Boom, Crisis, and Adjustment

The Macroeconomic Experience of Developing Countries, 1970-90

A Summary

Nov. 1994

I.M.D. Little
Richard N. Cooper
W. Max Corden
Sarath Rajapatirana
Boom, Crisis, and Adjustment
The Macroeconomic Experience of Developing Countries, 1970–90

A Summary

Richard N. Cooper

The World Bank
Washington, D.C.
Contents

A Note to the Reader

A Brief Description of Events
  Investment Booms 4
  Terms of Trade Shocks 6
  The Debt Crisis 8
  Painful Adjustment 11

Macroeconomic Policy
  Growing Fiscal Deficits 16
  Increasing Debt Burden 17
  Monetary Policy, Fiscal Policy, and Inflation 19
  Exchange Rate and Trade Policies 21
  Political Economy and Performance 23
  A Brief Postscript 25

Policy Advice 26

Notes 27
A Note to the Reader

Richard N. Cooper, Maurits C. Boas Professor of International Economics at Harvard University, who wrote this summary of the book, *Boom, Crisis, and Adjustment: The Macroeconomic Experience of Developing Countries*, is one of the original four authors. All are listed on the front cover of this booklet.

*Boom, Crisis, and Adjustment* is the synthesis volume for the World Bank Comparative Macroeconomic studies, a series of country studies now published or forthcoming that cover Brazil, Colombia, Costa Rica, Côte d’Ivoire, India, Indonesia, Sri Lanka, Thailand, and Turkey.
Boom, Crisis, and Adjustment

The Macroeconomic Experience of Developing Countries, 1970–90

From the early 1950s the major focus of economic policy in developing countries was on economic growth and on achieving the structural changes thought necessary for growth, notably the encouragement of manufacturing. From the mid-1970s to the late 1980s many countries were distracted from these long-term objectives by the need to adjust to a series of major shocks to their economies, some imported from the world economy, some generated at home. Perforce, governments had to turn their attention to short-run macroeconomic adjustment. The burden placed upon them, and their skill in dealing with these largely unwanted tasks, varied considerably from country to country.

How did countries respond to adverse, or favorable, changes in external economic conditions? What can be learned from their variegated and diverse responses for appropriate macroeconomic management in the future? Where shocks were generated domestically, what were their origins and how can they be avoided in future? And what are the implications of poor or skillful macroeconomic management for long-run growth?

With such questions in mind the World Bank sponsored a large-scale comparative study of macroeconomic management in developing countries during the turbulent period 1970–90, with reference to the late 1960s where relevant. The study was undertaken in two phases. The first phase involved an examination by economists who had some knowledge of the countries in question of macroeconomic disturbances and responses in each of seventeen countries. In the second phase generalizations from those country studies and other material were synthesized in the recently published volume *Boom, Crisis, and Adjustment: the Macroeconomic Experience of Developing Countries.* Here we summarize the major findings and recommendations from that book.

The countries were chosen to be a representative (but not random) sample of noncommunist developing countries. They included virtually all of the large developing countries, measured by gross output, and a selection of small ones, accounting in all for over 60 percent of the
GDP of developing countries as a group. The total population was 1.8 billion and the countries included six from Latin America, six from Asia, five from Africa, and one (Turkey) from Eurasia. The countries covered by the study, with their major economic characteristics, are listed in table 1.

The study was stimulated initially by concern that excessively broad generalizations were being drawn from the experiences of only a few developing countries. These were concentrated in South America, and we felt that explicit comparison among a substantial number of countries would offer a firmer base for general conclusions. In addition, although we use standard economic concepts and categories, we had no strong preconceptions about the results to be obtained; the study was inductive in spirit.

A Brief Description of Events

There were two dominant trends in the world economy between 1965 and 1990. The first was the continued rapid growth of world trade, including especially exports of manufactured goods from developing countries; the second was the emergence in the early 1970s of a world money and capital market to which many developing countries had ready access, as in the 1920s. The principal economic events of the period were the move from fixed to floating exchange rates among the major industrialized countries in March 1973; two sharp increases (1974 and 1979–80) and one sharp fall (1986) in oil prices; dramatic movements in prices of several other primary products, such as coffee, cocoa, copper, and phosphates (all commodities of special relevance to our countries); a mild economic recession and two deep ones (1975 and 1982); a large appreciation of the U.S. dollar against other leading currencies (1980–85), followed by an equally large and more abrupt fall (1985–86); and a debt crisis for many developing countries, during which voluntary external lending virtually ceased in the mid-1980s.

