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Central America: *inflation and stabilization* in the crisis and *post-crisis eras*

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The small, open economies of the Central American countries have all, to a large extent, been subject to the same determinants of inflation. The oil shocks of the 1970s brought the era of stable prices and steady growth in the subregion to an end. External factors continue to have a significant influence on price movements. In addition to the direct impact of international prices, the availability of external resources, which eases supply and demand pressures, also plays a role. It is true, however, that the nature of the national economic policies adopted to deal with fiscal imbalances have led to a progressive differentiation of the inflationary processes experienced by each country. The expansion of the money supply in relation to GDP has come to be a significant factor in some countries; furthermore, an increase in public-sector credit relative to import capacity has also proved to be inflationary. Lastly, a number of market imperfections have created rigidities in the behaviour of prices by introducing a large measure of inflationary inertia. Central American inflation has prompted a wide range of stabilization efforts. Governments first tried countercyclical policies that gave little consideration to external constraints, then moved on to anti-inflationary policies which used the nominal exchange rate as a price anchor—with severe repercussions for the external sector—and eventually resorted to tight-money policies that led, in some cases, to deep recessions. Thus, in situations marked by frequent domestic and external crises, learning to live with moderate, stable inflation rates may be the most effective macroeconomic policy and the option that is most in keeping with a sustained growth path.

I

Introduction

Up to the end of the 1970s, Central America exhibited a degree of price stability rarely seen in the rest of Latin America. Because of the small size of the Central American economies and the fact that they mainly export traditional agricultural products, they remained comparatively more open than those of the other countries of the region during the 1960s and 1970s. The countries applied an import-substitution strategy in a limited way and had a readily accessible subregional market – the Central American Common Market (CACM) – at their disposal. This factor contributed to the economic growth shown by the subregion, which was interrupted only by the oil shocks (especially the second one). From 1962 to 1975, Central America grew at an average annual rate of 5.6%.

When they found themselves faced with the external constraints associated with higher energy prices (and, to a lesser extent, higher food prices as well), the subregion's Governments – believing these difficulties to be temporary in nature – opted for countercyclical measures that were paid for by external resources and larger fiscal deficits. Economic adjustment efforts were thus deferred, and pressures built up in these economies as a consequence of mounting external debts, artificial price controls and excessive public spending.

In the late 1970s, the economic picture darkened in several of these countries as seemingly intractable political and military conflicts erupted. This state of affairs limited the economic policy options open to some of these Governments and this, together with the external-sector crises precipitated by trade deficits and the external debt burden, seriously undermined the trade relations and economic complementarity which the countries of the subregion had achieved through CACM.

The crisis in the real economy was exacerbated by the outbreak of a crisis in the financial sector as sources of external financing dried up and national capital fled abroad. This seriously curtailed the countries' investment capacity and their ability to modernize their production facilities.

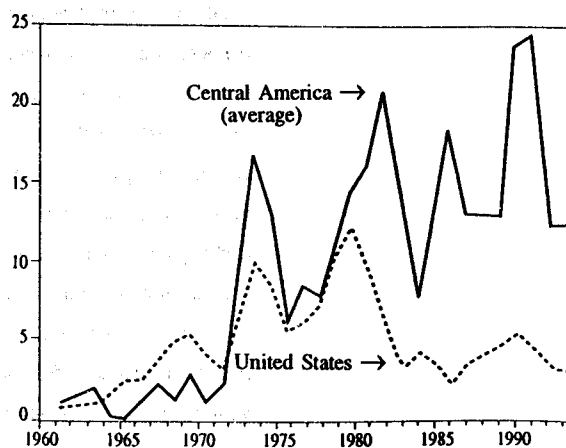
The combination of these elements resulted in a deep recession and an unprecedented rate of inflation in the Central American countries. After having been

held in check by direct controls during the 1970s, inflation flared in the 1980s (except in Honduras, where, on the whole, prices did not begin to climb until the 1990s) and began to move farther and farther away from both international inflation and the rate seen in the United States, Central America's main trading partner (see figure 1).

Faced with persistent macroeconomic imbalances, the countries were forced to undertake an economic adjustment in the 1980s. The nature of this process changed, however, over the course of the decade. The first stabilization policies to be implemented were of an unorthodox nature but, in view of the persistence of both inflation and the countries' external and fiscal deficits, as well as the terms and conditions imposed by international financial institutions, these policies were later abandoned in favour of more orthodox approaches.

The aim of this article is to examine both the inflationary process in the Central American subregion, taking into account the particular features of its economy, and the adjustment and stabilization policies that have been adopted in an effort to elimi-

FIGURE 1
Comparison of trends in inflation
in Central America^a and the
United States, 1962-1994
(Consumer prices, percentage variation
between annual averages)



^a Regional average; does not include Nicaragua.

nate its disequilibria. Section II presents an analysis of the subregion's various stabilization efforts, the circumstances in which they were undertaken and their results. The following two sections deal with the empirical aspects of inflation; section III explores the

possibility of a common econometric model for the subregion, while section IV analyses other dynamic factors which have a bearing on the design of stabilization policies. Section V outlines a number of conclusions.

II

Stabilization and macroeconomic adjustment in Central America

During the 1980s, the influence which external prices have traditionally exerted on domestic price levels was compounded by the emergence of various internal sources of inflation; as a result, the upward momentum of prices took hold in a more lasting and complex way than it had before and began to diverge from the trend of international inflation (see table 1).¹

In the late 1970s, numerous domestic and external factors began to destabilize the Central American economies. The drop in the prices fetched by traditional export products and the rise in international oil prices generated sharp external imbalances after 1974 and especially from 1979 onward. Even before 1979, tense military situations were prompting capital flight, which added to the external deficits not only of the countries directly affected by the conflicts, but of the rest of the subregion as well. In some cases, a misperception of the seriousness of these problems and a desire to prolong the economic bonanza of the 1970s led to the implementation of countercyclical policies which propped up aggregate demand with the help of international reserves or loans.

During the remainder of the 1980s, at least two types of stabilization strategies were employed: an unorthodox approach that used control of the exchange rate as a nominal anchor and placed restrictions on imports, and a more orthodox strategy which relied on control of the money supply as the backbone of anti-inflationary policy.² Thus, the 1980s can be seen as consisting of two distinct periods: during the first of these periods unorthodox strategies prevailed, while during the second, most of the countries

decided to tighten up the money supply while at the same time devaluing their currency.

