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# Macroeconomic Policy and Growth: Some Lessons of Experience

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*This paper asks how macroeconomic policies affect growth. It draws on the experiences since 1974 of seventeen developing countries—Brazil, Cameroon, Chile, Colombia, Costa Rica, Côte d'Ivoire, India, Indonesia, Kenya, the Republic of Korea, Mexico, Morocco, Nigeria, Pakistan, Sri Lanka, Thailand, and Turkey. First, the paper looks at the effects of the foreign-financed public spending booms of the 1970s, which tended to destabilize economies and lead to debt crises, initially raising and then lowering growth rates. Next, the paper compares reactions to the 1980–82 crises and adjustment policies in four countries that were relatively successful—Colombia, Turkey, Thailand, and Indonesia. The paper reviews the varying experiences with inflation of the countries in the study and assesses the effects of inflation on growth. The generally low-inflation countries experienced short bursts of high inflation caused by external shocks. Finally, the paper analyzes the relation between inflation and exchange rate regimes and describes the exchange rate policies of Indonesia and Mexico in detail. The paper draws a number of policy lessons—notably the need to do cost-benefit analyses for public investments, the need to avoid "euphoria" when the economic outlook appears favorable, and the need to react speedily to crises. Nominal exchange rates should be adjusted to avoid unstable real rates, and a flexible exchange rate policy should be combined with a commitment to a noninflationary monetary policy.*

How do macroeconomic policies affect growth in developing countries? Can we derive some lessons of experience to guide us in determining which policies are relatively more favorable to growth?

To gain some insights into this subject, I survey seventeen developing countries, most of which have gone through episodes of public spending booms, crises, and adjustment since 1974. I am able to take this overview because this paper is a by-product of a World Bank research project on macroeconomic policies, crisis, and growth in the long run, which involves comparative studies of seventeen developing countries over a long period (usually since the

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mid-1960s).[1] My aim is to see what we can learn about the effects of macroeconomic policies on growth, both in the short and long terms. However, I do not try to explain why governments pursued various macroeconomic policies at different times; I am not engaging in political economy.

The methodology of this paper is eclectic. Unlike much generalizing and model-building in academic development economics, the present study is not based on the experience of only one or a few countries. Nor does it take an econometric approach that conceives of many countries as representing, in some sense, a common population. Rather, it attempts to take into account the detailed experiences of a large number of countries.[2] This approach is characteristic of much World Bank research. Of course, in a conference paper one can include only so much detail, evidence, and qualification. Thus the "lessons" I relate at the end of each section of this paper should be understood as based on much more evidence than I can present here. Similarly, they should be seen as subject to numerous qualifications that I also cannot elaborate here. In short, I am posing these lessons as a basis for discussion.

The paper draws extensively on the experiences of sixteen of the countries in the World Bank study: Brazil, Cameroon, Chile, Colombia, Costa Rica, Côte d'Ivoire, India, Indonesia, Kenya, Mexico, Morocco, Nigeria, Pakistan, Sri Lanka, Thailand, and Turkey. The seventeenth country in the World Bank study is Argentina, but it is such a special case that I mention it only sporadically here.[3] I have brought in Korea, however, so the total number of countries studied is still seventeen. Korea is notable because it has had experiences similar to those of many of the other countries, but, as is well-known, its policy reactions and growth outcomes have been exceptionally favorable. Table 1 presents some basic data on growth rates, inflation rates, investment ratios, and external debt for these seventeen countries.[4]

In the last eight years or so, the academic literature on macroeconomic poli-

1. I am indebted to the authors of the forthcoming country studies, as well as to numerous published papers on some of these countries. Here I would particularly like to note the country studies contained in Sachs and Collins (1989) and Sachs (1990). The work of synthesis, drawing on the various country experiences, is still in process, and is being done by Richard Cooper, Ian Little, Sarath Rajapatirana, and myself. This paper has drawn on our ongoing work, and I am indebted to my co-authors. The views and judgments expressed here are purely my own at this time, and may not coincide with my views or those of my co-authors when this work is completed.

2. I am in sympathy with Reynolds (1985), who has sought an understanding of growth through in-depth historical studies of many countries and has looked for some comparisons and generalizations from these. He argues that "it is wrong to regard cross-section analyses as a satisfactory substitute for longitudinal studies" (p. 13).

3. Inevitably, I shall refer to Argentina in the section on inflation.

4. All large developing economies (except Egypt, Korea, and Venezuela) are included in the project, nine in all. A large economy is defined as any nonsocialist developing economy with a GDP greater than US$30 billion in 1987 (billion equals 1,000 million). Medium-size economies (US$10 billion to US$29 billion) are Cameroon, Chile, Morocco, and Nigeria. Small economies are Costa Rica, Côte d'Ivoire, Kenya, and Sri Lanka.

Table 1. *Growth, Inflation, Investment Ratios, and Debt: Seventeen Developing Countries*
(percent)

| Country | 1980–1988 | | Gross domestic investment as a percentage of GDP | | Total external debt as a percentage of GDP | |
|---|---|---|---|---|---|---|
| | Average annual growth in per capita GNP | Average annual rate of inflation (CPI) | 1980 | 1988 | 1980 | 1988 |
| Korea, Rep. | 6.9 | 8.7 | 31.7 | 32.6 | 48.7 | 22.0 |
| Thailand | 4.1 | 5.9 | 26.4 | 25.8 | 25.9 | 36.1 |
| India | 3.7 | 9.4 | 22.8 | 21.5 | 11.9 | 22.3 |
| Pakistan | 3.7 | 7.2 | 18.5 | 17.6 | 42.5 | 45.6 |
| Cameroon | 3.1 | 9.5 | 18.9 | 14.0 | 36.8 | 33.7 |
| Sri Lanka | 2.8 | 13.0 | 33.8 | 22.8* | 46.1 | 75.1* |
| Indonesia | 2.6 | 10.0 | 24.3 | 28.0 | 28.0 | 69.0* |
| Turkey | 2.1 | 50.1 | 21.9 | 19.0 | 34.2 | 57.7* |
| Morocco | 1.8 | 8.1 | 24.2 | 24.2 | 56.2 | 105.9* |
| Colombia | 1.3 | 23.2 | 19.1 | 17.5 | 20.9 | 46.5* |
| Chile | 0.8 | 21.9 | 21.0 | 15.9 | 45.2 | 96.6* |
| Brazil | 0.6 | 212.2 | 22.9 | 16.7 | 30.6 | 30.7 |
| Kenya | 0.3 | 10.9 | 30.0 | 19.0* | 51.2 | 71.3* |
| Mexico | −0.6 | 74.5 | 27.2 | 16.7* | 30.3 | 58.0* |
| Costa Rica | −0.9 | 28.3 | 26.6 | 23.9 | 59.5 | 100.0* |
| Côte D'Ivoire | −3.3 | 6.4 | 28.2 | 11.6* | 58.3 | 161.8* |
| Nigeria | −3.8 | 17.9 | 20.5 | 8.1* | 8.9 | 107.1* |

*Note:* GNP is gross national product; GDP is gross domestic product; CPI is consumer price index. Countries are listed in order of per capita GNP growth. Countries in which the investment-GDP ratio fell by 10 percent or more between 1980 and 1988 are marked with an asterisk in the fourth column. Countries in which the debt ratio increased by more than 20 percent of GDP over the period are marked with an asterisk in the last column.
*Source:* World Bank data.

cies in developing countries has blossomed. Yet this literature has been dominated by attention to a few Latin American countries—particularly Argentina and Chile but also Bolivia and Brazil. For all four of these countries, economists have been primarily concerned with analyzing the processes of reducing or attempting to reduce high inflation. By broadening the scope of investigation and giving a little more attention to the non–Latin American countries, one is reminded, for example, that inflation is not a general characteristic of developing countries.

Section I of the paper deals with the public spending booms that destabilized various developing countries at different times, usually between 1974 and 1980, and that together with terms of trade and interest rate shocks brought about fiscal imbalances and accumulations of debt that caused the subsequent crises and need for adjustment. Section II deals with the crises of the early 1980s and subsequent macroeconomic adjustments. Section III discusses the relation between inflation and growth, and section IV treats exchange rate policy. My major interests are in the implications of various macroeconomic policies for growth in each of the seventeen countries and the lessons that may be derived from looking closely at their experiences.

## I. The Public Spending Booms

### *A Stylized Story of a Boom*

Let us begin with a simple stylized story of a public spending boom. Of course, this story actually varies greatly between countries, and I will consider these variations later.

In our hypothetical case, first, there is an increase in public spending, whether on consumption or investment, caused above all by the ready availability of funds from the world capital market. The extra spending goes both toward home-produced goods and toward imports. The higher demand for home-produced goods increases domestic output, given that there is some slack in the domestic economy. This is the Keynesian effect, which manifests itself in a short-term rise in the growth rate. (The Keynesian effect on output may last for a time after the growth rate declines, but it will be temporary when the boom itself is temporary.) In addition, extra demand for imports worsens the current account. The adverse effect of the spending boom on the budget is moderated by higher tax revenue resulting from domestic output expansion and by the fact that increased imports bring in more revenue from taxes on trade.

In due course—usually very quickly—domestic prices rise in response to the higher demand. Given a fixed nominal exchange rate (or one that is not depreciated much in response), this produces an appreciation of the real exchange rate, with the usual expected effects. The higher domestic costs, including wages, squeeze the profitability of exports. In addition, domestic demand switches toward exportables and toward imports, especially imported inputs into domestic production. Hence the current account worsens further.

The precise effects depend, of course, on such matters as the composition of extra government spending—in particular its import content (or, more generally, its tradable content). This in turn may depend, among other things, on how much is extra investment spending and how much is consumption spending. Its subsequent effects—its effects on real output and income, and hence on the medium- and long-run rates of growth—are of particular interest for this paper and are discussed below. Obviously they depend, above all, on how much has been extra investment spending, how efficient the investment has been, and what debt burden has been incurred. Inevitably, the real appreciation would have to be reversed once the spending boom comes to an end, and this can also be regarded as an important medium-run effect.

Because of the Keynesian output and income expansions, private consumption spending will rise. Private investment spending will rise if there is a favorable expectations effect.

At the same time, or possibly before the spending boom was embarked on, there may have been a rise in export income caused by improved terms of trade. This may have led directly to higher private incomes, which are then spent and have the effects just discussed—Keynesian expansion, real appreciation, increased imports, and a squeeze on those exports that did not benefit from the

boom. The rise in export income will also have led to higher government revenues, which are then spent, as before, with the usual effects. The real appreciation resulting from such an export-financed spending boom leads to the familiar Dutch disease—a squeeze on nonboom ("lagging sector") tradables. When the spending boom is financed out of the gains from an export boom there will not be an increase in foreign debt. Indeed, the export boom may exceed the spending boom so that reserves are actually built up, as happened in a few countries. In other countries the spending boom was greater.

### *The Booms: What Actually Happened*

The stylized story gives a general indication of what happened in the seventeen countries, but there were great variations (for other comparative studies of booms, see Gelb and others 1988 and Cuddington 1989). The common feature is that all except Chile and India had a public investment boom at some stage during the 1974–81 period, and in almost all cases this led to increased foreign debt. The fact that this was so common is quite striking, especially considering that during the same period, developed countries were generally going through reduced growth and were trying to restrain public spending.[5] The explanation of the booms is a matter of political economy, and here each country appears to have its own story. Yet there must be some common factors—the most obvious being the easier availability of funds on the world market.