Broadly speaking the 1960s and early 1970s were years of outstanding economic growth and, until 1973, relative price stability. This pattern broke in the mid-1970s with a commodity price boom, the first major oil shock, and the deepest recession since the 1930s. Consolidation in the late 1970s was interrupted by a second oil shock associated with the revolution in Iran. That episode, along with stringent efforts by several major industrialized countries to control inflation, led to a second major recession in 1981–82. The combination of heavy borrowing through earlier difficulties, high interest rates associated with higher inflation and the anti-inflationary response, and 1982 recession produced the debt crisis of 1982–83. After a set-back in the late 1970s and early 1980s industrialized countries resumed their growth by the late 1980s. For developing countries the decade of the 1980s was one of
### Table 1. Basic Data on Eighteen Countries, 1965–90

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>93,260</td>
<td>32.3</td>
<td>2,370</td>
<td>-0.3</td>
<td>395.2</td>
<td>61.7</td>
<td>*</td>
</tr>
<tr>
<td>Brazil</td>
<td>414,060</td>
<td>150.4</td>
<td>2,680</td>
<td>3.3</td>
<td>284.3</td>
<td>22.8</td>
<td>*</td>
</tr>
<tr>
<td>Cameroon</td>
<td>11,130</td>
<td>11.7</td>
<td>960</td>
<td>3.0</td>
<td>5.6</td>
<td>56.8</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>27,790</td>
<td>13.2</td>
<td>1,940</td>
<td>0.4</td>
<td>20.5</td>
<td>73.6</td>
<td>*</td>
</tr>
<tr>
<td>Colombia</td>
<td>41,120</td>
<td>32.3</td>
<td>1,260</td>
<td>2.3</td>
<td>24.8</td>
<td>44.3</td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td>5,700</td>
<td>2.8</td>
<td>1,900</td>
<td>1.4</td>
<td>23.5</td>
<td>69.2</td>
<td>*</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>7,610</td>
<td>11.9</td>
<td>750</td>
<td>0.5</td>
<td>2.3</td>
<td>203.9</td>
<td>*</td>
</tr>
<tr>
<td>India</td>
<td>254,540</td>
<td>849.5</td>
<td>350</td>
<td>1.9</td>
<td>7.9</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>107,290</td>
<td>178.2</td>
<td>570</td>
<td>4.5</td>
<td>8.4</td>
<td>66.4</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>7,540</td>
<td>24.2</td>
<td>370</td>
<td>1.9</td>
<td>9.2</td>
<td>81.2</td>
<td></td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>236,400</td>
<td>42.8</td>
<td>5,400</td>
<td>7.1</td>
<td>5.1</td>
<td>14.4</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>237,750</td>
<td>86.2</td>
<td>2,490</td>
<td>2.8</td>
<td>70.3</td>
<td>42.1</td>
<td>*</td>
</tr>
<tr>
<td>Morocco</td>
<td>25,220</td>
<td>25.1</td>
<td>950</td>
<td>2.3</td>
<td>7.2</td>
<td>97.1</td>
<td>*</td>
</tr>
<tr>
<td>Nigeria</td>
<td>34,760</td>
<td>115.5</td>
<td>290</td>
<td>0.1</td>
<td>17.7</td>
<td>117.9</td>
<td>*</td>
</tr>
<tr>
<td>Pakistan</td>
<td>35,500</td>
<td>112.4</td>
<td>380</td>
<td>2.5</td>
<td>6.7</td>
<td>52.1</td>
<td></td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>7,250</td>
<td>17.0</td>
<td>470</td>
<td>2.9</td>
<td>11.1</td>
<td>73.2</td>
<td></td>
</tr>
<tr>
<td>Thailand</td>
<td>80,170</td>
<td>55.8</td>
<td>1,420</td>
<td>4.4</td>
<td>3.4</td>
<td>32.6</td>
<td></td>
</tr>
<tr>
<td>Turkey</td>
<td>96,500</td>
<td>56.1</td>
<td>1,630</td>
<td>2.6</td>
<td>43.2</td>
<td>46.3</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The 'technical notes' in *World Development Report 1992* explain the meaning and methods of calculation of the figures in the first five columns. The average annual inflation rate (column 5) is measured by the growth rate of the GDP implicit deflator, while other figures of inflation rates in this booklet refer to the growth rate of the cost-of-living index—but the two measures normally tell very similar stories. External debt in column 6 refers to the total external debt stock, long-and short-term. For column 7, note that Cameroon became rescheduled in 1989.