1. Early stabilization efforts (1979-1985)

Although the reduction of fiscal and external deficits figured among the main objectives of the first stabilization and adjustment efforts – particularly those signed between 1979 and 1980 – these programmes also included clauses designed to boost economic activity (El Salvador) or strengthen public investment (Honduras). Subsequent arrangements focused on eliminating the countries' major macroeconomic imbalances, which had worsened during the early 1980s. Some of these early programmes also provided for quantitative import restrictions and exchange controls aimed at eliminating the deficit on the current account of the balance of payments (e.g., the agreement signed by El Salvador with the International Monetary Fund in June 1980); later on, such instruments disappeared entirely from these programmes. Unlike the other four countries of the subregion, in 1980 Nicaragua embarked upon an expansionary economic policy, particularly with regard to social spending and government investment, based on the country's ready access to credit, an ample supply of external resources and the successful renegotiation of its external debt in 1980-1981.

The majority of the subregion's stabilization and adjustment initiatives called for cutbacks in public spending (especially in the area of current expenditure), although most of the countries revised their investment plans as well. As a way of ensuring the implementation of such measures, a ceiling was placed on the amount of credit that the Central Bank could extend to the public sector; limits were also

¹ The statistical information mentioned in this section is presented in a more detailed form in table 1.

² For an analysis of the different effects of these two strategies on economic activity, see Kiguel and Liviatan, 1990.

TABLE 1

Central America: Selected macroeconomic variables

	1970-1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
<i>Inflation (December-December, percentage variation)</i>																	
Costa Rica	11.7	13.2	17.8	65.1	81.7	10.7	17.3	10.9	15.4	16.4	25.3	10	27.3	25.3	17	9.0	19.9
El Salvador	8.8	14.9	18.6	11.6	13.4	14.8	9.8	31.9	30.3	19.6	18.2	23.5	19.3	9.9	19.9	12.3	8.9
Guatemala	8.0	13.6	9.1	8.7	-2	8.5	5.2	31.4	25.7	10.1	11	17.9	60.6	10	14.2	11.6	11.6
Honduras	7.2	22.5	11.5	9.2	9.4	7.2	3.7	4.2	3.2	2.9	6.7	11.4	36.4	21.4	6.5	13.0	28.9
Nicaragua	2.1	4.3	10.4	23.2	22.2	32.9	50.2	334.3	747.4	1 347.3	33 657.3	1 689.1	13 490.1	865.6	3.5	19.5	12.4
<i>Real wages (percentage variation)</i>																	
Costa Rica	...	...	...	-11.8	-19.8	-10.9	7.8	9.1	6.1	-9.7	-4.5	0.6	1.7	-4.6	4.1	10.2	3.7
El Salvador	...	...	...	-12.9	-10.5	-11.6	5.8	-18.3	-12.5	-19.9	0.2	-15.0	-5.9	-2.2	3.3	-3.2	2.0
Guatemala	...	...	...	...	...	...	-8.2	-13.9	-15.7	8.1	5.7	3.8	-18.1	-6.4	15.0	7.0	6.7
Honduras	...	...	...	...	...	...	-4.5	-3.2	-4.2	-2.4	-4.3	-8.9	16.7	0.1	13.3	1.8	-14.0
Nicaragua	...	...	...	-8.8	-11.4	-13.8	-5.8	-30.0	-63.9	-31.4	-58.7	66.0	61.5	3.2	19.2	-3.4	2.4
<i>Fiscal balance/GDP (%)</i>																	
Costa Rica	-3.5	-7.0	-8.2	-3.6	-2.6	-4.2	-3.0	-2.0	-3.3	-2.0	-2.5	-4.1	-4.4	-3.1	-1.9	-1.9	-7.0
El Salvador	...	-0.7	-5.3	-6.7	-7.2	-9.0	-6.1	-4.1	-3.1	-4.2	-3.6	-5.5	-3.6	-5.2	-5.2	-3.3	-2.1
Guatemala	-1.6	-2.6	-4.7	-7.4	-4.7	-3.3	-3.8	-1.8	-1.9	-2.4	-2.4	-3.8	-2.3	-0.1	-0.5	-1.5	-1.5
Honduras	-4.3	-4.8	-8.7	-8.1	-13.0	-10.9	-12.3	-9.8	-8.7	-8.1	-6.9	-7.4	-6.4	-3.3	-4.9	-9.3	-5.2
Nicaragua	-4.8	-7.0	-8.0	-11.3	-11.5	-28.8	-24.8	-23.3	-17.6	-16.8	-26.6	-6.7	-20.2	-7.5	-7.6	-7.4	-9.7
<i>Money (M1)/GDP (%)</i>																	
Costa Rica	18.1	17.9	17.2	18.9	18.6	19.0	17.4	16.2	17.0	15.4	15.2	14.8	13.0	12.7	13.2	11.6	11.5
El Salvador	18.3	15.3	15.8	16.3	16.7	14.6	15.3	16.1	14.6	12.5	11.4	11.9	11.5	10.5	11.6	10.6	0.1
Guatemala	10.0	10.0	9.0	8.6	8.6	8.7	8.9	11.8	9.9	9.9	9.7	10.2	9.4	8.1	7.6	7.8	7.7
Honduras	13.8	13.6	13.2	12.5	13.4	14.4	14.0	13.1	13.5	14.7	13.1	14.1	14.6	13.1	13.0	12.3	11.4
Nicaragua	12.7	24.2	21.3	23.2	24.4	35.0	46.4	50.6	47.3	56.9	...	...	...	10.54	8.98	7.27	8.8
<i>Public-sector credit/GDP (%)</i>																	
Costa Rica	6.9	18.2	21.5	18.8	14.4	22.9	21.1	17.4	18.5	17.9	17.1	13.7	14.6	11.6	8.5	7.3	7.0
El Salvador	3.3	6.2	17.5	25.5	28.8	17.2	18.0	21.1	15.0	14.1	12.4	7.7	8.2	8.7	8.5	7.2	4.5
Guatemala	3.4	1.7	4.5	9.3	12.6	13.9	16.6	15.5	8.1	5.7	4.3	4.6	3.2	4.5	2.7	1.5	1.5
Honduras	4.9	4.9	8.9	10.4	13.8	18.4	19.4	18.1	18.3	21.7	19.8	21.2	18.9	6.3	4.2	3.9	4.3
Nicaragua	1.7	12.4	31.1	40.2	51.8	72.3	82.4	69.2	43.9	40.7	64.4	1.2	35.7	29.6	213.6	190.5	179.6
<i>Private-sector credit/GDP (%)</i>																	
Costa Rica	28.4	30.8	29.1	23.2	18.7	21.4	19.9	19.0	17.9	19.1	17.8	16.1	17.0	14.1	15.9	18.1	17.7
El Salvador	26.9	28.7	25.8	28.3	31.2	35.6	34.8	31.3	28.5	26.8	25.4	24.6	20.3	19.6	22.0	24.9	27.0
Guatemala	13.7	16.2	17.0	17.4	18.5	20.5	21.7	20.0	15.5	17.2	17.1	16.2	13.1	11.2	13.3	13.0	13.6
Honduras	31.4	33.9	31.9	31.5	33.9	35.5	36.7	37.7	38.6	41.1	34.5	33.5	29.4	26.3	28.5	27.5	28.1
Nicaragua	27.6	59.6	41.4	39.0	35.4	31.6	25.2	16.4	16.2	13.1	14.9	0.2	6.1	22.5	22.1	27.6	32.9

Source: ECLAC.

placed on external borrowing by the central government and its subsidiary bodies. All the countries overhauled their tax systems, and in some cases an effort was made to increase the tax load. In addition, in an attempt not only to eliminate lags but also to boost public-sector income, public utility rates were raised. As a result, by 1985 the fiscal deficits of Costa Rica, El Salvador and Honduras were considerably smaller than they had been in 1979 or 1980.

A greater degree of flexibility was gradually introduced into the exchange system in order to eliminate lags in the real exchange rate and cut down on the central banks' exchange losses. Almost all the agreements that were reached also provided for the liberalization of interest rates. These measures had a number of different aims, including those of checking the steady outflow of flight capital from the subregion and of encouraging domestic saving and thereby curbing external borrowing, which had reached alarming levels. The arrangements made with the International Monetary Fund (IMF) during this period did not call for the liberalization of foreign trade, but they did include clauses that pointed in that direction.

On a different front, policies providing for the deregulation of prices (especially in Costa Rica, Guatemala and Honduras) and, to a lesser extent, of wages were launched. As a consequence of those policies and the slower pace of production activity, a steep downturn in real wages was observed throughout the 1980s (except in Costa Rica).

Meanwhile, in response to a reduction in the flow of external resources and sharp macroeconomic imbalances, Nicaragua embarked upon its first stabilization effort in 1982-1984. In regard to liberalization, however, it chose a path that was diametrically opposed to that taken by the rest of the countries in the subregion, as it proceeded to impose increasingly strict governmental controls in an effort to promote the development of a mixed economy. The changes made in the country's exchange policy failed to ease the pressures building up in the economy, however, and inflation continued to climb.

As of late 1982, hardly any of the stabilization programmes undertaken in Central America had been brought to a successful conclusion. As noted by Bulmer-Thomas (1985), the adjustment programmes implemented in 1979-1982 were not actually subject to conditions stipulated by the IMF. As the deficits on their balance-of-payments current accounts soared (from 3.5% to 11.7% of GDP between 1970 and

1981), almost all the countries placed controls on imports, began to require import deposits, applied exchange controls and delayed payments on their external debts (Costa Rica actually declared a moratorium in 1981). These measures invariably led to the suspension of their arrangements with the IMF.

Quite apart from any errors that may have been made in the implementation of economic stabilization policies, the seriousness of the adverse domestic factors (especially in El Salvador and Nicaragua) and unfavourable external (i.e., outside the subregion) conditions which the Central American countries had to face from 1979 onward was not fully recognized at the time that the targets for their adjustment plans were being set. In point of fact, the decline in coffee prices and, in general, the deterioration of Central America's terms of trade (by around 15% between 1980 and 1982) were very severe during the early years of the decade. In addition, the fact that tax revenues were so strongly influenced by international trade hurt public finances and thus pushed up the fiscal deficit. The capital flight that went hand in hand with the growing uncertainty felt by economic agents and the shortage of external credit inevitably sparked currency speculation.

2. Towards macroeconomic orthodoxy (1985-1994)

Controlling inflation was one of the areas in which the Central American countries' early adjustment policies met with failure. From 1983 on, new stabilization initiatives conformed much more closely to the conditions set by the IMF in the agreements it signed with the Central American countries; a greater degree of discipline was also to be observed, partly because the countries' external debt renegotiations were directly or indirectly contingent upon the fulfilment of their agreements with the IMF.³

The nominal anchor used to stabilize prices also was changed, as policy-makers switched their attention from controlling the nominal exchange rate to controlling the money supply. In addition, the focus of economic policy shifted from stabilization to structural

³ A number of countries (such as El Salvador in 1986 and Guatemala in 1986 and 1989) did, however, carry out adjustment programmes without necessarily having the support of international financial agencies.

adjustment, with emphasis being placed on downsizing the State and liberalizing domestic markets.

The stabilization and adjustment loans that began to be granted in 1985 reinforced the changes in the direction of economic policy that had started with the adjustment programmes of 1982. The countries' economic programmes were aimed at consolidating those changes: export promotion measures, the negotiations undertaken by most of the countries with a view to becoming party to the General Agreement on Tariffs and Trade (GATT), the creation of free zones, and inbond assembly (*maquila*) activities.

For the most part, the stabilization efforts undertaken in previous years bore fruit after 1985, except in Costa Rica, which was able to bring about a successful reorientation of its economy's production patterns earlier on. Rebounding coffee prices and lower oil prices on the world market in 1986, together with the resumption of external capital inflows thanks to the provision of international assistance in the form of official loans and grants, helped to ensure that the countries' adjustment policies were successful in reducing their macroeconomic disequilibria.

Nevertheless, the hefty debts built up during the early years of the decade and these economies' progressively greater openness to the external market—which led to an immediate surge in imports, whereas the development of new exports was slower in coming—continued to generate disequilibria in the balance-of-payments current account (in 1985 the deficit climbed to 10.1% of GDP for the subregion as a whole). Heavy defence spending and the reduction in tax revenues occasioned by tariff roll-backs hampered efforts to cut the fiscal deficit, and tight money policies therefore had to be kept in place throughout the remainder of the decade.

In the particular case of Nicaragua, stabilization policies became increasingly strict as the country's hyperinflation—which reached over 33 600% in 1990—gathered speed. The stabilization and adjustment plan of 1985-1986 brought an end to the populist orientation evident in earlier programmes and called for the implementation of a steep devaluation as its central component. The Government also began to decontrol prices, cut subsidies, raise taxes and hike nominal interest rates. The devaluations undertaken as part of the series of programmes launched to combat inflation never seemed to be enough to alter the real exchange rate, and this, along with a number of other obstacles, blocked the country's efforts to overcome

the severe external constraints it faced. Even the most orthodox of programmes (June 1988 and 1989), under which public spending and primary liquidity were slashed, failed to bring inflation under control.

As Central America's adjustment process proceeded, a number of problems arose that made additional policy changes necessary. For example, the reductions made in tariffs and taxes on traditional exports and the elimination of import surcharges cut deeply into fiscal revenues from foreign trade (which accounted for about 30% of total tax receipts in the mid-1980s). The public sector's capital expenditures, which had already been sharply curtailed under previous economic programmes, could not be trimmed down much further, and structural adjustment policies failed to make any appreciable decrease in current outlays. Thus, the countries urgently needed to undertake tax reforms in order to boost revenues.

On another front, the liberalization of the financial market and the widespread use of open-market operations to control monetary liquidity made financial deepening a necessity. The above-mentioned limitations on the amount of credit that the Central Bank could provide to the Government,⁴ which were an outcome both of the many conditions laid down by international agencies and of the Governments' own economic policies, also made it impossible to continue relying on seigniorage to finance the fiscal deficit and promoted the development of a financial market for government bond issues.

Towards the end of the 1980s, another downturn in international coffee prices, together with a number of other obstacles to export activity in some of the countries, gave rise to further balance-of-payments difficulties which, in turn, prompted sharp devaluations. This was particularly true in Honduras and Guatemala, where inflation reached record highs in 1990.⁵

In 1991, falling international interest rates and greater exchange stability began to make the national rates of the Central American countries particularly attractive, thus sparking a heavy inflow of private short-term funds (much of which corresponded to capital repatriations). This enabled the countries to

⁴ Between 1985 and 1992, the level of credit in the subregion dropped from 17.3% to 7.5% of GDP, on average.

⁵ Honduras had resisted the idea of adjusting its exchange rate and had instead relied on export subsidies and tight money policies. In 1990, for the first time in more than 40 years, it devalued its currency from 2 to 4 lempiras to the dollar.

fund their mounting external deficits without having to draw down their international reserves. One of the traits shared by all the countries of the subregion was a sizeable deficit on current account as a consequence of the large trade deficits occasioned by import liberalization. In addition, these heavy capital inflows caused a number of the countries' currencies to exhibit a tendency towards overvaluation.

Around 1991-1993, after a decade of adjustment, the behaviour of most macroeconomic variables in the Central American economies began to converge. All the countries had made substantial reductions in their fiscal deficits,⁶ and their inflation rates were moderate. Most of them had achieved their objective of raising fiscal revenues in order to finance public-sector expenditures, but this was not true of Honduras and Guatemala.⁷ Inflation had slowed in all the countries by the end of the period under consideration here.

III

Inflation in Central America: an aggregate empirical model

1. Methodology, background information and data used

This exercise has a dual purpose. The first objective is to determine whether inflation in Central America can be explained by a single theoretical model or whether its causes are too complex for that; the second is to find out whether the crisis of the Central American integration model and the countries' responses to this crisis have disrupted their shared pattern of price behaviour. In order to represent the effects of various potential sources of inflation and establish the existence of a common inflationary pattern that might be shared by the subregion as a whole, a general model was constructed. The selected methodology pooled time series and cross-

Even Nicaragua's inflation rate was only 3.5% in 1992 (actually, it was the lowest in all of Central America) following a decade of high inflation and hyperinflation. The unorthodox programme it launched in March 1991 stabilized the exchange rate, thanks to a sufficient supply of external resources, and imposed a freeze on key prices while at the same time ensuring an adequate level of supply for the market. The precarious nature of this situation became apparent in early 1993, however, when the devaluation brought on a swift reaction from domestic prices; soon thereafter, however, an adjustment was made to a sliding parity system (12% annually).

As this period drew to a close, an upsurge in inflation was seen in Costa Rica and Honduras against a backdrop of macroeconomic imbalances and devaluation, but the stabilization process took a firmer hold in Guatemala and El Salvador.

section data. This approach yielded a sample of 112 observations for each of the explanatory variables in four countries (Costa Rica, El Salvador, Guatemala and Honduras), which was large enough to permit the researchers to estimate an equation for a broad universe of explanatory variables and to define a sub-regional model while still retaining some elements specific to each country. In essence, the model includes elements associated with different schools of thought and incorporates the effects of imported inflation, the internal money supply, national structural imbalances and inflationary inertia.

As is generally recommended in situations involving fairly long time series for a small number of countries, a model was developed using fixed coefficients for the main explanatory variables (Hsiao, 1986). In order to register cross-country differences, factors of scale were added that changed from one country and time period to the next. In particular, the study left open the possibility that trend coefficients might vary from country to country, since these variables measure, *inter alia*, the effects of changes in the model's general environment (e.g., domestic markets'

⁶ Nicaragua's deficit still amounted to 8% of GDP in 1992, but even so this was much less than 10 years earlier (when it had stood at nearly 30%).

⁷ In El Salvador, the tax burden decreased considerably (from 11.6% to 8.5% of GDP), while in Guatemala it remained at what were already low levels (8.3% of GDP in 1992).

degrees of development and integration, the monetization of the economies in question, etc.).

The resulting model is as follows:

$$Y_{it} = \beta_1 + \mu_i + \delta_t + \sum_{k=2}^K (\beta_k X_{kit}) + \varepsilon_i \quad (1)$$

where:

- i : country index number (1, ..., 4);
- t : time index number (0 = 1965, ..., 28 = 1993);
- Y_{it} : mean inflation (calculated as the difference in the logarithm of the GDP deflator);
- β_1 : a constant term for country 1;
- μ_i : ($i = 2, 3, 4$) reflects the differences from β_1 for country i ;
- δ_t : trend variable for each country i ; and
- X_{kit} : the other explanatory K variables (see box 1).

Under an assumption of fixed factors, the model was estimated using the method of ordinary least squares. In order to ensure the homoscedasticity of the error term, it was necessary to alter the initial

specification by adding in four dummy variables for 1977 in Guatemala, 1982 in Costa Rica and 1990-1991 in Guatemala. In this case, including these variables is, to some extent, tantamount to eliminating the corresponding observations from the sample. It is noteworthy that in a similar study on each of the Central American countries (ECLAC, 1995), much the same sort of modifications had to be made when estimating the models for the research project. Even so, the sample yielded by the set of time series is large enough to ensure that these modifications do not impair the representativeness of the results.

With respect to the validity of the results, it is important to note that a number of precautions were taken to rule out any illusory correlations deriving from the dynamic properties of time series. Specifically, one point that can be established at the outset is that the variables in these equations are stationary. Nevertheless, the results correspond to the historical period covered by the study, and no attempt is made to use the experiences of the last 30 years as a basis

Box 1

EXPLANATORY VARIABLES INCLUDED IN THE MODEL^a

Relating to imported inflation

Change in unit value, in dollars, of imports of goods and services (DLDM)

Variation in exchange rate, in dollars (DLTC)

Relating to increases in nominal demand

Change in money (M1) supply (DLM1)

Variation in domestic credit for public sector (DCREPU) and for private sector (DCREPR)

Alteration of ratio between domestic credit and value of imports of goods and services (DCREM)

Relating to total supply and internal supply imbalances

Variation in real GDP (DLPIB)

Variation in quantum of imports of goods and services (DLMB)

Variation in coefficient of the share of imports of goods and services relative to GDP (COEFM)

Differential between the growth of output in the agricultural sector and in the rest of the economy (CADAR)

Differential between the growth rates of the goods-producing and services sectors (CADBS)

Dispersion of sectoral growth rates (CADEST)

Relating to past inflation

Sliding average rate of inflation for the three preceding years (DLPE), which minimizes losses from prediction errors (Nugent and Glezakos, 1979). The specification based on an adaptive expectations model gave a great deal of weight to inflation during the preceding year. It also picked up the impact of contract indexation and other inertial dynamic effects.

^a Obviously, many of these variables are related to similar concepts and it is therefore not always possible to include all of them in a single equation without introducing a problem of collinearity. The monetary and national accounts data were obtained from the IMF, while the unit values for imports of goods and services were derived from foreign trade indicators published by ECLAC. The period covered is 1962-1993. The documentation for the above data may be found, respectively, in IMF (several years) and ECLAC (1986).

TABLE 2

**Central America: Contemporary effects of explanatory
variables on variations in the GDP deflator^{ab}**

Annual inflation (GDP deflator)	Model A	Model B	Model C
General constant term	-0.141 (0.08)	-0.116 (0.08)	2.134 (1.08)
Constant term in El Salvador	-1.429 (0.76)	-1.436 (0.77)	-2.726 (1.24)
Constant term in Guatemala	-0.178 (0.09)	-0.180 (0.10)	-1.727 (0.79)
Constant term in Honduras	-0.301 (0.16)	-0.307 (0.17)	-1.875 (0.84)
Trend in Costa Rica	0.282 (2.92)	0.282 (2.94)	0.286 (2.49)
Trend in El Salvador	0.283 (2.94)	0.282 (2.97)	0.341 (3.03)
Trend in Guatemala	0.176 (1.71)	0.176 (1.743)	0.230 (1.91)
Trend in Honduras	0.106 (1.21)	0.106 (1.22)	0.151 (1.44)
DLDM (unit value of imports)	0.212 (3.66)	0.212 (3.86)	0.150 (2.18)
DLTC (exchange rate)	0.180 (9.22)	0.180 (9.31)	0.184 (7.92)
DLM1 (money)	0.235 (6.11)	...	...
DLPB (GDP)	-0.230 (1.46)	...	-0.083 (0.45)
DLM1/GDP (ratio of M1 to GDP)	...	0.235 (6.15)	...
DLMB (quantum of imports)	0.062 (1.15)	0.063 (1.43)	-0.023 (0.35)
DCOEFM (import coefficient)	-0.095 (2.02)	-0.096 (2.12)	-0.027 (0.49)
DCREM [-2] (domestic credit relative to imports)	0.118 (2.17)	0.117 (2.30)	0.118 (1.83)
CADAR (performance of agricultural sector)	-0.203 (2.71)	-0.202 (2.77)	-0.201 (2.28)
DLPE (past inflation)	0.232 (3.65)	0.231 (3.90)	0.261 (3.46)
DCREPU (credit to public sector)	...	...	-0.011 (1.05)
DCREPR (credit to private sector)	...	...	(0.091) (1.50)
R2 (adjusted)	0.86	0.87	0.81
Standard error of regression	3.51	3.49	4.11
Durbin-Watson	1.97	1.97	1.79
Residual autocorrelation ^c		0.27	1.08
Residual heteroscedasticity ^c		0.22	0.46

^a For a more detailed explanation of the abbreviations used in this table, see box 1.

^b All variables are expressed as percentage rates of annual variation. For reasons of clarity, the coefficients for the dummy variables are not shown. The figures given in parentheses refer to the absolute value of Student's *t*-statistic.

^c Value of F statistic, obtained with two lags.

for projecting the behaviour of inflation in a hypothetical situation of dynamic stability. As mentioned earlier, during the period in question the Central American countries underwent a number of structural changes and worked with a series of very different economic systems, many of which were marked by severe external constraints, imbalances and internal malfunctions. Such a state of affairs could hardly be expected to become the norm over the long term.⁸

2. The aggregate subregional model

At this stage, only the contemporary effects of the explanatory variables were considered (except in the case of the relation between domestic credit and the value of imports). The dynamic component was incorporated by means of the figure for expected inflation (DLPE). Unlike the models used to study very short-term (monthly or quarterly) price variations, which have to deal with complex dynamic structures (seasonality, among others), in this case the use of annual data makes it reasonable to expect that the contemporary effects of the explanatory variables will play a predominant role in the generation of annual inflation and that the variable of adaptive expectations will reflect lagged effects.⁹ There is, however, one important exception to the above, in that the relation between domestic credit and the value of imports of goods and services does serve as a leading indicator of future inflation (two years ahead).

Three different specifications (models A, B and C) were prepared for the contemporary effects of the explanatory variables in terms of variations in the GDP deflator in Central America (see table 2).

Model A

In addition to the variables that register the effects of the fixed factors for each country (trend and dummy variables), the initial model includes the variables for imported inflation (exchange rate and unit value of

imports) in an initial group of explanatory variables; a second set of variables registers changes in total supply and demand (of both internal and external origins); the final set includes inflationary factors associated with explanations that we may identify with structuralist schools of thought.¹⁰

Using this initial specification, we confirmed that Central American inflation is a multifaceted phenomenon and that, as such, it cannot be encompassed by any single theoretical model.¹¹ Indeed, the data support the view that a number of different factors influenced the inflationary process over the 30-year period covered by this study. Among the most important, by virtue of both the strength of their influence and their statistical significance, are the two factors relating to the external sector, the increase in nominal demand (represented in an approximate way by M1), the relative supply of agricultural goods and past inflation.

Factors linked to the level of total supply were not always so influential. Although the variation in domestic supply (GDP) had a strong deflationary effect which was (inversely) identical to the effect of stronger nominal demand, it was not very significant in statistical terms (registering major standard deviations). Meanwhile, the supply of imported goods had a considerable anti-inflationary effect when considered as a percentage of GDP (the imports/GDP coefficient). As an individual variable, the quantum of imports was not highly significant, possibly because of the complementarity between imports and national output.

The variable that reflects the effect of an increase in domestic credit relative to the value of external purchases proved to be of great help in accounting for the build-up of inflationary pressures

⁸ The econometrics of long-term relationships enjoyed somewhat of a boom in the 1980s. Thus far, however, little is known about unit root tests and co-integration in data sets. Moreover, the statistical implications of unit root concepts are not entirely relevant when using multivariate equations (Spanos, 1990).

⁹ In each country series, inflation can be characterized as an autoregressive process of the first order, i.e., stimuli dating back more than two years are not significant factors in determining the current level of inflation.

¹⁰ For this last group of variables, only the results obtained using the growth rate for the agricultural sector relative to that of the rest of the economy will be presented. As it turns out, these results are virtually identical to those obtained using the differential growth rate for goods production relative to the rate for services and construction, which can be interpreted as a rough indicator of changes in the ratio between tradeables and non-tradeables in the economy. In contrast, no significant results were obtained when the scatter coefficient for sectoral growth rates was incorporated in an attempt to capture the de-structuring effect of the unbalanced growth typical of growth-driven inflation (Blondel and Parly, 1977).

¹¹ This also has implications for stabilization policy: "Behind every stabilization programme lies a diagnosis of the cause of inflation and, hence, of the most suitable tools for bringing it under control" (Ramos, 1986).

that would later (with a two-year lag) erupt into open inflation. The coefficient for domestic credit/value of imports of goods and services was thus found to be a leading indicator of inflationary pressures, which corroborates the argument made by Bulmer-Thomas (1985). An oversupply of credit relative to import capacity may be interpreted as the result of counter-cyclical monetary policies having an inflationary impact, which would fit in with a monetarist interpretation. However, it could also occur as a consequence of external bottlenecks (a decline in import capacity owing to a shortage of foreign exchange) that are not accompanied by an adjustment in the supply of credit, which would be more in line with a structuralist model.

In any event, the subregional model succeeds fairly well in accounting for the changes in inflation rates occurring in the four countries that were studied, taken as a group. The homoscedasticity of the error term resulting from the application of the ordinary least squares method also supports our initial hypothesis regarding the fact that (constant and trend) parameters that register cross-country differences are fixed factors. It is interesting to note that these parameters indicate the presence of a greater propensity towards inflation in Costa Rica and El Salvador than in Guatemala and Honduras.

Model B: symmetry of supply and demand effects

As mentioned earlier, a remarkable degree of symmetry exists between the coefficients for monetary expansion (linked, under certain conditions, to an increase in nominal demand) and for the growth of output (domestic supply). To determine exactly how variations in the money supply and inflation are connected, the dynamic interrelationships between the two were explored by alternately performing regressions on changes in inflation and in the money supply for past variations in prices and in money. In order to take the specific traits of each country into account, the relevant constants and dummy variables were also added. The next step was to gauge to what extent the incorporation of past inflation would improve the model's predictive power for M1 and, reciprocally, whether or not past changes in the money supply provided us with more information regarding present inflation.

The statistical tests performed using three lags for both prices and money point to the existence of a cross-correlation between the money supply and

prices; however, an increase in the money supply (as a cause) apparently played a more systematic role in price increases than the other way around. Thus, changes in the money supply are not endogenous (i.e., they are not an entirely passive factor that simply provides a *post facto* validation of price changes).¹² It is therefore reasonable to expect that the correlative intersections between inflation and changes in the money supply and between inflation and variations in production will not only be inverse but will also be of a comparable strength.

The equality of the coefficients was tested and, since this hypothesis was not rejected, the restricted model was estimated by substituting the ratio M1/GDP for M1 and GDP. The good statistical fit of these results attests to the soundness of the initial specification.

Model C: the respective contributions of credit to the private and public sectors

Monetary expansion is linked to the expansion of domestic credit and the monetization of international reserves. Earlier we succeeded in demonstrating that an increase in credit coupled with greater external liquidity (import capacity) did not pose an inflationary threat. In order to delve more deeply into the correlations between credit policy and inflation, an effort was made to dissociate the effects of monetary expansion linked to public credit from those linked to private credit. The statistical results deteriorated, however, and neither of the two new variables' coef-

¹² The equations may be written as follows:

$$X_{kit} = \mu_i + \theta_i + \sum_{j=1}^3 \sum_{K=1}^2 (\beta_j X_{ki[t-j]}) + \varepsilon_{it} \quad (2)$$

where:

μ_i ($i = 1, \dots, 4$) is a constant for country i ;

θ_i is a dummy variable for country i ;

X_{jit} denotes a price change (DLPE); and

X_{2it} denotes a change in the money supply (DLM1).

The test consists of reducing the coefficients for X_{2it} to zero when X_{jit} is the elucidated variable and comparing the results with those obtained using the initial equation ($F = 140.16$) and, reciprocally, restricting the coefficients for X_{jit} to zero when X_{2it} is the elucidated variable and comparing the results with those of the unrestricted model ($F = 28.04$). Although in both cases these null hypotheses are rejected due to the high values of the F-statistic, the effects of M1 on the inflation indicator appear to be more systematic than the effects that prices have on money (note that the inclusion of dummy variables improves the quality of the estimate but does not make any meaningful change in the result).

ficients differed significantly from zero. In fact, the coefficient for an expansion of public credit (i.e., the portion of the fiscal deficit that is not financed with external resources) had the opposite sign from what was expected. The other explanatory variables also declined in importance as compared to the factors specific to each country, and the equation's overall explanatory power diminished.

Thus, in the case of Central America, the inflationary effect of an increase in the money supply cannot simply be attributed to domestic financing of

the fiscal deficit. Contrary to the conclusions reached by the leading schools of thought, the inflationary forces associated with an overly large money supply do not match up with an expansion of domestic public-sector credit. Thus, the financing of budget deficits and inflation do not appear to be directly related, which tallies with the available information on other Latin American countries (Meller, 1994). None the less, as will be discussed later on, the chain of causality is of a more complex nature and the relationship is an indirect one.

IV

The inflationary dynamic in Central America and some of its implications for stabilization policy

1. Inertia or adaptive expectations

a) *Interpretation*

As mentioned above, the inertial component derived from the model's estimation constitutes an important determinant of Central American inflation. Although there may be various economic explanations for this,¹³ it is also possible that it is nothing more than a merely statistical result. In that case, the coefficient calculated for the variable DLPE (see table 2) would simply be registering the lagged effect of explanatory variables (international prices, monetary expansion, etc.) rather than corresponding to an economic phenomenon as such.

In order to clear up this point, a general model was estimated which, in addition to the contemporary effects of the explanatory variables, included their lagged effects for the two preceding years. We reasoned that if the DLPE term retained its significance when a general dynamic model was specified, then the hypothesis that an independent inertial component was present would be strengthened. The results of this exercise are presented in table 3.

As may be seen from the table, the initial effect of some of the variables did not last for long, and there appear to be self-correcting phenomena at work that tend to blunt the long-term impact of the main variables (exchange rate, supply-demand imbalances). The specification of the model in a reduced form does not explain the reason for this result, which may be caused by factors not included in the equation or by interrelationships among the explanatory variables. Hence, the deflationary impact observed one or two years after a devaluation may be attributable to the types of controls that are usually implemented following such a step, which (all other things being equal) tend to dampen inflation. This phenomenon may have been reinforced by the overadjustment of the real exchange rate which preceded many of the stabilization programmes of the 1980s.¹⁴ It is also noteworthy that the regression's fit was not significantly better than the results obtained using only the contemporary impacts when these lagged effects were included.

¹³ The most common ones being the adaptive formation of inflationary expectations and the indexation of contracts (particularly labour contracts) based on past inflation.

¹⁴ It is interesting to note that an increase in international prices has a greater long-term inflationary impact than a devaluation does, whereas in the short run the effects of the two are comparable.

TABLE 3

Central America: a dynamic model

Annual inflation in Central America (GDP deflator) ^a	Explanatory variables with dynamic effects		
	No lag	1-year lag	2-year lag
General constant term ^b	-0.341 (0.23)	...	...
Constant term in El Salvador ^b	-1.840 (1.03)	...	...
Constant term in Guatemala ^b	-0.365 (0.20)	...	...
Constant term in Honduras ^b	-0.287 (0.17)	...	...
Trend in Costa Rica ^b	0.360 (3.69)	...	...
Trend in El Salvador ^b	0.333 (3.42)	...	...
Trend in Guatemala ^b	0.230 (2.28)	...	...
Trend in Honduras ^b	0.114 (1.33)	...	...
DLDM (unit value of imports)	0.170 (3.00)	0.031 (0.44)	-0.090 (1.32)
DLTC (exchange rate)	0.142 (6.70)	-0.062 (2.11)	-0.065 (-2.21)
DLM1/GDP (ratio of M1 to GDP)	0.236 (6.03)	0.084 (1.96)	-0.081 (1.91)
DLMB (quantum of imports)	0.067 (1.51)	0.008 (0.13)	-0.056 (1.00)
DCOEFM (import coefficient)	-0.087 (1.84)	0.085 (1.46)	0.051 (0.80)
DCREM [-2] (domestic credit relative to imports) ^b	...	...	0.128 (1.57)
CADAR (performance of agricultural sector)	-0.214 (2.98)	0.029 (0.40)	-0.111 (1.58)
DLPE (past inflation) ^b	0.339 (3.53)	...	...
R2 (adjusted)	0.88		
Standard error of regression	3.24		
Durbin-Watson	1.92		
Residual autocorrelation ^c	1.01		
Residual heteroscedasticity ^c	0.14		

^a All variables are expressed as percentage rates of annual variation. The figures given in parentheses refer to the absolute value of Student's *t*-statistic. For reasons of clarity, the coefficients for the dummy variables are not shown.

^b Lags were not applied in this case.

^c Value of the F-statistic, obtained using two lags.

Nevertheless, the coefficient for inertial inflation remains highly significant when the lagged effects of the other variables are included. Thus, there is a strong presumption that inertial inflation was very much a factor in Central America during the period in question and should not be regarded as merely an extension over time of the effects of the factors which caused the imbalance in the first place.

Many studies on this subject have sought to attribute this inertia to the expectations of economic agents in situations of imperfect information or to the existence of indexation clauses in contracts between agents (Schuldt and Acosta, 1995). When a majority of the economy is organized around nominal or implicit contracts, then the indexation of contracts on the basis of expected inflation makes it possible to

adapt the negotiation process to accommodate the uncertainty generated by persistently high inflation. In practice, inflationary expectations are based on past inflation and on a few key variables, such as public-sector prices, the exchange rate and others.

There is, however, no need to invoke the short-sightedness of economic agents in order to explain the existence of inertia in the price formation process. Inertia may coexist with rational expectations because of rigidities in the adjustments made by an economy.¹⁵ Specifically, if economic agents' decisions regarding their prices are not well synchronized, substantial modifications and inertia in the relative price structure may result (Blanchard, 1983). This line of reasoning leads to the same conclusions as those drawn by traditional structuralists regarding the imperfection of market mechanisms in developing economies (Lambert, 1959). It is important to bear in mind that, despite the Central American economies' small size, their markets are imperfectly integrated, and the prices of similar goods may differ considerably between one segment and another within the domestic market (Cáceres and Jiménez, 1988). It is quite likely, moreover, that the political crisis experienced by most of the countries in the subregion since the late 1970s has increased the fragmentation of their markets at both the subregional and national levels.

This market segmentation very probably compounded the effects of the oligopolistic structure that predominated in many sections of the subregion's product market as a result, in particular, of the import-substitution industrialization policies that began to be implemented within the CACM in the late 1950s, which gave rise to rigidities in the price formation process.¹⁶ This causes the general price index to exhibit inertia even in cases such as that of Central America, where inflation has been moderate and the indexation of formal contracts (especially labour contracts) has been less prevalent than it has in South America.

¹⁵ For a review of technical studies on this subject, see Mankiw and Romer, 1991.

¹⁶ Empirical studies of industrial economies have demonstrated the existence of a strong correlation between the degree of concentration in a market segment and the rigidity of its prices (Carlton, 1986).

b) *Implications in terms of the velocity of disinflation*

The persistence over time of inflationary effects strongly influences the extent of a shock's net impact on some of the explanatory variables for inflation in Central America. A 5% increase in international prices will, in and of itself, translate into a 0.6% rise in domestic price levels three years hence; however, the net effect will be an increase of nearly 1% in inflation due to inertial effects (see table 3).

This rigidity in the price formation process influences the social cost of a stabilization effort. Indeed, the coefficients obtained using model B (see table 2) indicate that in order for the effects of one percentage point of inertial inflation (which may, for example, be an after-effect of earlier surges) to be counterbalanced without delay, money creation would have to be reduced by over 4 points of GDP. Another consequence as regards price formation is the existence of a reciprocal relationship between monetary and real variables; thus, a country cannot rule out the possibility that a stabilization policy of this nature may have a negative impact on the performance of domestic supply, at least in the short and medium terms. If demand is the only variable that is being controlled and a strong inertial component exists in the inflationary process, then if the authorities move to stamp out inflation quickly, they may run the risk of triggering a reactive process of stagflation via an over-adjustment of macroeconomic policy. In particular, it would be unrealistic for the authorities to try to achieve and maintain zero (or very low) inflation in cases where a number of external and internal inflationary factors are beyond their control and may even involve a large measure of seasonality, as in the agricultural sector. Hence, the success and viability of a stabilization policy will depend on how credible the target level for inflation is.¹⁷

2. Public credit, fiscal deficit and inflation

Persistent inflation is usually identified with periods of fiscal disequilibrium. As we said earlier, in the case of Central America we were unable to find any direct relationship between an increase (that had not been financed with external resources) in the fiscal deficit and an increase in the general price index (see

¹⁷ Ramos (1986) has analysed a type of stabilization programme designed to minimize the risk of recession.

table 2). However, the maintenance of large public deficits is not without its costs, especially in view of the inflationary effect of import constraints, as measured by the variable DCREM.

The available statistical information¹⁸ indicates that monetary expansion, when based on domestic credit for the private sector, does not have any substantive effect on the "domestic credit/value of imports of goods and services" coefficient, which is a leading indicator of a build-up of inflationary pressures. This is not true in the case of public-sector credit, however. Owing to this sector's weaker pro-

pensity to import, an expansion of public credit will raise the quotient of credit over external supply and is therefore more likely to generate persistent inflationary pressures than is monetary expansion based on private-sector credit.

In view of the above finding, it is not surprising that the accumulation of inflationary pressures in the Central American countries coincided with the growth of their fiscal deficits, although the complexity of the inflationary process in the subregion is such that the increase in domestic prices cannot be attributed entirely to the imbalance in public finances.¹⁹

V

Conclusions

Even though Central America is composed of small countries that are heavily exposed to the influence of the international market, it has exhibited an increasingly complex pattern of inflation since the late 1970s or early 1980s. Furthermore, despite the growing sophistication and diversification of these countries' economic structures and the differences in their macroeconomic policy, they still share a common explanatory model for inflation.

Specifically, the inflationary effects to which they are subject still stem largely from the external sector. The availability of foreign exchange, in particular, plays an important role in easing the pressures which excess demand or insufficient supply exert on prices.

Thus, for example, the fiscal deficit did not, in and of itself, have any major direct impact on inflation. On the other hand, an increase in public-sector credit relative to the country's import capacity did have lagged inflationary effects of some significance.

A rise in this coefficient foreshadows an inflationary process driven by excess demand that cannot be satisfied with greater imports or with imports which the country purchases on a regular basis but for which the flow of financing is reduced by a crisis in the external sector.

Another indicator of just how strongly the external sector's financial standing influences the behaviour of prices is the fact that the imports/GDP coefficient is a highly important variable with regard to inflation. However, not all demand pressure is siphoned off by higher imports, given the growing significance of non-tradeable goods and services within the economy. In fact, an increase in M1 as a percentage of GDP is a very significant inflationary factor.²⁰

General or sectoral imbalances –i.e., the more structural sorts of effects– were of some importance in determining the level of inflation in certain cases, especially in terms of the anti-inflationary effect of increases in agricultural supply.

¹⁸ The correlation between a variation in the "domestic credit/value of imports" coefficient and a change in the amount of credit supplied to the private and public sectors is -0.03 and 0.45, respectively. What is more, unlike what happens with a variation in private credit, an increase in public-sector credit tends to be associated with declines in the volume of imports. This may be linked to the countercyclical nature of fiscal policy in the subregion, especially during the late 1970s and early 1980s, when the restriction of external capital flows militated against a satisfactory economic performance.

¹⁹ In particular, the possibility cannot be ruled out that inflation has weakened the tax base owing to the absence of appropriate indexation mechanisms for maintaining real tax receipts at constant levels as prices rise.

²⁰ Considered separately, these two variables have symmetrical effects on the level of inflation, of opposite signs but similar weight.

The inertial component of Central American inflation is significant and, as we demonstrated, is not derived from the accumulation of the lagged effects of other explanatory variables. In contrast to the situation in South American countries with high inflation, the indexation of contracts does not appear to be a very important determinant of this variable either. Instead, market imperfections and segmentation, which have given rise to oligopolistic practices and rigidities in the price formation process, appear to be the most important sources of inertia.

Thus, for the most part, the countries have been unable to bring the inflation rates observed in the wake of their adjustment and stabilization efforts back down to the levels registered prior to the oil shocks of the 1970s. There are at least two obstacles to a rapid return to complete stability in Central America: (i) given the inertial aspects of inflation in the subregion, the countries would have to make too severe an adjustment in order to lower inflation any more than they already have; and (ii) tax reforms of the type needed to cover the Governments' financing requirements have yet to be undertaken (after years of relative neglect, the countries' infrastructure is such that public investments cannot be postponed any longer).

The stabilization policies applied during the 1980s were designed to cope with the factors that were thought to be the main causes of inflation, with the most important such factor being the fiscal deficit. Sooner or later, this led to the implementation of recessionary stabilization policies. The factor that invariably determined the degree of success of the countries' macroeconomic adjustment programmes, however, was the supply of external resources. Therefore, the inflationary process seen in the 1980s cannot be considered in isolation from other aspects of the crisis experienced by the subregion or, in particular, from the external constraints affecting Central America since the late 1970s as a result of its balance-of-payments difficulties and the deterioration of its terms of trade.

The volatility of the external resources available to the subregion in the early 1990s raises some doubts as to just how solid the foundations for its present macroeconomic stability are and point up the

importance of deepening its financial markets and retooling its manufacturing and agricultural sectors in order to establish a more stable position in international markets. Relying on short-term external resources to fund the subregion's growing trade deficits is a very risky strategy for stabilizing the exchange rate and, hence, the level of inflation. In addition, the Central American countries' external debt burden is quite heavy in comparison to that of other Latin American nations, and they therefore do not enjoy much latitude in terms of increased borrowing. Nor does it appear likely that the flow of official assistance can be sustained at its present high levels (equivalent to 2% of GDP in Costa Rica and Guatemala and perhaps as much as 9% in Honduras and 30% in Nicaragua) in the future.

An examination of Central America's experiences with stabilization programmes in the 1980s and of the factors that have influenced inflation in these countries during recent decades leads to the conclusion that the subregion needs to devise formulas of its own in order to deal with inflation. When, in the late 1970s, these countries chose to ignore the external constraints affecting them and resorted to countercyclical policies involving the imposition of governmental controls on selected prices, they only managed to stave off the effects of the strong inflationary pressures generated at that time. In the 1980s, the initial decision to use the nominal exchange rate as an anchor for prices and the subsequent move to tighten up the money supply for the same purpose also had serious disadvantages. In the first case, policy-makers failed to take the limits of external resources into account—a truly essential consideration for these countries—and, in the second, they resorted to recessionary measures that weakened these countries' production base.

With the exception, of course, of situations marked by high and erratic rates of inflation, macroeconomic policies designed to maintain a moderate yet stable level of inflation may be the most effective means of promoting steady long-term growth, whereas an over-adjustment that achieves zero inflation may not be the best choice from this standpoint.

(Original: Spanish)

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