Despite some commonalities, the booms differed greatly in timing, magnitude, and details. India did not have a boom and borrowed very little. Did India thereby miss opportunities? Chile experienced only a private investment and consumer durables boom. (The debts incurred by private borrowers in Chile were taken over by the government because of the crisis and pressure from foreign creditors, so the net result for public external debt was much the same as if the boom had been public originally.)

In the three oil-exporting countries—Indonesia, Mexico, and Nigeria—the booms were clearly initiated in response to higher actual or expected export income. In coffee-exporting Kenya the situation was similar. In Cameroon a modest investment boom—in particular, investment in oil exploitation—followed the coffee boom and preceded the oil boom. Morocco's public investment expenditures had already started to increase before the phosphate export boom but then greatly increased as a result of this boom. In Costa Rica and Côte d'Ivoire also, the public spending booms started before the export booms but were indeed kept going longer than otherwise as a result.

It should be pointed out that Mexico actually had two spending booms. The larger one was in 1977–81 and was clearly initiated by expectations of high oil-export income. The smaller and earlier boom, during 1972–76, however, can be

5. This very factor caused demand for funds to decline and real interest rates to be low, and so made banks more eager to lend to developing countries and made governments of developing countries more ready to borrow.

explained in domestic political terms and by the ease of foreign borrowing. It was not associated with an actual or prospective export boom.

Colombia is a special case. It had an export boom in coffee but not a public investment boom at all during the export boom period. Rather, the gains went mostly to the coffee producers; the monetary effects were partly sterilized; and the budget deficit was reduced. Colombia's story is resumed later, but it should be noted now that Colombia finally did have a public spending boom—one that came as a reaction to the decline in the coffee price and that was designed to stabilize domestic demand.

The accounting so far leaves six countries that had public investment or spending booms of some kind but no export booms at all during the period. Sri Lanka's boom was particularly big and is discussed below. Turkey had its boom roughly from 1974 to 1977, encouraged both by the ease of borrowing abroad and by a 1971–73 boom in remittances from workers abroad (this was similar in effect to an export boom). Pakistan had a public investment boom in 1974–76 and was able to finance its current account deficits through cheap loans from some of the oil-producing Gulf countries. Korea increased its investment ratio (private and public) from 1974, and in 1978 and 1979 it went into a short-lived "maxiboom" resulting from a major investment drive in heavy and chemical industries. Even cautious Thailand followed the fashion and went into a modest foreign-financed public investment boom in 1977–78. Brazil maintained a high level of spending despite the adverse effects of the oil price rise, and it borrowed heavily, but the investment ratio only rose slightly in 1974 and 1975; much of the foreign-financed investment was done by parastatal enterprises.

Many of the countries built up big debt burdens during this period. India was an exception. Other notable exceptions were Cameroon, Colombia, and Nigeria—all countries in which the export boom exceeded the spending boom and in which reserves were built up. Pakistan also did not really develop a debt problem because the concessional nature of its loans made interest payments low and because the nation borrowed only modestly.

### *Implications of a Boom for Growth*

This paper began by asking how macroeconomic policies have affected growth. The public spending booms leading to fiscal deficits that have been described here were indeed the initiating macroeconomic policies for the whole long episode I am discussing. How has growth been affected?

For many countries the data tell a simple story. During the booms, when the investment ratio rose, the rate of growth of output also rose, and because much of the boom was financed by foreign borrowing, spending grew even faster. Later, after the crises began, both the investment ratio and growth fell, often drastically. As for retained national income, because of debt-service payments, the rate of growth—and sometimes even the level—fell even more. What, then, has been the net effect of the whole episode on growth and on real incomes?

First, we must distinguish effects of investment booms on rates of growth

from effects on levels of output. It is really rather misleading to focus on growth rates. Suppose there is an investment boom in year $t_1$, and this bears fruit in a higher output level from year $t_3$ onward. The rate of growth will then rise in year $t_3$ and fall back again to its trend value the next year. It is not a failure of the investment boom that it has not led to a permanent rise in the growth rate.

Second, we should distinguish boom effects on "Keynesian growth"—or demand-determined growth—from effects on growth of capacity. It seems obvious that the increases in the growth rates in the years of the public spending booms were Keynesian. They had nothing to do with the productivity of the investment and its possible effects on long-term growth. It is not necessarily an achievement for the macroeconomic policymakers to bring about growth of this demand-led kind because such growth is not sustainable. As I have just suggested, a Keynesian demand expansion leading to output levels above trend—a boom—for several years may well cause the rate of growth to rise at first and then to fall and become negative in the later years of the boom.

The issue is whether a boom yields fruit later. Let us focus on this and hence on the possible effects on incomes and output. One possibility is that public investment is efficient in an ex post facto sense. Perhaps output rises as a result (when converted into tradables), and it rises sufficiently to finance the debt service and something extra. In that case it will have had a favorable effect not only on output but also on national income (that is, after net factor payments). The spending will temporarily have raised the rate of growth, and it will have made the country permanently better off. The rise in debt, even possibly in the ratio of debt to gross domestic product (GDP), should not be a problem. The fact that the so-called resource transfer resulting from the investment becomes negative once the investment ceases should not be a matter of concern.[6]

It is also possible that the investments could have been efficient in an ex ante sense—that is, they were efficient, given available information and reasonable expectations at the time, allowing for risk. But because of unexpected adverse terms of trade and interest rate movements they turned out to be uneconomic. This might be a good description of what happened in many cases, although some of the investments were clearly not efficient even in this sense.

In any case, when investments proved inefficient it could still mean that output growth was boosted for a time, and levels stayed higher than they would have been otherwise. But a debt problem was generated or increased, forcing reductions in absorption below levels that could have been sustained in the absence of the earlier boom. Thus the effect on retained income (gross *national*

6. When the public investment boom is financed from a country's own export income boom, the story has to be a little different. To judge the efficiency of the domestic investment, the stream of extra output has to be set against the earnings that could have been obtained by investing the gains from the export boom abroad. If domestic investment is inefficient there will have been the same sort of loss, as discussed in the text, but it need not lead to or help to bring about a debt crisis in the direct sense. It will, however, still reduce the country's creditworthiness (compared with investment abroad), and hence it will have an indirect effect.

product) was negative even though the effect on output (gross *domestic* product) may have been somewhat positive.

In addition, the debt crisis had indirect adverse effects on outputs and real incomes, and possibly growth later, and these must be attributed to the earlier boom, which contributed to the buildup of debt. First, in some cases (notably Brazil) the crisis led to an increase in trade restrictions. In other cases (notably Mexico, Morocco, and Turkey) the crisis led to trade liberalization, so that there was presumably a positive productivity—and possibly growth—effect. Second, the crisis forced reductions in imports that caused outputs of import-using industries to decline and, given some immobility of labor, at least transitional unemployment.

Note that there is empirical support for the proposition that over a longer period (1965–88) countries that on the average had high investment ratios tended also to have high growth rates. Yet for the 1975–88 period, a clear time-series relationship between investment ratios and rates of growth of output a few years later—when the fruits of the investment would be expected—cannot be found. But this is no surprise when we recall that during the boom period, investment ratios and rates of growth were high, and during the crisis and early adjustment period a few years later both were low (the earlier high growth being explained by Keynesian effects and the later low growth by various factors, including the consequences of the inefficient investment earlier). This has also meant that there is a tendency toward a negative cross-country relationship between investment booms in the 1974–80 period and rates of growth from 1982.

### *Lessons of the Boom*

It is important to learn the lessons of this 1970s boom because some of the circumstances that gave rise to it could come about again. The lessons should be remembered whenever the economic situation for a country appears to be really favorable. When the crisis comes it is too late to avoid pain.

*How much macroeconomic destabilization can be tolerated?* Suppose a country looks as though it is moving into a foreign-financed investment boom, public or private, and all the evidence suggests that it is soundly based. If debt-financed, the expected interest rate over the relevant period is low relative to expected returns. Alternatively, the boom may be the result of direct private investment, which is unsubsidized and sound on proper cost-benefit calculations (though these may not necessarily be calculations that take into account the considerations discussed here). But the boom is inevitably temporary.

Some macro-destabilization is then inevitable. During the boom the current account will go into deficit (or greater deficit than before), the real exchange rate will appreciate, and there will be some domestic inflation, all features described in the stylized story earlier. It is important that price rises are perceived as temporary adjustments, so that inflationary expectations are not generated. Later these effects will tend to be reversed. This prospective destabilization has

to be recognized—and should be foreseen—but it is not sufficient reason to try to kill a boom completely. Nevertheless, there is then a need for stabilizing or smoothing policies—notably reducing public investment when the boom is a private one, or moderating public and private consumption spending when the source of the boom is the availability of funds from abroad for investment. The adverse (Dutch disease) effects on the tradable industries of temporary real appreciation are a particular problem; they strengthen the case for stabilizing policies.

*Unsound investment spending shows the need for a cost-benefit approach.* Our study of the seventeen countries shows that some public spending decisions were unsound on the basis of knowledge and reasonable expectations at the time. Some projects were bound to be unsound because of the speed of the decisionmaking processes, the rapidity with which the programs themselves were implemented, and the massiveness of the investment. Many of the investment booms and borrowing splurges took place in very short periods and created debt burdens that have affected the countries adversely for many years.

The obvious need is for a cost-benefit approach, preferably one that is institutionalized. This lesson is as important for creditors (private or official) who are eager to lend as it is for the governments. In particular, when the investment is in nontradables, lenders and governments need to take into account the likelihood of a later real depreciation. The need to reverse the resource transfer—as new capital inflow declines and especially as interest and dividend payments have to be remitted—means that there will have to be some real depreciation later, at least relative to what might have happened otherwise. If new investment took this into account it would tilt the pattern of foreign-financed investment in the direction of tradables. At the same time, cost-benefit analysis that makes some use of shadow pricing would tilt new investment away from highly protected (usually import-replacing) industries. The net effect would be that investment in export industries, or in direct or indirect inputs into exports, would be favored.

*Beware of euphoria.* It is well at this point to recall the experiences of three countries—Chile, Sri Lanka, and Côte d'Ivoire.

In Chile there was massive private borrowing during a very short period—1980 and part of 1981. This much-analyzed episode teaches at least two lessons. The first is how quickly problems can be created that take years to solve. The second is the need for caution against "euphoria." In this case, it was a euphoria of the international capital market and of domestic investors about Chilean economic prospects as a result of policy changes believed to be favorable to private enterprise, and the building up of confidence in the private sector that this situation would be sustained.

Sri Lanka's boom began in 1977 when a new, liberalizing government came into power. From 1977 to 1982, public spending rose from 28 to 41 percent of GDP. The previous government, like the Indian government, had been reluctant to borrow abroad and possibly could not get much from official sources. When a government came into power that liberalized trade, reduced subsidies, and

liberalized the financial sector in a country that had been very protectionist and regulated, funds from official sources, including the World Bank, became readily available. Here again, as with Chile, we had euphoria, now on the part of the government itself, which undertook an ambitious investment program (mainly a single irrigation project), and on the part of official lenders.

Finally, Côte d'Ivoire teaches similar lessons. In 1974 public investment was 11 percent of GDP, and by 1978 it was 21 percent. Until 1974 Côte d'Ivoire was considered a great success story because it had followed policies that were sympathetic to private enterprise and foreign investment and had attained the highest per capita growth rate in sub-Saharan Africa. This all fell apart because of a massive public investment boom embarked on in 1974—before the coffee boom began—whose consequences are still being felt in a very high debt burden and low growth rate.

The foregoing are extreme cases of euphoria in which governments had a sound record or appeared to be following or planning orthodox policies. Another well-known example is that of Mexico in 1980–81, when the spending boom far exceeded the oil export boom. In general, euphoria was characteristic of the whole period among many countries that had export booms, or countries that found it easy to borrow abroad even without such booms.

There are lessons here not only for various governments but also for potential foreign creditors. They should be remembered whenever a government, its policies, and the country's economic prospects look "really good."

## II. Crisis and Adjustment

The broad characteristics of the crises that befell almost all of the countries in the study from about 1980 to 1982 (poorer terms of trade, higher real interest rates, decline of foreign lending) are well known and will not be described here. But once one gets beyond aggregate data and simple econometrics, one becomes aware of the enormous differences between countries—in the extent of the crises; in the precise origins of the crises (terms of trade, interest rates, decline of lending, and internal factors); in the timing; and, above all, in the policy reactions.

The onset of the crisis was always a decline in the availability of new loans from the private capital market, and the countries that avoided an immediate crisis were principally those that could and chose to continue borrowing for a time. The timing of the terms of trade shock depended crucially on whether the country was an oil exporter or importer, or a coffee exporter. Pakistan was the one country in our project that did not really have an actual or potential crisis of the kind that affected the other countries, because the adverse effect of the oil price rise was offset by the boom in remittances from workers in the Middle East and because Pakistan did not have a significant debt-servicing problem.

For this paper one would ideally like to determine how the immediate policy

reactions affected later growth. Two aspects were probably critical. First, one might presume that if there is continued borrowing to maintain consumption levels (as in Brazil) or to finance doubtful investment programs (as in Sri Lanka), the increased debt burden would have an adverse effect on future growth, as discussed earlier. Second, many countries tightened import restrictions. This is a natural reaction at a time of balance of payments crisis, but, if maintained, it is harmful for the growth of exports and economic growth later. The question then is whether the tighter restrictions lasted for some time. In some countries (Mexico, Morocco, and Nigeria) structural adjustment programs led later to major trade liberalization measures that have more than reversed the earlier increases in restrictions, but this was not so in other cases—notably Brazil and Colombia.

Actual short-term outcomes depended not only on the policy reactions but also on the initial shocks and their effects. Countries with flexible economies and flexible policies—Indonesia, Korea, and Thailand are examples—managed to recover quickly or keep their domestic recessions short. Going beyond the crises to subsequent developments, some countries went through major adjustment processes—Turkey from 1980, Morocco from 1984, Colombia from 1984, and Nigeria from 1986. Usually these involved a significant devaluation and subsequent trade liberalization.

Before discussing a few countries in more detail, I would like to suggest a general lesson. Unfavorable shocks and surprises can hardly be avoided, and it is difficult to conceive of crisis management that does not involve at least some pain. The most that some countries could do was to postpone the pain. The main lesson is that countries should aim to establish favorable initial conditions in good times. They should avoid big spending booms; keep their debt ratios fairly low, which is primarily a matter of pursuing conservative fiscal policies; and keep their reserves high, especially when there is heavy dependence on a few volatile exports. They should make their economies and policy reactions as flexible as possible. Some initial conditions can be influenced in advance, but once the crisis comes, all the initial conditions are beyond control.

### *Four Cases of Crisis Management and Adjustment*

Let us now look briefly at the experiences of four countries that have been reasonably successful and see whether there are any particular lessons that emerge. The greatest success, Korea, is not discussed here because it is so well known (see Aghevli and Marquez-Ruarte 1985, and Collins and Park 1989).

*Colombia.* When other countries were in crisis, Colombia was not, but Colombia did experience a later, modest crisis of its own making. In 1978, when the coffee boom came to an end, Colombia had no crisis because debt was low. In fact, very sensibly, Colombia had reduced debt and had built up reserves during the boom. In 1979 Colombia started a public investment boom to counteract any recession the fall in coffee prices might cause. This boom involved foreign

borrowing. The move could be regarded as a sensible countercyclical policy, and for a while the country could afford it.

But in 1981 coffee prices collapsed, and gradually Colombia's Keynesian strategy got out of hand, especially in 1983, when a serious recession emerged. Colombia continued its policy of stimulating the domestic economy by fiscal and monetary expansion into 1984, with more and more public sector and current account deficits, supporting the policy by a fall in reserves and by heavy borrowing.

In 1984, however, Colombia undertook an orthodox adjustment program, involving fiscal discipline and substantial depreciation, and this program has been so successful that by 1986–88 the current account was roughly in balance.

In retrospect, it appears that Colombian policymakers failed to depreciate the exchange rate sufficiently from about 1981, bearing in mind the real appreciation during the boom and the need to stimulate demand when the boom came to an end. In due course, depreciation would have fostered exports and provided some of the additional demand for home-produced goods that the fiscal and monetary expansion had provided instead. Still, as balance of payments problems developed in 1984, the government took quick, appropriate, and quite drastic action. That is an example to other countries: mistakes are made even in well-managed countries, but the art is to recognize them early and act with sufficient firmness.

*Turkey.* Turkey had its spending boom, its debt crisis, and its recession relatively early. The crisis had nothing to do with the oil price rise but rather was the result of excessive borrowing earlier and other domestic problems.

In 1980 Turkey adopted a major (classic) structural adjustment program that was badly needed in its very distorted economy. The World Bank—its advice and its money—was much involved. Details need not be given here other than to note that a big devaluation took place. That year was still a year of low growth and of exceptionally high inflation (more than 100 percent), a by-product of price and exchange rate adjustments. But from 1981 on, Turkey became a big success story, with a rapid growth of exports and average per capita growth from 1981 to 1987 of 3.2 percent. The devaluation clearly played a major role here. This probably is the main lesson of this case, although there were also some favorable market developments, and some degree of trade and financial sector liberalization must have helped as well. But there has not been a very significant overall fiscal adjustment.

There was capital inflow from official sources, offsetting the decline in private capital inflow, so that Turkey could continue to run substantial current account deficits even though it had faced a debt crisis. This was an important feature of the Turkish case. Between 1981 and 1987, new funds were more or less sufficient to pay for the growing interest bill so that no outward resource transfer was needed. The result was that the ratio of debt to GNP rose from 34 percent in 1980 to 62 percent in 1987. But with the great growth in exports, the ratio

relative to exports fell, and this must have helped in maintaining Turkey's perceived creditworthiness. It is still an open question how beneficial for growth of national income this official capital inflow will turn out to have been. It depends on how the funds have been spent. But insofar as the inflow contributed to the improvements in structural and exchange rate policies that led to the export boom (through conditionality and through avoiding crises), its effects may have been very positive.

The policy improvements would not have happened without the 1978–80 crisis, so that in this instance at least the response to the crisis was clearly good for the level, and probably the growth rate, of real income.[7] This has not generally been true in Turkey or in other countries. More often, balance of payments crises have led to the imposition or tightening of import restrictions that are not removed when the balance of payments problem disappears.

*Thailand.* Thailand was as seriously affected by the second oil shock as by the first. The second shock cost Thailand about 4 percent of GDP. The nation borrowed its way through the immediate period and made gradual adjustments. Indeed, gradualism is a characteristic approach of Thailand's policymakers. As a result, the growth rate stayed high. But the adjustment policy bore fruit. By 1986 the current account deficit had disappeared, and the fiscal situation was thoroughly under control. Of course, the 1986 oil price decline helped.

The slow adjustment involving large current account deficits for some years was possible because Thailand had maintained creditworthiness (so that capital inflow from private creditors never ceased) and, more important, because the nation had obtained strong support from official lenders. There were two reasons for this favorable view held by foreign lenders, private and official. First, Thailand started off with a relatively low debt-GDP ratio. Second, after a short deterioration, inflation was low, sound policies were being embarked on, and an export boom appeared to be under way. The real exchange rate had been mildly appreciating, mainly because the baht moved with the dollar, but in 1984 there was a 14 percent depreciation relative to the dollar to offset this, and from 1985 the real rate depreciated further, moving with the dollar.

Thailand thus suffered a considerable external shock, and yet it was able to get over it without a crisis comparable to that of so many other countries, and without a severe recession. Initial conditions—a relatively low debt ratio and a tradition of fairly conservative management—helped, as did the underlying high growth rate. And even though the policy response was rather slow, it was credible on the basis of previous experience. Arguably, it was a stabilizing policy, which might be favorable for long-term growth. On the other hand, Thailand may have run undue risks by delaying full adjustment for some time but was rescued by the 1986 oil price decline.

7. The authors of the forthcoming country study on Turkey for the World Bank project, Ziya Onis and James Riedel, suggest in their draft that this was indeed the main effect of the crisis on long-term growth.

*Indonesia.* Indonesia suffered two shocks. One was in 1982–83 and was caused by the world recession, which brought about an oil price fall and declines in the prices of other export commodities. The other was in 1986 and was caused by the further, massive, oil price fall. The responses to the two shocks must be analyzed together. The two terms of trade shocks cost Indonesia about 10 percent of GNP.

The responses were orthodox, impressive in their speed and magnitude, and bore fruit in a reduced current account deficit, although Indonesia is still relying heavily on new funds from official lenders, including the World Bank. There was severe fiscal retrenchment. From 1980 to 1987 the per capita growth rate was modest (1.5 percent) because of the two shocks and possibly because of the policy responses, although the long-term (1965–87) per capita growth rate of 4.5 percent has been notably high.

Compared with Thailand's, Indonesia's total shock was bigger and its response quicker. Like Thailand, Indonesia has essentially (though no longer formally) tied its currency to the dollar, but it has been much more ready to devalue substantially, and it did so in response to each of the two shocks. These devaluations had significant effects, especially because of the tight monetary policy. From 1986 on Indonesia has taken major structural adjustment measures—trade liberalization, deregulation, and so on—and 1987 saw the beginning of a boom in manufactured exports.

Decisive orthodox macroeconomic and structural policies have been successful in this case—with big fiscal retrenchment and big devaluations following quickly after a shock. Since 1986, trade and other liberalizations have contributed to a nonoil-export boom. One could argue that Indonesia, like Turkey, derived a favorable by-product from the crisis (the 1986 crisis, this time), in that the crisis induced long-overdue structural adjustments, notably trade liberalization. This is likely to have beneficial long-term growth effects. The debt-GNP ratio rose from 28 percent in 1980 to 69 percent in 1988, but Indonesia avoided a debt crisis because of strong support from official lenders, which also ensured Indonesia's ability to continue borrowing on the private capital market.

### *The Four Countries: An Overview*

Colombia and Thailand were slow to adjust to their adverse shocks. They could afford to adjust slowly because their debt ratios were relatively low. Thailand was able to borrow readily because its relatively sound macroeconomic policy record indicated that the government was in control of the country's policies.

To a lesser extent, but for the same reasons, Colombia was also able to borrow, but, in addition, it was able to draw on ample reserves built up during the boom. Colombia's ability to borrow from the private market was damaged by the spillover effects of the debt problems of other Latin American countries. Yet Colombia was unique in Latin America in never having called for a

rescheduling of its debts, and one would expect a "rational" private market to have taken more account of this.

Colombia did encounter a crisis, whereas Thailand avoided one because of its adjustment policy and with help from the 1986 oil price decline. In neither country did the situation get out of hand, though both might have acted sooner. Both countries effected real devaluations. Colombia seems to have made rather limited structural adjustments on the micro side and is still quite protectionist. Thailand has also made adjustments, typically in a gradual way, but in any case it was a much more open economy.

The current success of Thailand seems to make a case for gradualism in adjustment policies, but such gradualism may be appropriate only in circumstances such as Thailand's—when there is no crisis situation, when distortions do exist but are not as major as in so many other countries, and when there is a tradition of firm conservative financial management. One should not advocate such gradual macroeconomic adjustment for some other countries (particularly Argentina and Brazil) because their authorities lack credibility. That is, people would not believe that the proclaimed path of adjustment would be followed consistently. One should also distinguish gradualism in a planned adjustment program from slowness in making a decision to adjust adequately over a period. Provided there is no credibility problem and new borrowing remains possible, a case for gradualism can be made.

Turkey suffered a major debt crisis, responded with drastic measures of an orthodox kind, and achieved favorable results for growth. But, in comparison with heavily indebted Latin American countries, Turkey had more foreign funds available, and this undoubtedly eased the macroeconomic adjustment process. Thus Turkey has not really solved its fiscal problem, and it has now become a high-inflation country, a matter discussed below.

The case of Turkey suggests a possible link between structural adjustment policies, foreign borrowing (especially concessional borrowing), short-term growth, and long-term growth. Structural adjustment policies bring in more foreign funding, concessional or otherwise, and this has a beneficial effect on short-term (Keynesian) growth. It depends on the extent to which these funds are used for investment and the efficiency of the investment, whether this raises long-term growth. In addition, for well-known reasons, the initiation of significant structural adjustment policies (including policies leading to real devaluation) is likely to have a directly favorable effect on long-term growth.

Indonesia has also made important structural adjustments and has also benefited from continued availability of foreign funds, mainly concessional. Like Turkey, Indonesia has acted quickly and drastically, but Indonesia has been far more effective in its macroeconomic stabilization. Although Indonesia should have made its microeconomic structural adjustments sooner, one can hardly fault its response to the crisis, because the crisis resulted not from an earlier borrowing boom but principally from the unexpected 1986 oil price decline. It is too early to observe the effects on medium- or long-term growth in Indonesia.

## III. Inflation and Growth

### *The Effects of Inflation on Growth*

What are the effects of inflation on growth? Inflation, of course, is not a macroeconomic policy but rather the outcome of policies, or possibly of the failures of policies. This subject is large, but it cannot be avoided if we want to assess the relationships between growth and macroeconomic policies. Here, to start, I will focus on the role of inflation as a tax. It is probably the key aspect for the countries that have gone or are still going through significant inflationary episodes, such as Brazil, Mexico, and Turkey.

Inflation results primarily from monetization of fiscal deficits. It is a tax that has distorting effects that not only lower the level of real income but also lower the rate of growth by reducing the productivity of investment. Inflation's uncertainty effects may also discourage investment. But the effects of the inflation tax on the rate of growth can only be assessed in relation to the alternatives.

If government investment expenditure were reduced to avoid a deficit that would otherwise have to be monetized, the rate of growth would (or might) also be affected adversely. If there were a switch from money financing to domestic debt financing, domestic private investment would be crowded out. "Ordinary" taxes, such as taxes on trade, might replace the inflation tax, but these would also cause distortions that would lower the efficiency of investment and hence the rate of growth. Increased taxation of investment goods or of corporations would reduce private investment directly. If the alternative were more foreign borrowing, there would be future costs. Only if the alternative consisted of reductions in government consumption or private consumption—the latter attained through reduced transfers or higher ordinary taxes that were not very distorting—would the growth effect of choosing the inflation tax be clearly adverse.

Despite this long list of ways in which various possible alternatives to inflation can lower the growth rate, an inflation tax is surely never part of an optimal tax structure that is carefully thought out and that takes into account the need to minimize distortions and attain desirable redistributive and investment effects. It is usually the tax of last resort.[8] In the high-inflation countries it is the outcome not of policy but of policy failure. The costs of a given rate of inflation can be reduced by indexation of various kinds, but this is likely to raise the rate of tax required to attain a given revenue. It is hard to believe that more efficient ordinary taxes are not available.

Furthermore, the costs of inflation rise over time, and this is usually not taken into account when the inflationary process is—by default—embarked on. First,

8. "The method is condemned, but its efficacy, up to a point, must be admitted. A government can live by this means when it can live by no other. It is the form of taxation which the public finds hardest to evade and even the weakest government can enforce, when it can enforce nothing else" (Keynes 1923, p. 41).

as expectations and financial habits adjust to higher inflation, the demand for real balances falls, and so the rate of inflation rises for a given money-financed fiscal deficit or rate of growth of the money supply. Second, as inflation accelerates, eventually stabilization measures—often drastic—have to be taken, and then costs cannot be avoided. Chile has been through that experience; Argentina and Brazil have tried it unsuccessfully; and Mexico is going through it now.[9]

### *The Trade-off between Inflation and the Current Account*

The inflation tax is usually the last resort for bringing about the necessary reduction in real expenditure (absorption) in a balance of payments crisis. Given that ordinary taxes cannot be increased nor government expenditures reduced sufficiently, and that there are limits to domestic financing of a deficit, a government is faced with the choice between emergency foreign borrowing—hence allowing a continued current account deficit—and monetization of a fiscal deficit, which leads to inflation. There is thus a trade-off between inflation and the current account. I call this the "trade-off model." It is very helpful for understanding what happened in several (mostly Latin American) countries and for comprehending the choices policymakers have had to make. For a given (inflation-adjusted) fiscal balance, a country can improve its noninterest current account (the resource transfer) by increasing inflation. This tended to happen in the debt crisis for a number of countries—Argentina, Brazil, Mexico, and possibly Turkey. The debt crisis compelled a switch from financing budget deficits through foreign borrowing to money financing. In addition, the budget deficits themselves had increased because of increased interest payments and poorer terms of trade. In both Brazil and Mexico there was also a shift to domestic debt financing, which (through increasing interest payments) tended to worsen the deficits further.

The argument that inflation improves the current account hinges on two assumptions: first, that it leads to higher private savings than otherwise—savings designed to restore, at least partially, real balances—and, second, that the nominal exchange rate is flexible or frequently adjusted. The argument seems counterintuitive when one thinks in terms of a fixed exchange rate regime, because in that case inflation brings about real appreciation, which tends to worsen the current account, even though the inflation tax would still reduce absorption and so have the opposite effect. Furthermore, there are plenty of circumstances, including the immediate onset of the 1981–82 crises, when both current account deficits and inflation rates increased. But this is not incompatible with the model, because the model only says that for any given inflation-adjusted fiscal deficit, there is a negative relationship between inflation and the noninterest current account deficit. The 1981–82 crises were actually associated with increased budget deficits.

9. There is an extensive literature on these stabilization efforts and the search for least-cost methods of descending from a high-inflation path. See, for example, Bruno and others (1988).

### *The High-Inflation Countries*

With regard to inflation, the eighteen countries in our group (this time including Argentina) can be classified as follows. Eleven were low-inflation countries, with rates of less than 20 percent on average over the period 1980–88 (actually, eight of these had inflation rates of less than 10 percent). Of the seven others, Argentina and Brazil were the only consistently high-inflation countries. Costa Rica, Mexico, and Turkey were low-inflation countries until 1973 and sometimes later. Since then they have gone through high-inflation episodes.

Brazil is an important outlier. It was a high-growth and high-inflation country over a long period, seeming to challenge the presumption that high inflation is bad for growth. During 1965–73, a period that embraced the "Brazilian miracle," the average inflation rate was 28 percent, and the per capita growth rate was 7.2 percent, one of the highest in the developing world. The inflation rate was also high by the standards of those years. But during this period the Brazilian inflation rate steadily fell from 61 percent to 13 percent, so that the average figure is really rather misleading. In the actual "miracle" period, 1968–73, the inflation rate averaged about 20 percent and the per capita growth rate about 9 percent. In the next period, 1973–80, the average inflation rate rose to 45 percent, and the per capita growth rate was still exceptionally high at about 4.5 percent.

Recently, however, Brazil's experience seems to support the presumption that inflation is bad for growth, or at least tends to be associated with low growth. Brazil's per capita growth rate was still positive up to 1987 (unlike that of Argentina, Costa Rica, Côte d'Ivoire, Mexico, and Nigeria). But from 1988 Brazil's growth rate has fallen as the inflation rate has risen. Per capita growth became negative in 1988, as the inflation rate rapidly accelerated, reaching hyperinflationary levels (of about 1,000 percent annually) by 1989.

The special—and much discussed—feature of Brazil is that it has been an indexed economy. Indexation has made Brazilians more tolerant of inflation (therefore helping to explain the continuation and acceleration of inflation), and it has reduced the costs of a given inflation. Above all, it has avoided prolonged overvaluations of the real exchange rate. This is surely a reason why high inflation has not prevented high growth until recently.

Three other Latin American countries are also interesting with regard to inflation. Colombia had moderately high inflation over long periods, and the effects were not obviously adverse. Colombia's average inflation rate from 1980 to 1988 (it was also fairly stable) was 23 percent. This country was among the first to practice the crawling peg exchange rate system for a prolonged period, and hence the same comment can be made for Colombia as for Brazil. The system has clearly avoided some of the biggest potential costs of inflation.

Mexico switched from being a low- to a high-inflation country with the 1982 crisis. Its two bursts of 100 percent annual inflation (1982–83 and 1986) can be readily explained in terms of the trade-off model. It is now going through a

stabilization program that appears successful so far. This program has a strong orthodox element (monetary and fiscal restraint). In addition, it involves a wage restraint pact with the trade unions and the regular depreciation of the nominal exchange rate on the basis of a predetermined scale, which is designed to reduce inflationary expectations.

Costa Rica was a very-low-inflation country until 1982 but had a short burst of really high inflation as part of its 1982 crisis (this is discussed below).

This leaves Turkey, which I noted earlier as a case study of successful adjustment. When one takes the increase in inflation into account, especially since 1988, Turkey appears less successful. It became a high- or medium-inflation country with the 1978 crisis. Its inflation is obviously explained by the monetization of fiscal deficits together with a steady reduction in the demand for real balances, an adjustment of expectations to the shift to relatively high inflation since 1978. In earlier days such deficits would have led to balance of payments crises; in fact, they did in 1958, 1968, and 1978. The fixed exchange rate regime ruled out continuous inflation. But, along the lines of the trade-off model, foreign borrowing problems are now avoided by means of the inflation tax. It is noteworthy that a period of quite high inflation has also been associated with a period of high growth rates (as in the case of Brazil earlier), but at least until 1987 the higher inflation rate was fairly stable. The danger is that eventually the need to deal with the inflation problem could put an end to high growth rates, at least temporarily.

### *The Low-Inflation Countries*

Three observations can be made about inflation in the relatively low-inflation countries (inflation below 20 percent). First, all these countries have had short bursts of high inflation, usually in the 1980–82 period. The bursts were usually caused by an external shock, such as the oil price rise for oil-importing countries, or by a devaluation necessitated by the balance of payments consequences of poorer terms of trade, higher interest rates, or the decline of foreign financing of spending booms. But the inflationary bursts did not last.

Even Thailand, the low-inflation country par excellence, illustrates the susceptibility of nations to short-term bursts of high inflation. From 1975 to 1979 its average inflation rate was 7 percent. In 1980 the inflation rate jumped to 20 percent. By 1982 it had fallen back sharply to 5 percent. A more extreme example is Costa Rica. Before 1973 its inflation rate had never been above 5 percent, and from 1975 to 1980 it averaged 12 percent. But, for the kinds of reasons listed above, its inflation rate jumped to 90 percent in 1982. Yet by 1984 it had fallen to 12 percent again. Among the many similar examples that could be given, Nigeria had a big inflation bubble in 1984, at 40 percent, and the next year its inflation rate was down to 5.5 percent.

One can always explain these high-inflation episodes. Sometimes they represent no more than the short-term effects of a big devaluation or, more generally,

of a necessary structural adjustment episode. In Nigeria, a severe decline in imports was necessitated by a balance of payments crisis and implemented through tightened import restrictions. In India droughts have produced inflation bubbles. The episodes were brief because governments had a commitment to low inflation—a commitment derived from historical experience—so that they did not allow these episodes to change their basic low-inflation strategies. The brief episodes did not stimulate inflationary expectations (and hence made it possible to bring inflation down again without great or any cost) because of the governments' low-inflation reputations. A record of a long period with fixed exchange rates, or rates infrequently altered, is helpful here. This must have been a factor in the success of the Costa Rican stabilization and also, currently, in the Mexican success story.

A second reason for inflation in the relatively low-inflation countries is that during boom periods some inflation was part of the process that brought about the necessary real appreciation associated with spending booms discussed earlier, given that there was a fixed nominal exchange rate or an inadequately adjusted exchange rate. This applies particularly to Colombia, Côte d'Ivoire, Indonesia, and Nigeria, but also to other nations in which there were private or public spending booms. Provided that inflationary expectations are not created during such a process, and that the government's basic anti-inflation commitment (possibly signaled by the exchange rate policy) remains, such a temporary inflation and real appreciation should not lead to continuous inflation. The crucial issue is whether the government can keep control of the process.

A third factor in the inflationary episodes of the relatively low-inflation countries is that costs of inflation depend, above all, on the exchange rate regime. The nominal exchange rate may be fixed, or it may not be depreciated sufficiently to keep pace with the inflation differential. Given an export boom, or a spending boom that is foreign-financed, a real appreciation might be appropriate as part of the process described above. But a common situation has been that the combination of inflation and a fixed exchange rate has led to intensified import restrictions and hence to familiar distortions that have an adverse effect on growth—often a severely adverse effect.

Examples of such episodes can be found in many of the seventeen study countries, but an outstanding case is in Nigeria. There, the trade-weighted nominal rate was pretty well fixed from 1981 to 1984, but because of a rate of annual inflation averaging 23 percent over this period, the real rate doubled (appreciated). In addition, the terms of trade deteriorated, mainly because of the falls in oil and cocoa prices, so that a real depreciation was really required. Extremely tight import restrictions were applied, and exports became highly uncompetitive. The unavailability of essential imports for local production as well as the decline in exports must have been a major factor in the negative growth rates of those years. According to the available figures, per capita growth averaged −8 percent during those four bad years. One must blame the combination of high inflation and the fixed exchange rate for these adverse

effects. In this case the fixed exchange rate regime did not succeed in anchoring the price level or the money growth rate.

### *An Overall View*

In cross-country comparisons, can one find a direct correlation between inflation rates and growth rates? Clearly other things are not equal between countries, but some econometric results suggest that inflation tends to go with low growth, especially when post-1980 figures are used.[10]

It is useful to compare four countries that are clearly either low-inflation countries (Thailand and India) or high-inflation ones (Argentina and Brazil). Thailand is a low-inflation country with high growth; Argentina is the opposite. That is, both in the per capita growth tables and the inflation tables they are at opposite ends, so they confirm the presumption that inflation is bad for growth.

The matter is not quite so clear for the two biggest economies in our group, India and Brazil, essentially because their relative growth rate positions have changed. From 1965 to 1980, India was a low-growth country (1.5 percent per capita), but from 1980 to 1988 India jumped to the relatively high rate of 3.7 percent. In the latter period, 1980–88, Brazil moved in the opposite direction, from 5.7 percent to 0.6 percent. Thus a comparison based on the recent period again confirms the presumption. A comparison over time for Brazil also confirms it. As the rate of inflation has climbed, the rate of growth has fallen. Yet one cannot ignore Brazil's episodes of high growth and high inflation mentioned earlier.

It may be generally true—even though some cases, such as Brazil, India, and Turkey during certain periods, as well as various African countries, give a contrary result—that low-inflation countries tend also to be high-growth countries, and vice versa. But this does not necessarily mean that high or medium inflation is the principal cause of relatively low growth. Obviously, investment ratios, degrees of openness of economies, and many other factors are relevant. To some extent inflation and low growth may have a common cause. It seems plausible that poor economic management—which may be the result of an inability of a government to resist pressure groups and generally to ensure adequate macroeconomic controls (clearly the case in Argentina)—leads to a variety of policies that produce low growth. And high inflation, which is always unplanned and is a last-resort tax imposed by default, is clearly a symptom or consequence of poor management.

### *Some Lessons*

An obvious lesson taught by Argentina, Brazil, Chile, and several other Latin American countries is that high inflation, once it keeps going for some years, is

10. A satisfactory statistical relation for 1980–88 between the per capita growth rate and the rate of inflation cannot be found for the seventeen countries. This is essentially because of the inclusion of three African countries with low inflation and low growth, as well as Turkey, which had high inflation and high growth (see table 1).

hard to reduce without severe cost, both economic and political. It is best to avoid getting started on the road. It is an inefficient tax. It yields immediate benefits to governments that have difficulty cutting expenditures or raising other taxes, but the costs come later, and, as the demand for money falls, the cost-benefit ratio deteriorates. Once on the move, high inflation is difficult to control unless counteraction is taken very quickly, so that there is no more than an inflationary bubble, as in several of the countries in our group. The dislike of inflation even at modest levels that is customary in many of the Asian countries we have been considering can be very healthy.

As Brazil and Colombia show, it is possible to live with inflation over long periods—that is, to adapt to inflation and have fairly high growth. A crucial element in such adaptation is exchange rate adjustment to avoid real appreciation. The danger is always that the rate of inflation will accelerate. But it is an interesting question to what extent the long period of high inflation with high growth in Brazil can be blamed for the current hyperinflation.

Other countries—even Thailand—show that short bursts of inflation are sometimes difficult to avoid. But they can be made short. Their significance must not be misunderstood. Sometimes they are the consequences of a necessary devaluation or a by-product of an adjustment to capital inflow, an export boom, or a structural adjustment of some kind. In all cases it is important that inflationary expectations do not increase and that a fundamental commitment of the government to low inflation is clearly established. It is also important that the exchange rate is appropriately adjusted so that increasing import restrictions (the Nigerian case) are avoided.

## IV. Exchange Rate Policy

### *The Exchange Rate and Growth*

The central issue is whether keeping a nominal exchange rate fixed when there is domestic inflation or an unfavorable exogenous shock can possibly be favorable for growth. There are obvious reasons, to which I shall return below, why its effects would be *un*favorable. But might there be a favorable aspect?

The simple answer is that devaluation or readiness to depreciate may be inflationary, and this, for reasons discussed earlier, could be adverse for growth. The potential problem is not the once-and-for-all rise in the domestic prices of tradables (which may take some time to come about) but the possibility that devaluation would set off an inflationary process. This is only possible if it induces continuous monetary expansion.

Devaluation, or the possibility of depreciation, could lead to continuous monetary expansion and hence be inflationary in two ways. First, a price-wage spiral may be set off by devaluation, and to avoid deflation caused by a continuous decline in the real money supply the nominal money supply may then be continuously increased. Second, a fixed (or reluctantly adjusted) exchange rate may

have been an anchor for monetary policy—that is, a restraint on it. The exchange rate commitment may have discouraged inflationary monetary policy and monetization of fiscal deficits. Once the possibility of depreciation is opened up, the constraint on inflationary tendencies disappears.

The empirical question here is whether long periods of low inflation in some countries can be explained by the constraint imposed by their fixed rate regimes, or whether, alternatively, the ability to maintain fixed rates was the result of low-inflation monetary policies, the latter explained by more basic anti-inflation attitudes, possibly historically based. This question applies to many low-inflation countries in our group, at least up to 1982, mostly in Asia and Africa, but also Costa Rica and Mexico up to about 1973. Can one argue that increased inflation in many of the countries since 1982 was caused by the increased flexibility of exchange rates, which loosened the constraint?

The question is only posed here, because there is no space to attempt an adequate answer. It raises issues of political economy because it concerns the motivation for inflationary, noninflationary, and monetary policies. I have concluded provisionally that in several countries (for example, Mexico, Nigeria, and Turkey) an apparent commitment to a fixed exchange rate did not prevent accelerating inflation and that in the five Asian countries (as well as Kenya and Morocco) a switch to more flexible exchange rate regimes left relatively low-inflation policies intact or nearly intact. Hence, in these cases, the exchange rate regime was not the driving force in sustaining low or moderate inflation. Rather, low- or moderate-inflation policies were a direct and more fundamental objective, and the exchange rate followed rather than led monetary policy.

Let us now ignore the possible effects of exchange rate flexibility in inducing expansionary monetary policy just discussed. The central concern for exchange rate policy thus becomes its effects on the real exchange rate. There is strong evidence that in the low- or moderate-inflation countries the nominal exchange rate affects the real exchange rate in the same direction and, in the medium run, to a similar extent. The issue is to "get the real exchange rate right," and in particular to avoid or eliminate overvaluation. This is a familiar World Bank and International Monetary Fund (IMF) theme.

We have seen that real appreciation may be a necessary element in adjustment to a spending boom financed by an export boom or by deliberate foreign borrowing or aid. Exchange rate policy that leads to real appreciation is then just an incidental aspect of the total process, part of the transfer mechanism. In that case, real appreciation cannot be described as overvaluation. I have already discussed the growth implications of such a spending boom. But there remain cases in which there is no export boom or autonomous capital inflow. The problem may be a real appreciation that has resulted from a fixed or reluctantly depreciated nominal rate combined with domestic inflation. Or it may be an overvaluation caused by an adverse external shock that requires a real depreciation that does not take place because of rigidity of the nominal rate.

There may then be various effects, all potentially adverse for growth. Episodes of real exchange rate overvaluation leading to these effects can be found in most of the countries at some time. It is the desire to avoid these effects that explains World Bank and IMF concern with real exchange rate overvaluation.

First, overvaluation causes import restrictions to be imposed or intensified, as a substitute for devaluation, to "switch" demand away from imports. This would have adverse effects on growth through the distortions created, rent-seeking, reduced availability of imported capital goods, and so on, as in the Nigerian example cited above.

Second, crisis borrowing takes place at interest rates far in excess of the marginal productivity of domestic investment, or the borrowed funds finance consumption, with fiscal expansion possibly accompanying the real appreciation to maintain demand for domestic resources. This affects growth adversely in the way discussed earlier with regard to the borrowing of the 1970s. Third, the expectation of devaluation induces capital flight. Fourth, as continuous inflation brings about continuous real appreciation and hence tighter import restrictions, devaluation does eventually take place, possibly in a crisis situation. The real exchange rate thus may move in the right direction over time, but it may be very unstable, gradually appreciating, suddenly depreciating in a crisis, then appreciating gradually again, and so on. Such instability is likely to have adverse effects on growth.

### *Country Experiences*

Every conceivable exchange rate regime can be found among our seventeen countries during the period under consideration. Below I look in some detail at Indonesia and Mexico. (The example of Nigeria described earlier should be recalled as well. In that case a fixed nominal rate failed to prevent inflation but led, rather, to increased import restrictions.)

Many countries switched their exchange rate regime during the period 1975–84, having had a fixed rate of some kind until the switch and then having moved to a flexible rate, possibly a crawling peg. Aside from the two franc-zone countries, none have firm exchange rate commitments now, though three—Indonesia, Thailand, and Kenya—have (more or less) fixed-rate regimes with occasional devaluations. The shift to a flexible exchange rate regime of some kind in many Asian and African countries that used to have fixed rates can be explained in part by the shocks of the 1980–82 period and, most importantly, by the reduced ability in all countries to restrict international capital movements even when that is desired (and hence the reduced ability to sustain an exchange rate for any length of time against speculative attacks).

Indonesia kept its nominal exchange rate fixed to the dollar from 1971 to 1978, a period in which there was a substantial real appreciation resulting from inflation above world levels but justified by the higher oil income. Since 1978 Indonesia has devalued three times, in each case by about 30 percent. The 1978

devaluation was quite a surprise, because there was no balance of payments problem but rather a concern with the declining profitability of nonoil-export industries. This was a case of exchange rate protection. The 1983 and 1986 devaluations took place very promptly in response to balance of payments problems. The 1986 devaluation was a crucial ingredient in the adjustment program.

Indonesia's monetary policy has been fairly conservative, with an average inflation rate in the period 1982–88 of 8.5 percent. The devaluations did have some temporary effects in raising inflation rates at the time, but one cannot really say that the readiness to devalue made monetary policies looser, as is implied by the argument advanced at the beginning of this section. It should be added that capital mobility is high in Indonesia. Thus once a devaluation is expected and hence leads to speculative outflows, it cannot be long delayed. Remaining controls on capital movements have been removed recently, so that in the future there will probably have to be more frequent, and less large, exchange rate adjustments.

Mexico's exchange rate policy reflects the continuous tension between two objectives: trying to keep down the rate of inflation through fixing the rate, and restoring competitiveness (as well as stopping or reversing capital flight) by devaluing. Up to 1972 Mexico was characterized by low inflation and fixed exchange rates, but since 1973 a fixed rate has never really stopped high inflation. Nevertheless, the memory of the long and successful period of a fixed exchange rate and low-inflation regime, together with the obvious potential benefits of having a stable rate to the U.S. dollar, has led Mexican policymakers to attempt again and again to fix the exchange rate at a new level, even when they regularly fail to attain the low-inflation target.

Hence, Mexico has experienced several periods of continuous real appreciation, followed by sharp depreciation (1976, 1982, and 1986). After the big depreciation of 1986, the real rate was kept down until 1988, when it started rising again as the result of the fixing of the exchange rate as part of a stabilization plan. Currently, the exchange rate is effectively fixed on a predetermined crawl. The periods of real appreciation involve obvious problems—capital flight (recently avoided through very high domestic interest rates) and loss of competitiveness for tradable goods producers. One would expect the uncertainties created by such fluctuations in the real exchange rate to have adverse effects on investment and growth. The contrast with Brazil is striking. Since 1973, Mexico's real exchange rate has been much more unstable than Brazil's.

The lesson is not necessarily that the nominal exchange rate should have been depreciated more, or more often. After all, experience has shown that in Mexico the real depreciations are eroded by high inflation after a while, and it is quite possible that greater depreciations would simply have led to more inflation. The lesson—which in fact has been learned—is rather that policy packages are required. Reducing inflation requires explicit monetary and fiscal policy decisions supported (at least in the Mexican context) by a wage compact. The exchange rate should be only one part of the package.

### *Lessons*

At the risk of oversimplifying, I suggest that this study yields three simple lessons with regard to exchange rate policy.

1. A country has to make a commitment to a noninflationary monetary policy. This does not require a nominal exchange rate commitment, and usually such an exchange rate commitment is not enough to achieve the objective, although it may be helpful. A commitment to fiscal restraint is usually more important.

2. Real exchange rate misalignment and variability should be avoided through appropriate nominal exchange rate adjustment, preferably by frequent small changes rather than by large discrete changes. This is an oft-repeated message of the World Bank and the IMF. But in particular cases or episodes, the anti-inflation objective may have to take priority.

3. Devaluation without an appropriate policy of monetary restraint—and firm commitment to such a policy—is undesirable because it will ultimately be ineffective. In general, policy *packages*—involving monetary, fiscal, and exchange rate policies—are required.

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# COMMENT ON "MACROECONOMIC POLICY AND GROWTH," BY CORDEN

John Williamson

Max Corden's paper presents the first results from the massive World Bank comparative study of macroeconomic policy and performance in seventeen countries over almost twenty years. As Corden emphasized, the paper does not have any startling new insights. But it will appeal to those who believe that it is more important to be right than to be novel.

The paper interweaves three themes. The first is the history of the seventeen countries, which provides the background. The second is an exposition of standard macroeconomic theory for open, developing economies. Just about all aspects of this theory are expounded at one point or another. The third theme is the lessons that can be drawn from the experiences of these countries. It is these lessons on which I concentrate in my remarks.

I happen to agree with all nine of the lessons that Corden draws. My only criticism is that he might have been less cautious in phrasing them. Although they may not be startlingly original, these lessons are important. If we do not bring them into sharp relief, other countries may repeat the mistakes that have been made in such profusion over the last twenty years.

Corden's first lesson is that countercyclical policy is feasible and advisable. To paraphrase the point, countries should endeavor to restrict their spending to the level of their permanent income. Colombia is a great example of a Latin American country that attempted to do this in the 1970s, and I strongly believe it is not an accident that Colombia had by far the best growth performance of the region in the 1980s. It is true that in the end Colombia overdid it by attempting to sustain demand at a level that did not allow for the "permanent" deterioration in the external environment in the 1980s. Because of that, the nation found itself with unsustainable twin deficits. But Colombia corrected its mistake relatively quickly. It provides a model for emulation. Mexico represents the opposite extreme; not only did it fail to restrain spending but it used its transitory income from high oil prices as collateral to increase spending even more than income.

Corden's second lesson is even more elementary, but it has been violated often nevertheless. Investment projects should be carefully vetted for profitability, remembering that real depreciation will occur when the lending boom ends and

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the debt has to be serviced, so that the rate of return in nontradables will need to be higher than that in tradables to justify borrowing.

The third lesson is this: beware of euphoria. Corden makes the interesting point that this lesson should be particularly addressed to the sort of governments of which most of us tend to approve—market-oriented governments managed by competent technocrats. A useful dictum that may help successful technocrats avoid overconfidence is that all positive shocks should be treated as though they were transitory and all negative shocks as though they were permanent.

The fourth lesson is that countries should be extremely suspicious of inflation. On this point I would strongly back Corden's view as against Rudiger Dornbusch's suggestion in his paper (this issue) that any rate of inflation below about 50 percent per year should be accepted with equanimity. I agree with Corden that inflation is never part of an optimal tax structure. In fact, the evidence is that it is one of the most regressive of all taxes. Add to that the conclusion of the accelerationist theory that there are no permanent gains in output from accepting a higher long-run rate of inflation and the consideration that the occasional corrective inflation can operate more efficiently when the contract structure is based on an assumption that prices will generally be stable, and I see a compelling case for accepting Alan Greenspan's criterion of seeking an annual rate of inflation of 2 percent or less. This is not to argue that a minimal rate of inflation must be the overriding priority of economic policy or that it necessarily must be achieved in the short run. But it is to urge that no government should feel relaxed about a rate of inflation that is "just 20 percent." Once that happens, inflation will not stay at 20 percent.

How does one reconcile a respect for the dangers of inflation with Corden's fifth lesson, which says that it is possible to sustain high growth with high inflation for a long time, provided that the nominal exchange rate moves to offset the differential inflation? Once again, Colombia provides the outstanding example. Colombia has operated a crawling peg for twenty-three years and has regularly had an annual rate of inflation of around 20 to 30 percent. I nonetheless wonder whether it might not have been sensible somewhere during those twenty-three years to accept a significant temporary sacrifice in output to eliminate inflation.

Corden's sixth lesson is that corrective inflation—a one-time rise in the absolute price level undertaken to achieve a change in relative prices that is needed to adjust to a real shock—is admissible. As I noted above, I regard the possibility of using corrective inflation as sufficiently important to be a significant argument justifying the attempt to eliminate trend inflation.

The seventh lesson is that macroeconomic policy needs a nominal anchor but that this need not be a fixed exchange rate. Indeed, Corden argues explicitly that the attempt to use a fixed nominal exchange rate as the nominal anchor has often proved ineffective, and he could have added Chile and Costa Rica in the early 1980s as further examples of this thesis. The alternative to a fixed

exchange rate is essentially demand management policy. I favor use of a target growth rate of nominal domestic demand as the alternative nominal anchor.

The eighth lesson is that exchange rate policy should be used to avoid misalignments of the real exchange rate, subject to the same qualification that Dornbusch emphasized earlier. This qualification admits that a temporary freeze of the exchange rate may be a useful element in a stabilization package designed to bring rapid inflation under control. The conventional wisdom now seems to be that within six months of a stabilization, the exchange rate should start to crawl again if this is necessary to prevent an overvaluation from emerging. If this is not done, and inflation has not come to a halt, the danger is that the markets will start to demand a big premium on the domestic nominal interest rate to compensate for the risk of a subsequent jump devaluation. One will get the cost of a crawling devaluation without the benefits in terms of keeping relative prices in line. Hence the freeze of the exchange rate should last for the minimal period needed to use the international structure of relative prices as a guide to the set of internal relative prices that will prevail after stabilization.

Corden's ninth lesson is that devaluation needs to be used as a part of a policy package, along with fiscal, monetary, and—if helpful—income policies. The bad academic habit of arguing that devaluation is ineffective in isolation is irrelevant to the policy debate.

In addition to the nine lessons Corden drew in his paper, I would suggest two others that seem clearly implied by his stories. The first is that the debt ratio should be maintained at a low level and international reserves maintained at a high level. The purpose is to provide a shock absorber to prevent the need for damaging lurches in policy.

The other lesson is that when a country has the chance—which means when it has followed the preceding lesson—it should *plan* for gradual adjustment but *initiate* a comprehensive adjustment program promptly. Confusion over the desirability of gradualism has arisen when policymakers have failed to note the distinction between prompt initiation of adjustment, which is always desirable, and immediate achievement of adjustment, which can be enormously costly. Of course, there are circumstances in which adjustment should be achieved immediately. It makes no sense to think of a gradual reduction in hyperinflation. But it does make a great deal of sense to achieve balance of payments adjustment over several years, as Thailand did, rather than to try to turn the accounts around in a matter of months, as happened in Latin America in the early 1980s, with disastrous results.

I conclude by suggesting topics on which I hope the authors of the study will endeavor to provide some guidance on the basis of the experiences of the sample countries they have investigated. One of these concerns the crucial question raised by Dornbusch: How does one get growth going again after stabilization? Note, incidentally, that this is not the first time economists have confronted this issue. Various phrases were used in the 1930s to indicate the conclusion that an

easy monetary policy was not enough for the purpose: "you can't push on a string;" "you can take a horse to water but you can't make it drink." Similarly, the founders of development economics toyed with ideas of big pushes and balanced (or unbalanced) growth strategies to get the growth process going. But gradually interest in this set of issues was displaced by concern to increase savings, to provide adequate infrastructure, to ensure that the real exchange rate was sufficiently competitive to nurture the growth of nontraditional exports, and to ensure that investment passed the market test of profitability. The message was that if the supply side and the exchange rate are appropriate, then investment and growth will take care of themselves. Can the historical experience of the seventeen countries confirm that this is wiser than immediately looking for drastic policy changes if growth does not return as quickly as one might hope? Is there any evidence that an overactivist policy could prevent reforms from taking root and actually do more harm than good? Or is there indeed some additional ingredient that can promote a resumption of growth?

In particular, I wonder whether the historical evidence can shed some light on Dornbusch's own prescription of massive foreign loans as necessary for reinitiating growth. It is not obvious to me that this is correct. For example, in the 1930s countries sought to reignite growth by competitive devaluation in order to secure a *negative* resource transfer. Regarding Mexico, Dornbusch is quite right to argue that it is a question of turning the corner, and that once confidence revives, the repatriation of flight capital will finance an investment boom. But is a big new foreign loan the right way to revive a lack of confidence that has been caused by a debt overhang? Perhaps the Brady Plan is more relevant, and the real aim of policy should be to reinforce the debt settlement with the commercial banks by doing something about public sector debt.

More generally, can the historical experience be used to illuminate the crucial question of the relationship between policy reform and resource transfer? A decade ago, most of us took it for granted that more resource transfer was better. We are sadder now and tend to argue that resource transfer has often been used to perpetuate bad policies that actually worsen a country's long-term prospects. The conclusion we draw is that additional resource transfer should be provided only after policy reforms have been securely emplaced. How compelling is the historical evidence that we are not only sadder to take this view but also wiser?

# COMMENT ON "MACROECONOMIC POLICY AND GROWTH," BY CORDEN

Susan M. Collins

This paper addresses an extremely important topic: the role of macroeconomic policy in promoting growth. It draws on a wealth of experiences, which enables it to cover quite a lot of ground in specific countries. It also is refreshing to find the discussion broadened to include so many different countries. Too often, the focus is on just a few economies, typically the large Latin American ones. These are not representative of experiences of economies in Africa and Asia--or even of the smaller economies in the Western Hemisphere.

Corden's paper is built on the skeleton of fiscal expansion that sets the stage for a crisis when lending is interrupted, requiring domestic adjustment. It then focuses on two key aspects of adjustment—inflation and exchange rate policy—and draws a series of lessons. I agree with many of these lessons. (A major exception is Corden's conclusions on inflation. Here, I found his discussion misleading, and I will explain why below.)

Although I agree with many of Corden's lessons, I would have drawn them with a somewhat different brush, and I would have shifted the emphasis. In particular, I do not believe that it is possible to omit the political economy of macroeconomic policymaking in a discussion of how policy can promote growth. Let me revisit the major lessons of the paper, then, from my own perspective.

The role of public expenditure booms in the period before a crisis in country after country is really striking. These experiences clearly spotlight fiscal restraint as the cornerstone of sound macroeconomic policy. The paper could have brought this point out even more strongly. The need for adjustment in almost all of these countries was not created just by external shocks such as the reduced access to foreign capital after 1982. It was also a result of unsustainable domestic policies. Thus it should come as no surprise that the countries that did better were the ones that adjusted sooner and that had not allowed basic policies (especially the budget and the exchange rate) to get too far out of line in the first place. For example, both the Republic of Korea and Indonesia began to adjust macro policies before they were forced to—and before crisis hit.

Corden is exactly right in stressing the need to push good policies during good times. This creates favorable initial conditions that ease the adjustment in bad

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times. In asking how these adjustment policies affect growth, Corden is also exactly right in pointing out that growth during the stabilization period should not be compared with growth during an unsustainable period of poor policy.

In a few countries, one very visible element of the aftermath of the post-1982 lending crunch was runaway inflation. After looking at these episodes, Corden reaches the very strange conclusion that "inflation improves the current account." It is certainly not true, however, that countries with higher inflation—or larger increases in inflation—tend to have smaller deficits or larger surpluses. Nor is it true that an increase in inflation in individual countries leads to current account improvement. Perhaps the author meant the causality the other way around: Forced current account improvement without adjustment in macroeconomic policy tends to be inflationary. This is the real lesson from countries such as Argentina and Mexico. The countries (for example, Korea) that went from current account deficit to surplus while reducing fiscal deficits and establishing competitive exchange rates were also able to control inflation.

Corden then turns to the question of exchange rate management as part of the adjustment. In particular, is there any rationale for keeping the exchange rate fixed in the midst of domestic inflation? Here, I think the answer is simple and clear. It is important to maintain a competitive exchange rate. However, a temporarily fixed rate—at a competitive level—can help to cut inflationary expectations in the early stages of a stabilization program. (We have seen this most recently in the Polish and Yugoslav programs, which began with maxi-devaluation and temporarily fixed rates.) This is the conclusion that Corden suggests—but not strongly enough.

Arguments about pegging the value of a high-inflation country's currency to the currency of a low-inflation country as an anti-inflation device are familiar from discussions of the European Monetary System. There, some have argued that pegging the Italian lira to the German deutsche mark "tied the hands" of the Italian monetary authorities, adding to the credibility of their anti-inflation program. But announcing a fixed exchange rate cannot possibly be enough. The problem, of course, is that the public knows that the exchange rate can be devalued—and that in fact it will need to be if it continues to appreciate in real terms. The political will to cut inflation, backed by observable policy changes, must accompany the announcement of a fixed exchange rate for the anti-inflation policy to be credible. An exchange rate that is allowed to become more and more overvalued erodes that credibility quickly.

Where does this leave us in terms of macroeconomic policy and growth? I draw a different—though not inconsistent—set of conclusions from Corden's. In my view, it helps to identify four different types of countries. The first group, countries that have managed to keep per capita income growing, reinforces an old lesson: stable, orthodox macroeconomic policies create a fertile environment for economic growth. They also provide room for adjusting to bad luck and to policy mistakes as well as room for addressing such difficult problems as reducing poverty.

The second group of countries includes ones that have implemented major economic reforms after a period of poor policy and performance but that for various reasons are not enjoying a revival of economic growth. I would include Jamaica and Mexico here. The difficulty is that it can be politically tough to carry through the reforms because the population gets tired of continually tightening its belt. In my view, these experiences present a challenge to the United States and other developed countries that also gain from the economic growth and stability of developing economies. The challenge is to lend a helping hand to support these reform efforts until they begin to pay off. In some cases, this may entail financial assistance for public and private investment. In others, it may mean reducing debt and debt service to free domestic resources for investment.

This leaves the issues of appropriate macroeconomic policy for countries that are not growing and have major policy problems, which make up the third and fourth groups. The third group includes the countries that are in the midst of full-blown economic crisis, such as Bolivia in the mid-1980s and Poland at the end of 1989. Here the basics of macroeconomic stabilization must come first, and policies can be designed without dotting all the i's. Furthermore, a crisis tends to generate popular support, particularly for a new government, to do *something*, even if *something* begins with a difficult transition period.

The fourth group includes the countries that are not in the midst of a full-blown crisis but that are in poor shape nonetheless. This category includes countries with a wide range of difficulties, sometimes primarily macroeconomic and sometimes not. In any case, this group typically faces politically difficult environments for implementing—and carrying through—reform programs. This is because it is not at all clear to domestic residents that an adjustment program, which is likely to entail high transition costs, is preferable to the current "muddling through." These countries pose the most important challenges for domestic politicians, for policymakers abroad, and for academics. That challenge is how to design and to support economic reform programs that are politically feasible but also present a reasonable chance of raising growth and living standards down the road. To my mind, this is the really tough set of questions, and I hope that it is among the questions that Corden and others focus on next.

## Floor Discussion of the Corden Paper

Discussion centered on the "lessons of experience" Corden raised in his paper and particularly on the specific application of Corden's observations and recommendations regarding structural adjustment, inflation, and exchange rate policies.

Regarding structural adjustment loans (SALs), a World Bank participant noted that for the most part the World Bank makes such loans to countries in balance of payments difficulties. Along with the SALs, the participant pointed out, come other aid flows, repatriation of flight capital (as in Sri Lanka), and private foreign investment. However, "aid booms" can bring about the same damaging effects as do export booms, including the appreciation of the real exchange rate and all that it entails. The participant felt that sometimes the World Bank is not mindful enough of this dilemma and of the danger of undermining gains from the structural adjustment measures that have just been put in place.

Another participant suggested that the concept of "conservative euphoria" that Corden mentioned in his presentation deserves greater attention both as it seems to grip the countries themselves and the international organizations, such as the World Bank, when they are analyzing the prospects for the gains from reforms. The participant suggested that after the 1977–78 political changes in Sri Lanka, the World Bank may have fallen prey to "conservative euphoria" about economic changes there, and that the subsequent heavy capital inflows may have been responsible for destabilizing social effects. The participant felt that international organizations need to be particularly sensitive to the political and social consequences of rapid structural adjustment.

A participant noted that Dornbusch's conference paper had stressed the importance of a productive tax structure as part of adjustment, including moderate, uniform rates of taxation and the absence of any significant subsidies. This is in line with the International Monetary Fund (IMF) and World Bank approaches and with traditional economic thinking, which distinguish between efficiency and equity on the assumption that once we get the efficiency right, the political process can redistribute income and arrive at equity. But the participant was not sure how income would be redistributed if we rule out subsidies and different tax rates. He also wondered whether there was a contradiction when

This session was chaired by Il Sakong, visiting fellow, Institute for International Economics, Washington, D.C., and former minister of finance, Republic of Korea.

Dornbusch's paper stated that public sector pricing must be corrected, and any income distribution consequences would be resolved through the general tax structure. He also recalled that Corden's early work stated that a subsidy system, rather than tariffs, should be used to protect infant industries. Are subsidies now ruled out in current thinking?

Turning to Corden's paper, the same participant noted the importance of imported intermediate goods, particularly in Africa, where macroeconomic stability has been achieved through import compression. While Corden had emphasized that there was a trade-off between inflation and the current account deficit, it could work the other way. Letting the current account deficit expand allows greater imports of intermediate goods, which increase domestic production and have supply effects that reduce the inflation rate. Finally, the participant found the section on inflation ambiguous in its discussion of the relationship between inflation and growth, particularly at low rates of inflation. He said that there is some evidence to suggest that the variability of the rate of inflation is what is crucial. He wondered whether there was evidence from the seventeen countries Corden cited to suggest that there is a strong negative correlation between the variance of the rate of inflation and the growth rate.

Corden conceded that an element of euphoria, as he defined it, might be overenthusiasm by private and official lenders to jump into promising countries; that might have been true in Sri Lanka. The domestic real exchange rate adjustment—price changes that go with any transfers into a country, whether from aid, loans, or an export boom and the familiar Dutch disease phenomenon—is a quite separate aspect. He argued that it was impossible to avoid such price changes without ruling out loans, investments, and so on. The key, he suggested, was the scope governments gave to countercyclical measures, which would offset the relative price effects to some extent.

On the variability of inflation, Corden advised against generalizations. Because all high-inflation countries have variable inflation, there is a clear correlation between the average level of inflation and variability. There is, however, no clear answer on the effects on growth from the country studies he had reported on in his paper. Brazil, for years one of the highest-growth countries in the developing world, was also a high-inflation country. But there are other countries, in Asia for example, that have high growth and low inflation. Yet Argentina has high inflation and low growth. A number of African countries have relatively low inflation but also low growth. Corden also cautioned that the choice of the time period under study also had an important effect on the relationship between inflation and growth.

Extending his discussion of inflation and growth, Corden posed the following question: if high inflation goes with low growth, does it not automatically follow that high inflation caused the low growth? Incompetent governments find themselves with high inflation because they do not have a decent tax system and end up with many distortions; so there is a common cause for both high inflation and low growth. Even if high inflation is not the cause but a symptom, very high and unstable inflation has to be bad for growth prospects.

On the question of whether structural adjustment loans generate Dutch disease problems, John Williamson (discussant) noted that he preferred to think about the problem in terms of the growth-maximizing exchange rate. If the exchange rate is overvalued, even assuming there is no foreign exchange constraint, the incentive to invest is low, resulting in a low growth rate from lack of demand for investment. If, in contrast, the currency is too undervalued, there is presumably a high incentive to invest, but saving is inadequate because it has been used to make foreign investments with a lower yield. That is not very clever either. So what you want to find is the growth-maximizing exchange rate in the middle. The real question then is whether there is a surplus or a deficit at this optimal exchange rate. Structural adjustment loans are very helpful in letting you run a deficit; conversely, with a surplus you want to guard against Dutch disease problems by putting the loans into reserves or paying off commercial debt. The difficulty for policy arises when money is coming into the private sector, because then a fiscal surplus is needed in order to sterilize it.

Susan Collins (discussant) suggested that on the tax issue, Dornbusch, if he were still in the audience, would probably cite his comparison case, Argentina, where relatively few people are paying taxes, and tax rates are very high. The point was that if the key objectives in designing a tax structure are compliance and enforcement, a uniform structure makes sense. Clearly, you cannot redistribute if you do not have the tax revenues to begin with; then there is some tradeoff between being able to generate revenues and then figuring out how to reallocate some of them. She felt that there was useful middle ground between complete uniformity and exclusive focus on a very small group that pays taxes.

On the structural adjustment loan issue, Collins said that countries that had achieved macroeconomic stabilization, readjusted to structural problems, and maintained or revived growth had not done it without receiving capital inflows to help ease the cost of adjustment. It is true that capital inflows can create problems and become part of the problem. The real question is how to use them properly, recognizing that they can always be used poorly.

A World Bank participant asked Corden what should be done when a country was ignoring Corden's maxims yet was managing quite well. The participant had India in mind. He also asked whether Corden, from his country studies, had identified the impact of structural adjustment policies recommended by the World Bank on growth, particularly microeconomic effects that would enhance efficiency and speed up the return to growth.

On the first point, Corden replied that India had been doing well recently but cannot be considered a great success story over the longer period. And even if a country were managing well, it might be able to do better. The participant then expanded his question to draw attention to the high budget deficit relative to gross national product in India. Corden replied that with high private saving, as in India, the question boiled down to whether the deficits amounted to a good use of the saving; a cost-benefit analysis should always apply, whether funds were borrowed from abroad or come from domestic saving.

On the effects of structural adjustment Corden said that growth depended on

so many factors that it was difficult to measure a direct correlation with any one element. However, he did see a difference between policy regimes that looked only at macroeconomic structural adjustment and those that also focused on microeconomic policies. He added that his studies had not attempted to assess the effects of World Bank and IMF programs but had looked at the totality of the country's policies.

A participant contrasted Dornbusch's discussion of the need for indexation with Corden's discussion of the need for a reduction of real wages to make countries competitive through a devaluation. Taken together, these implied that in countries where it was not feasible politically to reduce the large public sector employment, indexation would have an adverse effect on the fiscal balance and at the same time an adverse impact on the real exchange rate. How does one handle this policy dilemma? Regarding exchange rate misalignment, the participant asked Williamson how one determined the growth-maximizing exchange rate in reality, when, for example, countries face conservative euphoria.

A participant said that after the two major oil price shocks, the need to recycle petrodollars led to a decline in the quality of investment at the microeconomic level. These past misallocations of investments, he felt, had led to the need for SALs. But the SALs themselves have partially prevented improvement in the quality of investment analysis in the World Bank. For some countries, SALs have swamped World Bank conventional investment loans and analysis for them. The question is: where are we going from here?

Another participant asked whether the advocacy of conservative monetary policies automatically implies putting a brake on fiscal expenditure. In other words, are foreign lenders and domestic lenders always more conservative than central banks? The participant asked why some countries that had followed anti-inflation policies still had inflation rates of 15 to 20 percent—three to four times the world rate. The participant also expressed the view that exchange rates and overvaluation of currency were sometimes overemphasized. For countries that exported mainly minerals or petroleum, the exchange rate, unless absurdly overvalued, did not really matter that much. Other distortions, such as punitive taxation, were much more important.

Corden, referring to the question on public sector wage indexation, said that unlike Dornbusch, he was not very sympathetic to indexation. If there is indexation of wages, it is very difficult to reduce them when a country has had an adverse shock in the form of trade deterioration. If wages have to be reduced, Corden said that it may be easier to reduce them in real terms rather than in nominal terms, and there is a possible role for devaluation.

Regarding the World Bank's structural adjustment lending, as compared with its project lending, Corden said that the real question was, is there significant conditionality? Corden felt that it is proper for the World Bank and the IMF to be concerned with general economic policies, not just with projects. In that sense, conditionality inevitably involves criteria such as the level of trade restrictions, which is hard to monitor or even measure, and there is a tendency for these loans

to slide into becoming ordinary balance of payments support loans without real conditionality. His interpretation of SALs was that the countries did not necessarily need the money for balance of payments but rather that the loans were incentives to encourage countries to pursue better policies.

On inflation, Corden did not think that 15 to 20 percent inflation rates were necessarily a big problem. He cited Chile as being rather successful with a fairly steady level of 15 to 20 percent, after a long history of erratic high inflation.

On whether the real exchange rate was overemphasized in considering growth, Corden pointed out that this conference was concentrating on macroeconomic matters. At the same time, it was true that many factors had a bearing on growth.

Williamson, commenting on indexation and inflation, said that indexation certainly made it difficult to deal with inflation. But he believed Dornbusch was saying that there are circumstances in which the alternative to indexation is much worse; indexation can be part of a bargain in which labor accepts lower wages as part of a stabilization package but wants a guarantee that the real wage will not be eroded beyond a certain point. In those circumstances, he would agree with Dornbusch that there is a role for indexation.

On the question of identifying a growth-maximizing exchange rate, Williamson replied that one uses an econometric macroeconomic model if one believes in it. If one doesn't, one has to fall back on some rules of thumb. In his experience, the performance of nontraditional exports is a good indicator. If nontraditional exports are booming and perhaps even leading to a balance of payments surplus, the exchange rate is possibly undervalued and certainly not overvalued. If nontraditional exports are stagnant, the exchange rate is probably overvalued, even if one is told that some other source of payments, such as mineral exports, is providing all the foreign exchange needed, and the exchange rate is not perceived to be critical. So a simple short-cut rule is to look at nontraditional exports; if they are moving, that is fine, but if they are not, then the exchange rate is probably overvalued, and that is cause for worry.

A World Bank participant observed that the speakers had widely different opinions on the acceptable rate of inflation. The relation between inflation and growth appeared to be very nonlinear, with a point in the relationship after which inflation became much worse much more rapidly. The participant asked about the basis of this abrupt nonlinearity of the relationship and how one determined at what inflation rate it occurred.

Another World Bank participant commented that there is misconception both within the World Bank and outside about what the Bank did before SALs were started. Before SALs, the Bank basically financed a subset of a country's public investment budget. A condition of such loans in most cases was a public investment review, and endorsement of the whole public investment budget. There is nothing that says that just because one has SALs now, one cannot have cost-benefit analysis and a review of the public investment budget.

On the macroeconomic side, this same participant was struck by the difficulty

of maintaining stability in real exchange rates even if there are no booms. With the instability of real exchange rates observed even in the countries that belong to the Organisation for Economic Co-operation and Development (OECD), the question was whether one could expect to have exchange rate stability in the developing world. This related to another question: what is the macroeconomic policy role of the OECD countries in assisting the resumption of growth in the developing countries?

Another participant noted that on the question of indexation and inflation Dornbusch earlier had flatly stated that indexation does not create an inflation problem as long as the budget is balanced. The problem, of course, was that one did not see a country with a balanced budget and indexation. Furthermore, indexing in the context of public sector prices is only partial indexation. Other sectors as well have major repercussions on inflation.

On instability in real exchange rates and the implication of the variability of OECD countries' exchange rates, Corden agreed that there is a problem. One possibility is to fix the rate to a trade-weighted basket. In the case of Asian economies, that means a heavy element of yen and of U.S. dollars, and there are the inevitable problems when there are large yen-dollar rate changes. But those are much simpler problems as compared with the bigger problems with which the paper was concerned: the problems of changing conditions in the developing country itself, which is trying to keep the exchange rate fixed and cannot succeed in getting inflation under control.

On the question of deciding on the "correct" level of inflation, Corden voiced the opinion that a 20 percent rate is not harmful if it is steady. But a central problem is that the higher the rate of inflation, the more variable it is, which of course creates uncertainty. And if it is rising, one doesn't know where it will stop. Thinking of the countries in his study, Corden suggested that any country that had managed to have 20 or 25 percent inflation or less did not have a big problem, certainly in Latin America. And countries such as Thailand, with 3 to 5 percent inflation, are to be welcomed and certainly not encouraged to work their way up to 20 percent.

On the inflation nonlinearity issue, Collins thought that what was important was that moderate to low inflation was qualitatively different from high inflation, and the threshold at which moderate inflation becomes high inflation will vary depending on the country, its history, and other factors, particularly exchange rate and fiscal policies. In a particular setting, looking at the inflation rate, does one expect the rate to remain at that level or come down, or does one believe it is a floor and will rise? If it is the latter, then it will generate a large degree of uncertainty, and people devote resources to trying to hedge against that uncertainty.

Collins felt that the difficulty of maintaining real exchange rate stability, given the instability of bilateral exchange rates in the developed world, was really a matter of degree. It is certainly harder if one is trading with countries that are having large exchange rate swings between them. But most of the exchange rate

variability comes from domestic policies and domestic responses to external shocks.

On optimal or reasonable inflation rates, Williamson said that he began with the view that the inflation tax is very regressive. He then embraced the accelerationist position that there are no permanent benefits from a faster inflation rate; these are purely transitory; the higher the rate of inflation at which the economy stabilizes, the greater the regressive tax. Williamson added that the ability to use corrective inflation, to adjust to a shock by changing the price level rather than the rate of inflation, is so dependent on inflation expectations; if you wish to get expectations down, the only sensible rate of inflation is 0 to 2 percent. If it is too costly to get inflation down, you wait for an opportune moment. But you do not tell yourself that a 10 percent rate of inflation is just fine, and there is nothing to worry about.

Williamson endorsed Corden's position that as long as exchange rates are fluctuating among the industrial countries, any developing country with reasonably diversified trade can either stabilize the effective exchange rate, which makes sense from a macroeconomic standpoint, or it can stabilize an individual bilateral exchange rate, which may be more attractive from a microeconomic point of view, but it cannot do both. One has to choose between the two, and if trade is very diversified, on balance he would support stabilizing the effective rate, which is done by pegging to a basket. Finally, on the indexation question, Williamson reiterated that indexation can contribute to making a stabilization program acceptable. However, wage indexation based on a high inherited rate of inflation can be problematic just when the budget is first brought back into balance and one most wants to bring down the inflation rate. Then it becomes impossible to stabilize without a high rate of unemployment.

In closing the discussion, Sakong (chair) said that the range among speakers in what was considered moderate inflation was somewhat confusing, and therefore, that country-specific studies were very useful to complement more general conclusions. The political economy of macroeconomic policy and the resumption of growth are very important, and Sakong hoped that the World Bank would further pursue this research issue.