**Source:** *World Development Report 1992* (for the first five columns). Column 6 is from the World Bank's *World Debt Tables 1991–92*, Volume 2. Column 7 comes from the International Monetary Fund and chapter 4 of LCCR.
adjustment, relative stagnation, and for some, accelerating inflation (see table 2).

**Investment Booms**

In the early 1970s development planning was fashionable among both officials and academics. Governments took on the roles of entrepreneur, investor, and manager of economic activities in addition to their more traditional functions. As conditions permitted, this tendency produced remarkable investment booms in virtually all our countries during the 1970s and early 1980s. As shown in table 3, investment as a share of gross domestic product (GDP) rose substantially during this period—by an astonishing 18 percentage points in Sri Lanka and not much less in Morocco and Nigeria. In Nigeria the rise occurred over a span of only two years. Except in Chile, India, and Kenya, the investment booms were led by the government, although the private sector also played a significant role in Brazil, Cameroon, Indonesia, and Sri Lanka. The Korean investment boom was undertaken mainly by private firms under close government supervision and inducement as part of its big push into heavy and chemical industries. In all of the countries investments were often undertaken hastily and with too little serious evaluation, and they failed to make a proportionate contribution to economic growth.

Only in Indonesia, Kenya, and Nigeria were the investment booms generated by sharp improvements in the foreign terms of trade (on which more below). In all other cases the investment booms were domestically conceived and launched, although improvements in the

---

**Table 2. Growth and Inflation, 1965–90**

(percent a year)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GDP growth</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial countries</td>
<td>4.4</td>
<td>2.5</td>
<td>3.1</td>
</tr>
<tr>
<td>Developing countries</td>
<td>6.2</td>
<td>5.1</td>
<td>3.2</td>
</tr>
<tr>
<td>Per capita</td>
<td>3.7</td>
<td>3.0</td>
<td>1.2</td>
</tr>
<tr>
<td><strong>Inflation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial countries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP deflator</td>
<td>5.4</td>
<td>9.5</td>
<td>4.5</td>
</tr>
<tr>
<td>Exports (U.S. dollars)</td>
<td>5.6</td>
<td>12.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Developing countries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP deflator</td>
<td>9.7</td>
<td>24.9</td>
<td>61.8</td>
</tr>
<tr>
<td>Nonoil exports (U.S. dollars)</td>
<td>4.5</td>
<td>12.5</td>
<td>0.2</td>
</tr>
</tbody>
</table>

*Source: Calculated from International Financial Statistics Yearbook (1990), and World Bank, World Development Report, 1992.*
Table 3. Investment Booms
(percentage of GDP)

<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>Public</th>
<th>Private</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>1973–77</td>
<td>8.4</td>
<td>13.4</td>
<td>21.7</td>
</tr>
<tr>
<td>Brazil</td>
<td>1972–75</td>
<td>5.1</td>
<td>7.4</td>
<td>12.5</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1974–79</td>
<td>4.5</td>
<td>4.6</td>
<td>9.1</td>
</tr>
<tr>
<td>Chile (F)</td>
<td>1976–81</td>
<td>5.1</td>
<td>4.2</td>
<td>9.3</td>
</tr>
<tr>
<td>Colombia (F)</td>
<td>1978–83</td>
<td>5.5</td>
<td>9.1</td>
<td>14.6</td>
</tr>
<tr>
<td>Costa Rica (F)</td>
<td>1975–79</td>
<td>7.0</td>
<td>8.9</td>
<td>15.9</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>1974–78</td>
<td>11.3</td>
<td>21.0</td>
<td>32.3</td>
</tr>
<tr>
<td>India</td>
<td>1977–81</td>
<td>8.4</td>
<td>10.0</td>
<td>18.4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1974–81</td>
<td>8.0</td>
<td>13.2</td>
<td>21.2</td>
</tr>
<tr>
<td>Kenya (F)</td>
<td>1977–80</td>
<td>9.0</td>
<td>10.7</td>
<td>19.7</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>1976–79</td>
<td>5.5</td>
<td>7.5</td>
<td>13.0</td>
</tr>
<tr>
<td>Mexico (1)</td>
<td>1971–75</td>
<td>4.7</td>
<td>8.9</td>
<td>13.6</td>
</tr>
<tr>
<td>Mexico (2)</td>
<td>1977–81</td>
<td>7.7</td>
<td>11.7</td>
<td>19.4</td>
</tr>
<tr>
<td>Morocco</td>
<td>1973–77</td>
<td>4.7</td>
<td>20.7</td>
<td>25.4</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1974–76</td>
<td>4.8</td>
<td>17.3</td>
<td>22.1</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1973–77</td>
<td>7.1</td>
<td>15.3</td>
<td>22.4</td>
</tr>
<tr>
<td>Thailand (F)</td>
<td>1974–81</td>
<td>3.7</td>
<td>9.2</td>
<td>12.9</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1977–82</td>
<td>6.5</td>
<td>16.7</td>
<td>23.2</td>
</tr>
<tr>
<td>Turkey</td>
<td>1973–77</td>
<td>8.5</td>
<td>12.5</td>
<td>21.0</td>
</tr>
</tbody>
</table>

*Note:* F indicates gross fixed capital formation. The figures for total investment differ from those derived from the World Bank data base (which are expressed as a percentage of GNP, not GDP) given in the appendix tables in LCCR. But there is no serious conflict. The figures for Korea are from Servén and Solimano (1991).


terms of trade facilitated, and perhaps augmented, the booms in Cameroon, Costa Rica, Côte d’Ivoire, and Morocco and the second Mexican boom. Specific political factors as well as general "developmentalism" were behind most of the investment booms. But in all cases other than the first three mentioned above, they could not have been undertaken without ample sources of external credit. This credit came partly through foreign assistance programs (especially important in the case of Sri Lanka) but mainly through the revived international financial market, which was given a strong boost by the first oil shock as oil-exporters temporarily placed their much higher export earnings in the London-based financial market. Even those countries with favorable movements in their terms of trade soon began borrowing in the international market, encouraged in part by the relatively low interest rates prevailing in the mid-1970s, but mainly by the ample availability of funds. Thus the widespread character of the investment boom was made possible by revival of the world capital market.
Terms of Trade Shocks

The first oil shock occurred when OPEC ministers agreed in December 1973 to raise crude oil prices from under $4 a barrel to over $11 a barrel. This promptly redistributed about $65 billion annually from oil-importing countries to oil-exporting countries and imposed an adverse movement in the terms of trade on oil-importing countries that varied in magnitude according to the importance of oil in their total imports. This action, of course, also improved the terms of trade of oil-exporting countries (among our countries Indonesia and Nigeria, joined later in the 1970s by Cameroon and Mexico). Combined with the anti-inflationary responses of the major industrialized countries, especially the United States and Germany, the sharp increase in oil prices led to the recession of 1974–75, which in turn depressed earnings on most exports of industrial materials.

Table 4 reports the magnitude of terms-of-trade shocks in terms of GDP for the years 1974 and 1975. Chile experienced the biggest adverse shock over the two years (copper prices dropped sharply in 1974), while, as noted, Indonesia and Nigeria experienced significant improvements. For Morocco the negative effect of higher oil prices was more than offset by higher prices for phosphates, its most important export. Argentina, Colombia, and Mexico were virtually oil self-sufficient, so movements in their terms of trade were dominated by other factors. Since countries differ substantially in their openness to foreign trade, a given effect of changes in the terms of trade on GDP can represent substantially different burdens in terms of their claim on export earnings. For example, in India, a large and heavily protected country, the adverse movement of its terms of trade amounted to 25 percent of Indian exports, while a roughly equivalent change (in terms of GDP) in Thailand’s terms of trade amounted to only 5 percent of Thailand’s exports.

Oil prices rose less than inflation over the period 1974–78, but other prices moved more substantially. In particular, a major frost in Brazil led to a threefold increase in coffee and cocoa prices in 1976–77, sharply improving for several years the terms of trade of major exporters of those products—Cameroon, Colombia, Costa Rica, Côte d’Ivoire, and Kenya among our countries. As table 4 also shows, growth rates generally were unaffected by the first large oil shock: growth in the post-1974 period was actually higher in many countries than it was in the early 1970s, and it declined substantially only in Kenya, Brazil, Mexico, and (paradoxically) Nigeria.

The study finds no correlation between the magnitude of the terms-of-trade shock and the change in growth rates. Countries experiencing an adverse movement either increased their exports (Korea, Thailand, and Pakistan) or borrowed (Chile, Costa Rica, Brazil, and Argentina), or both, to cover their increased import bill. Of course, heavy borrow-
### Table 4. Terms of Trade Shocks, 1974 and 1975, and GNP Growth (percent)

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage of GDP</th>
<th>GNP growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chile</td>
<td>-12.4</td>
<td>-5.1</td>
</tr>
<tr>
<td>Cameroon</td>
<td>-3.8</td>
<td>-3.7</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>-0.9</td>
<td>-6.4</td>
</tr>
<tr>
<td>Kenya</td>
<td>-4.1</td>
<td>-3.0</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>-5.1</td>
<td>-1.0</td>
</tr>
<tr>
<td>Pakistan</td>
<td>-3.1</td>
<td>-2.8</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>-4.0</td>
<td>+0.9</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>-3.1</td>
<td>-0.6</td>
</tr>
<tr>
<td>Thailand</td>
<td>-0.8</td>
<td>-3.0</td>
</tr>
<tr>
<td>Brazil</td>
<td>-2.6</td>
<td>-0.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>-0.9</td>
<td>-0.6</td>
</tr>
<tr>
<td>Turkey</td>
<td>-1.1</td>
<td>-0.3</td>
</tr>
<tr>
<td>Argentina</td>
<td>-0.9</td>
<td>-0.3</td>
</tr>
<tr>
<td>India</td>
<td>-0.9</td>
<td>+0.0</td>
</tr>
<tr>
<td>Colombia</td>
<td>+0.9</td>
<td>-1.1</td>
</tr>
<tr>
<td>Morocco</td>
<td>+3.0</td>
<td>+1.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>+17.0</td>
<td>-3.0</td>
</tr>
<tr>
<td>Nigeria</td>
<td>+23.1</td>
<td>-2.6</td>
</tr>
</tbody>
</table>

*Note:* The terms of trade must be regarded as giving an order of magnitude only: there are considerable divergences in several cases between World Bank data and those given in the country studies. (But only in the case of Kenya were World Bank data clearly wrong.)

*Source:* LCCR, tables 3.1 and 3.5.

Living abroad increased external debt, laying the basis in some countries for later difficulties. But it also mitigated the world recession which would have been deeper had not so many countries borrowed to continue their investments and their imports of oil.

Iran’s revolution in 1979 led to a marked decline in Iran's oil exports and set off the second large oil shock. This was not so concentrated in time as was the first, but over two years the price of crude oil increased from roughly $12 a barrel to $33 a barrel. This led to another major transfer, this time over $100 billion annually, from oil-importing to oil-exporting countries. Once again, the oil price increase itself and the anti-inflationary policy responses it provoked in all the major industrialized countries led to an unexpectedly sharp world recession in 1981–82. Concerns with the increase in inflation during the 1970s led countries, especially the United Kingdom (which by 1979 had become an exporter of North Sea oil) and the United States, to pursue much tighter monetary policies than they had done earlier, and short-term interest rates rose sharply in 1980 and 1981, with the three-month dollar London interbank offered rate, LIBOR, exceeding 17 percent in 1981. The
sharp increase in interest rates imposed a heavy debt-servicing burden on those countries that had already acquired significant external debt subject to floating interest rates (generally adjusted at six-month intervals), a feature of many bank consortium loans.

Thus, many developing countries again experienced an adverse movement in their terms of trade, composed partly of higher oil prices and partly of higher interest rates on their outstanding external debt. Table 5 reports the cumulative terms-of-trade effect on our eighteen countries arising over the three years from 1979 to 1981, in terms of annual GDP. Côte d'Ivoire suffered the most severe effect, at 13 percent including interest rates, and half of our countries experienced an adverse movement of more than four percentage points. In terms of interest rates alone, Chile and Korea experienced the most serious effects. As in 1974, Indonesia and Nigeria benefited from the higher oil prices, as did Cameroon and Mexico this time, although Mexico's gain on oil was lost on interest rates.3

The Debt Crisis

The combination of investment boom, worsening terms of trade, and deep world recession resulted in great enlargement of current account deficits between the early 1970s and 1982. