.2</td>
<td>2.7</td>
<td>4.3</td>
<td>4.7</td>
<td>1.3</td>
<td>0.4</td>
<td>0.5</td>
<td>2.2</td>
<td>1.9</td>
<td>1.0</td>
<td>1.1</td>
<td>1.1</td>
</tr>
<tr>
<td>1970–79</td>
<td>132.8</td>
<td>15.9</td>
<td>30.5</td>
<td>174.0</td>
<td>26.5</td>
<td>59.3</td>
<td>53.7</td>
<td>19.3</td>
<td>10.4</td>
<td>11.9</td>
<td>14.7</td>
<td>11.1</td>
<td>15.3</td>
<td>9.2</td>
<td>9.4</td>
<td>8.9</td>
<td>9.2</td>
<td>6.6</td>
<td>6.0</td>
<td>6.6</td>
<td>7.9</td>
</tr>
<tr>
<td>1980–85</td>
<td>335.5</td>
<td>225.1</td>
<td>142.0</td>
<td>23.8</td>
<td>97.3</td>
<td>48.9</td>
<td>224.0</td>
<td>23.1</td>
<td>34.2</td>
<td>25.6</td>
<td>56.4</td>
<td>17.0</td>
<td>45.1</td>
<td>16.9</td>
<td>15.2</td>
<td>8.2</td>
<td>10.6</td>
<td>8.8</td>
<td>5.0</td>
<td>12.9</td>
<td>11.9</td>
</tr>
<tr>
<td>1986–87</td>
<td>110.7</td>
<td>145.5</td>
<td>167.5</td>
<td>19.7</td>
<td>61.9</td>
<td>70.0</td>
<td>153.2</td>
<td>21.1</td>
<td>14.3</td>
<td>26.3</td>
<td>109.0</td>
<td>26.8</td>
<td>78.9</td>
<td>14.4</td>
<td>28.4</td>
<td>24.6</td>
<td>-4.1</td>
<td>3.5</td>
<td>-0.2</td>
<td>19.8</td>
<td>15.7</td>
</tr>
<tr>
<td>1988</td>
<td>450.0</td>
<td>20.0</td>
<td>1000.0</td>
<td>15.0</td>
<td>2000.0</td>
<td>50.0</td>
<td></td>
<td></td>
<td>n.a.</td>
<td>40.0</td>
<td>70.0</td>
<td>30.0</td>
<td></td>
<td>30.0</td>
<td>80.0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>n.a.</td>
<td>40.0</td>
<td></td>
</tr>
</tbody>
</table>

1Author’s projection.
2Weights equal the share of each country’s population in its group.
change in aggregate demand that the government succeeds in bringing about will ultimately manifest itself in higher prices and not higher output. Increases in the budget deficit and in the stock of money can have a short-run effect on the economy only as long as people fail to anticipate price rises. Once inflation is built into people’s expectations, increases in the money supply only result in increases in the level of prices. This process could even be extremely fast if people have rational expectations.

**Seignorage.** The basic truth in monetarism is that inflation could not persist without sustained money growth. The government’s source of revenue from printing money is called seignorage. When the government finances a deficit by creating money, the money is absorbed by the public. As prices rise, the purchasing power of a given stock of nominal balances falls. Therefore, inflation acts like a tax.

How much revenue do governments in Latin America obtain from the printing of money? When the economy is growing, the government obtains some revenue from seignorage even if there is no inflation. Because the demand for real money grows when there is real income growth, the government can create some money without producing inflation. But as money growth increases above the real growth of income, inflation rises. Seignorage revenue also increases but at a decreasing rate. This happens because, as inflation rises, people reduce their real holdings of the money base, as it becomes more and more costly to hold. Thus, seignorage will increase less than proportionately with the increase in money growth and inflation. Eventually, inflation will become so high that no increase in money growth can produce an increase in real seignorage.

The classical illustration of seignorage is a war economy where a government, unable to boost taxes, has to finance its defense expenditures by printing money. An example today is Nicaragua. For the last five years, more than half of the national budget in Nicaragua has been devoted to defense. Unable to raise taxes, the government has been forced to print money to finance its chronic budget deficit which has resulted in accelerated inflation. By mid-1988, the annual inflation rate in Managua was estimated to be 10,000 percent per year.

**Inflation and Debt.** Can we explain inflation in other Latin American countries in the same way? For the countries in Table 2, no clear relationship appears to exist between inflation and seignorage. The experiences of Brazil, Argentina, and Mexico have to be interpreted in the light of their external debts. The inflation story of the 1980s starts with the debt crisis, when Latin American governments were deprived of foreign capital inflows to finance their deficits. To produce the trade surplus and the needed exchange resources to service the debt, the exchange rates were greatly depreciated. The devaluations had inflationary consequences through their impact on imported intermediate and final goods. They also had an important impact on the domestic cost of servicing the external debt. Because the devaluations increased the debt service measured in domestic currency, the budget deficit measured in that currency also increased, increasing the required money creation and inflation. The result was that Latin American inflation doubled in the early 1980s (see Table 1).

<table>
<thead>
<tr>
<th>Year</th>
<th>Argentina ΔH/GDP</th>
<th>Argentina π</th>
<th>Brazil ΔH/GDP</th>
<th>Brazil π</th>
<th>Mexico ΔH/GDP</th>
<th>Mexico π</th>
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<tbody>
<tr>
<td>1978</td>
<td>4.2</td>
<td>175.5</td>
<td>2.0</td>
<td>38.7</td>
<td>3.6</td>
<td>17.5</td>
</tr>
<tr>
<td>1979</td>
<td>3.2</td>
<td>199.5</td>
<td>3.3</td>
<td>52.7</td>
<td>4.3</td>
<td>18.2</td>
</tr>
<tr>
<td>1980</td>
<td>3.0</td>
<td>100.8</td>
<td>2.0</td>
<td>62.8</td>
<td>4.9</td>
<td>26.4</td>
</tr>
<tr>
<td>1981</td>
<td>2.5</td>
<td>104.5</td>
<td>2.0</td>
<td>105.6</td>
<td>5.5</td>
<td>27.9</td>
</tr>
<tr>
<td>1982</td>
<td>3.9</td>
<td>164.8</td>
<td>2.1</td>
<td>97.8</td>
<td>10.9</td>
<td>59.9</td>
</tr>
<tr>
<td>1983</td>
<td>5.5</td>
<td>343.8</td>
<td>2.0</td>
<td>142.1</td>
<td>6.7</td>
<td>101.8</td>
</tr>
<tr>
<td>1984</td>
<td>5.1</td>
<td>626.7</td>
<td>2.7</td>
<td>197.0</td>
<td>5.8</td>
<td>65.5</td>
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<tr>
<td>1985</td>
<td>4.3</td>
<td>672.1</td>
<td>2.7</td>
<td>226.9</td>
<td>1.8</td>
<td>57.7</td>
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<tr>
<td>1986</td>
<td>2.6</td>
<td>90.1</td>
<td>3.6</td>
<td>145.2</td>
<td>1.8</td>
<td>86.2</td>
</tr>
</tbody>
</table>

*Seignorage, ΔH, is the increase in the money base, H, defined as line 14 in JFS, except for Argentina, where it is line 14a. π  is the annual inflation rate of consumer prices, line 64.


**Dollarization.** As inflation rises and confidence in domestic money declines, people tend to favor foreign money. The use of U.S. dollars by Latin Americans in place of domestic currency is referred to as the dollarization of Latin America. To measure dollarization, we need to know to what extent U.S. dollars are used for transaction and speculation. As there are no data on U.S. currency circulating in the region, we can use data for dollar-denominated deposits in Mexico and Bolivia to give an indication of the process of dollarization.

The ratio of dollar- to peso-denominated deposits in
Mexico rose from 5 percent in 1975 to 25 percent by the first quarter of 1977, and to 58 percent in 1982 (see Figure 1). At the end of 1982, with the deposit freeze and radical financial reforms, the ratio suddenly dropped. It should be noted that the years of marked increases in the dollarization ratio have been the final years of an administration. Both devaluation expectations and perceptions of possible changes in the economic regime played an important role in explaining the Mexican dollarization, for example.

The ratio of dollar- to peso-Boliviano-denominated time deposits in Bolivian commercial banks increased from 10 percent in 1973 to more than 150 percent in 1982, a period during which inflation had risen from one to three digits. Bolivia is an excellent example for the monetarist argument. There is a clear link between the debt crisis, the increase in the budget deficit, and money creation. In 1982, Hernan Siles-Suazo took power as head of a leftist coalition. The government wanted to satisfy social demands and also had to meet larger debt service due to the increase in international interest rates. Revenues from export taxes had dwindled with falling prices of tin, and international lending had dried up. The government deficit was met through an increase in money creation. Inflation further increased the deficit because real tax revenues fell due to lags in tax collection. The pursuit of seigniorage revenue, combined with flight from money, led to hyperinflation in 1985.

**Early structuralism**

Latin American structuralists claim that different sectors of the economy develop at different speeds, causing bottlenecks. In the presence of downward price rigidities in some sectors, those bottlenecks cause inflation spurts that money squeezes cannot correct, although they will most certainly provoke more unemployment. Structuralists thus preach investment in areas where bottlenecks are supposed to appear (those in which social revenues exceed private revenues), even if those investments can only be financed by money creation.

Some structuralists blame inflation in countries with low productivity in the agricultural sector on changes in relative prices. During the process of industrialization there is a shift of resources from the agricultural to the industrial sector. With a stagnant food-producing sector, growth in the industrial sector will increase the demand for food faster than its supply. Because the inadequate purchasing power of exports prevents sufficient food imports, excess demand for food induces increasing prices. Yet the food price increases are not matched by price declines in the industrial sector. This is the case because industrial prices are marked up over wages, and the behavior of wages depends on food prices. Hence, overall inflation is induced.

Structuralists also point to distributive inconsistencies (a set of claims to real income that cannot all be satisfied simultaneously out of the economy’s real output) as a source of inflation (see Taylor in For Further Reading). The debate over whether distributive inconsistency could really cause inflation led to concessions between monetarists and structuralists. Many monetarists now agree that increased incompatibility of income claims translates itself into larger budget deficits and will therefore produce higher inflation with an accommodating monetary policy. Conversely, most non-monetarists will now concede that the acceler-
tion of inflation cannot persist indefinitely without monetary accommodation.

New structuralism: inflation inertia

Structuralists have recently been succeeded by a new group of economists who emphasize inflation inertia, or inflation that perpetuates itself. It appears when people base their expectations of future inflation on past inflation. Widespread indexation—linking monetary obligations automatically to the price level—can play the same role as expectations in perpetuating an ongoing inflation.

In the presence of chronic inflation, indexation of wages protects wage earners from fast declines of their real incomes, and a crawling peg prevents overvaluation of the exchange rate. The cost of indexation is that it perpetuates inflation, making stabilization more difficult.

To understand the consequences of indexation, it helps to start with the analysis of an economy that is perfectly indexed. In that economy, all contracts are adjusted simultaneously to an index such as the Consumer Price Index. This economy would have a lot of trouble adjusting to a shock requiring changes in relative prices, as for example the oil price shock. However, it would be well suited to adjust from a monetary shock. Faster money growth would lead to faster inflation but the real economy would be isolated from the money-supply-caused inflation.

Real life is not that easy. First, no indexation is free from lags and thus perfect indexation is unattainable. Second, there is no record of a pure inflation in which the money supply started to grow at the whim of the monetary authorities. There is always some impulse from the real economy that forces governments to turn to inflationary policies. Because of this causal linkage, indexed contracts, are likely to restrict adjustment rather than help (see Lessard and Williamson in For Further Reading).

Integrating different interpretations

Monetarists tend to be correct on the special case of hyperinflations when they argue that the behavior of money and velocity explain most of what is happening. But as we move away from hyperinflations, we must admit that structuralists have something to teach: supply-side factors and inflation inertia cannot be ignored. A more realistic equation of inflation should take all these factors into account to explain the causes of the inflation process. Current inflation depends on past inflation via indexation of wages, the exchange rate, and public-sector prices. These inertial relationships alone, however, do not drive inflation. Overspending or underspending—the level of economic activity relative to the aggregate supply of resources—also affects current inflation, because it influences the marginal costs of firms to the extent that the turnover of the labor force can be used for cutting wages. In addition, supply shocks must also be taken into account. The inflation process today, then, is propelled by three sets of forces: (1) Inflation yesterday, plus (2) effects of the level of economic activity, plus (3) effects of supply shocks.

This process has several implications. First, current supply shocks are automatically transmitted to future periods. Shocks such as an oil price increase, a real currency depreciation, increases in indirect taxes, elimination of public-sector subsidies, and increases in the real price of agricultural goods raise the current rate of inflation. These are transmitted via indexation into increased inflation in subsequent periods. In the vicious circle created by indexation, inflationary shocks, like a devaluation or an increase in public-sector prices, are perpetuated. Indexation of the financial system, of the tax structure, and of the public debt imply that changes in the inflation rate are automatically and fully accommodated. Besides that, a slowdown in the growth rate of nominal spending cannot eliminate inflation from one day to the next. It runs counter to the effect that comes from lagged inflation.

Orthodox stabilization

Orthodox programs are based on the monetarist diagnosis of inflation: Budget deficits and fast money growth inevitably lead to excess demand which manifests itself in inflation and current-account deficits. If the exchange rate is fixed, inflation leads to an overvalued currency, which further aggravates current-account deficits. The ageless orthodox medicine for a balance-of-payments crisis and inflation consists of two basic ingredients: a devaluation (or a cut in real wages) and a cut in the budget deficit. These medicines have traditionally been part of IMF programs, which also emphasize the need to free up prices. Table 3 shows the policies most commonly used in IMF programs.

January-February 1989/Challenge 15
These policies usually result in a recession. How long the recession lasts depends on whether the cut in real wages sticks and on how fast the economy adjusts to the change in relative prices. Economists of a more conservative strand tend to believe that adjustment costs are short-lived. They argue that once budgets are cut and relative wages are set to more competitive levels, the economy adjusts quickly and growth resumes. Other economists emphasize that economies take time to adjust in response to changes in relative prices and that, in the meantime, wage earners bear most of the burden of adjustment. Both theory and history have demonstrated that the latter is true. During a stabilization program a la IMF, wage earners have to live with more unemployment and lower real wages until capital moves to more profitable export industries. During the adjustment period, declining standards of living and political unrest are important outcomes of IMF experiments.

<table>
<thead>
<tr>
<th>Policies Employed in Fund-Supported Adjustment Programs (94 programs for 67 countries between 1980 and 1984)</th>
<th>Percent of programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceiling on credit expansion</td>
<td>98</td>
</tr>
<tr>
<td>Restraint of central government current expenditure</td>
<td>91</td>
</tr>
<tr>
<td>Curtailment of investment or delay in new projects</td>
<td>60</td>
</tr>
<tr>
<td>Reduction in subsidies</td>
<td>61</td>
</tr>
<tr>
<td>Rise in tax on goods and services</td>
<td>73</td>
</tr>
<tr>
<td>Wage guidelines</td>
<td>46</td>
</tr>
<tr>
<td>Increase in energy prices</td>
<td>46</td>
</tr>
</tbody>
</table>


From the 1950s to the 1980s, Latin America suffered from the application of numerous orthodox programs: Chile (1956–58, 1973–78), Argentina (1959–62, 1976–78), Bolivia (1956), Peru (1959, 1975–78), Uruguay (1959–62, 1974–78), Mexico (1983), and Brazil (1982–83). The results were appalling. Temporary reductions in inflation and external deficits were combined with large increases in unemployment and a reduction of the labor share in output.

Manuel Pastor (see For Further Reading) made an empirical analysis of the IMF programs in Latin America in the period 1965–81. His major findings were that IMF programs (1) led to significant balance-of-payments improvements which were mostly due to increased capital inflow induced by the IMF’s seal of approval rather than to significant current-account improvement; (2) had mixed impacts on growth rates; (3) were associated with accelerating inflation and not inflation-rate reduction; (4) were significantly and consistently associated with declines in the wage share in output. Thus, on the evidence, IMF programs have induced worsening of income distribution, exacerbated social tension, and made no improvement in the inflation and growth fundamentals.

The Brazilian experience is now often cited as a successful example of orthodox programs. However, it should be recognized that the stabilization program of the mid-1960s in Brazil was not strictly orthodox, as it did make use of incomes policy. Following several years of stagnation, high inflation, and political unrest, the military coup of 1964 began a period of rigorous stabilization. Early in the program, the budget deficit was drastically curtailed by increasing taxes and reducing current government expenditures and at the same time expanding public investment. The exchange rate was devalued and restrictions on money wage increases were imposed. As a result, the inflation rate fell to 20 percent per year, a modest rate by Brazilian and Latin American standards. Real growth at first fell, but after 1967, registered around 10 percent per year until 1973, and combined with a strong external position. However, the costs were not minor for the group who paid the bill. The fall in real wages (and attendant bad effects for income distribution) was tolerated only in the face of massive political repression.

The recent Chilean and Mexican experiences are sometimes recounted as success stories, but it should be noted that the costs of stabilization in Chile have been very large. Today, 20 percent of the Chilean population take 81 percent of income, and Chile’s minimum wage is less than half that of Argentina.

**Mexican experience**

Inflation rose in Mexico during the late 1970s as a result of the budget deficits of President Lopez Portillo’s government. Although public revenues from oil exports increased by 12 times from 1977 until 1981, they lagged behind government expenditures which increased tremendously in an attempt to speed up economic development. To prevent any further inflation, increases in prices and tariffs of goods and services...
provided by the public sector were postponed, and increased government deficits were financed by external borrowing.

The effects of the international recession in the early 1980s were significant as were the drop in oil revenues and the increase in foreign debt service payments. The resulting current-account deficits and the continuing deterioration of the balance of payments, despite the 1981 and 1982 devaluations, gave rise to the expectation that gradual depreciation of the exchange rate would be insufficient to correct for imbalances on the current account. As a result, capital flight reached unprecedented levels. Its magnitude, and the resulting exchange reserve losses, finally convinced the government to impose exchange controls, close the mezzodollar market, and nationalize the banking system.

Stabilization came at the end of 1982. The critical target of the program was reduction of the public deficit from 17.6 percent of GDP in 1982 to 8.5 percent in 1983. The costs of adjustment were large: approximately 750,000 jobs were lost. By the end of 1983, most of the fears of financial disaster that prevailed the year before had vanished. However, the program did not succeed in stopping inflation. Inflation only subsided in 1988 because of the freeze on the exchange rate, wages, public-sector prices, and a range of private prices.

There is at least one important lesson to be derived from the Mexican experience. Contractionary policies have proved ineffective to reduce inflation because of inertia. The same can be said about Brazil in 1982–83. The restrictive monetary policy of 1982–83, combined with adverse shocks and velocity adjustments, resulted in high real interest rates, recession, and unemployment but left the inflation rate unchanged.

**The neoconservative approach**

Restoring the role of free markets has become the dominant ideology of neoconservatism. Its strategy consists of: (1) freeing prices; (2) eliminating quantitative restrictions on trade and reducing tariffs; (3) promoting a domestic capital market by freeing interest rates and eliminating controls over the allocation of credit; (4) promoting the free entry and exit of capital, and (5) reducing the participation of the public sector in production.

There are several excellent studies of the ups and downs of the neoconservative experience in Argentina, Chile, and Uruguay (see Ramos and Foxley in For Further Reading). What distinguishes the neoconservative programs in the Southern Cone in the late 1970s from other orthodox programs is the reliance on the exchange rate to achieve disinflation. The neoconservative approach is based on global monetarism which maintains that a fixed exchange rate makes imported goods cheaper, forcing domestic producers to reduce their prices. The fixed exchange rate is also seen as the central price around which price expectations can be formed. A fixed exchange rate is thus the basic vehicle of disinflation, while fiscal discipline avoids undermining the program.

An exchange rate freeze, together with a fiscal package that makes it sustainable in the long run, brings inflation down to international levels. But as long as there is inflation inertia and other prices are not frozen, overvaluation will take place. Overvaluation implies large current-account deficits and capital flight. Debt will accumulate and force policies to be reversed. Trade surpluses will have to be generated to serve the debt and higher inflation rates will be just around the corner.

Argentina’s experience is illustrative: Inflation rose to more than 100 percent at the end of the Peronist administration in mid-1975. At the beginning of 1976, inflation had reached 400 percent and the military once again took power. With Martinez de Hoz in charge of the economic team for five years, the first phase of the disinflation program relied on wage controls. At the same time, the fiscal deficit was gradually reduced. As a result, inflation subsided.

Then, in December 1978, the government instituted a new price-stabilization program: The resultant reduction of inflation was bought at the price of a huge overvaluation. By 1981, the overvaluation had precipitated massive capital flight and external debt. The collapse of the exchange rate that followed brought about a new inflation surge. Successors to Martinez de Hoz failed to contain inflation, as the terms of trade deteriorated, external credit was rationed, and the Malvinas War brought about debilitating economic conditions. Inflation accelerated until prices were frozen in 1985, when a heterodox program was introduced.

**Populist heterodoxy**

Populist programs in Latin America are sometimes called heterodox. They rely on the structuralist argument that budget deficits do not matter; that speeding
up domestic growth while controlling prices is what is needed to stop inflation. Those programs typically apply extended price controls, while at the same time expanding wages and government expenditures. They never fail to set the economy on the fast lane to hyperinflation. The Peron administrations in Argentina and the recent Alan Garcia administration in Peru applied populist programs.

High inflation in Peru dates from the second half of the 1970s. When Alan Garcia assumed the Peruvian presidency in August 1985, inflation was running at an annual rate of 240 percent. His first move was to limit external debt service to 10 percent of exports. That gave the government temporary relief. Price controls reduced inflation sharply, while employment and real wages increased. But the experience of high growth and moderate inflation was just a product of a fixed exchange rate, price controls, and government subsidies. Inflation rapidly accelerated when controlled prices had to be adjusted. It did not take long for Peru to learn that rapid growth and large increases in real wages are incompatible with reducing inflation; in September 1988, inflation exceeded 100 percent per month.

New heterodoxy

The so-called new heterodox programs are based on incomes policy combined with fiscal correction, as opposed to conventional IMF packages that emphasise tight monetary policy and fiscal correction as the exclusive instruments of stabilization. These programs can only work if fiscal consolidation takes place. The difference between heterodox programs and IMF programs is that heterodoxy recognizes that restraining aggregate demand is not enough for stability: the important role played by inflation inertia requires the use of incomes policy to stop inflation.

In 1985–86, Argentina and Brazil introduced programs of stabilization that included wage-price controls and a fixed exchange rate as key features. Although fiscal consolidation was not achieved in either of the two cases, it was part of the initial program. A monetary reform was also an important component.

There are at least three reasons for a monetary reform. The most obvious one is to ease bookkeeping by eliminating zeros. A second reason is to reduce inflation expectations, using a new currency as a symbol for a policy change. But the most important reason is to avoid wealth transfers that would take place after the stabilization.

Contracts that are not explicitly indexed in a backward-looking way, like short-term loans in the financial system, carry forward-looking inflation adjustments. At any point in time there is a given stock of such contracts outstanding. Their maturity may run as far out as six months or a year. They specify interest rates that reflect inflation expectations. If inflation disappears, a 10 percent interest rate per month becomes the real interest rate. A sudden disinflation would imply an arbitrary redistribution between debtors and creditors, as well as pervasive bankruptcy. A monetary reform provides a practical way of revising contracts. A "tablista" that converts the old money into a new one according to a set timetable of depreciation is an instrument to align the real value of payments with the expectations implicit at the time contracts were concluded.

Wage contracts pose another difficult problem for designing a freeze. Just as government prepares to declare zero inflation, some contracts are coming up for renewal and workers will ask to be compensated for past inflation. But this would create cost increases and new inflation. Others will have just received their adjustment and find themselves with high real wages relative to the average. And freezing at this level will be perceived as inequitable by the others. The program will have to include recontracting to avoid this inertia effect. Those who had recent increases must see their wages rolled back, while those who are in a low position need upward adjustment.

Wage freezing was the central point of the Cruzado Plan in Brazil, which is now seen as the most obvious example of the failure of heterodox programs to stop inflation. It thus forces us to look at what can go wrong with these programs.

The Cruzado Plan

When the Cruzado Plan was announced in February 1986, plans for an inflation stabilization that circumvented the critical difficulty of inertia had been widely discussed in Brazil for more than a year. Policymakers believed that past inflationary shocks were being perpetuated in the vicious circle created by indexation, and that the freezing of prices, exchange rates, and wages would create a rupture with the past, permitting the economy to rid itself of inertial inflation.

Between February and June 1986, cumulative inflation was zero. But between June and November, the program took on a life of its own. Fueled by strong popular support for the price freeze, Finance Minis-
ter Dilson Funaro elevated controls to a dogma. The budget was allowed to deteriorate dramatically, the trade surplus disappeared, shortages and black markets became pervasive.

Among the factors leading to the failure of the Cruzado Plan, the most prominent was the overheating of the economy through loose fiscal and monetary policies, as well as through the wage policy.

On the fiscal side, the tax reform of December 1985 was expected to have laid much of the groundwork for stabilization. The expected revenue gains were to close a budget deficit of 6 percent of GDP. However, during 1986, tax revenues rose disappointingly little, revenues of state-owned companies were hurt by the price freeze, spending ran higher than anticipated, and subsidies that were cut during 1983–84 were phased back in 1986. The public-sector wage bill also increased in line with the economy-wide trend.

Loose monetary policy produced very low interest rates that permitted firms lacking confidence in the program to build up speculative stocks, waiting for the removal of the price freeze to pocket capital gains. The signs of excess demand and repressed inflation started to pile up, but the policymakers preferred to deny the evidence rather than give up the zero inflation fetish for more realistic policies.

Furthermore, the increase in real wages promoted by the Cruzado Plan and the fast growing economy rapidly expanded wages and sustained a consumers’ boom. By July 1986 it was already obvious that the economy was overheated. Acute shortages, especially of meat and milk, commanded the headlines of all newspapers. Black markets for all sorts of goods started to flourish.

Reforms introduced in November increased sales taxes and reintroduced partial indexation, creating a new system of daily corrections of the exchange rate and tying the interest payments on savings accounts and other financial instruments to the short-term interest rate. In February, the prohibition of indexation for contracts of maturity shorter than one year was abolished, the freeze was removed, and prices exploded.

**Sustaining success**

The great merit of heterodox programs is that they provide a period during which price stability can be achieved without a recession. Thus, they provide the political support for implementing the fiscal reforms that are necessary for stability. Such an opportunity was lost in Argentina, Brazil, and Peru. The initial honeymoon with the price freeze was mistaken for success, and the fiscal consolidation was avoided. Hence, the programs were lost. Incomes policy is a valuable tool in achieving disinflation. By itself, however, it is not enough. Without fiscal consolidation, disinflation will not be long-lived, and with a boom, the demise comes quickly.

The position of the public sector in Latin America today is badly compromised by the need to extract resources from the private sector for the service of the external debt. The stabilization programs of the 1980s failed to obtain budget consolidation and large budget deficits have pushed the economy into a classic inflationary finance situation. How to obtain fiscal consolidation remains the big problem to be faced. Raising taxes to service the debt is an unmarketable political decision, especially in economies where distributive conflicts inevitably lead to strong pressures on the budget. However, stabilization can only succeed if fiscal deficits are reduced. Today that means postponing debt service and giving Latin American countries time to stabilize and rebuild their economies.

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**Robert Lekachman**  
1920–1989

We are saddened by the death of Robert Lekachman, the distinguished teacher of economics, who for 15 years served on the editorial board of Challenge. We will feel the absence of his intellectual inspiration and good-humored counsel to press numerous issues so important to an equitable American capitalism. His many contributions to Challenge exemplified his analytical sharpness, and his interview in the March–April, 1987 issue of the magazine showed his courage in speaking out against policies that in the last eight years undermined economic growth and social justice. He will be missed, but his work certainly will remain an enduring legacy.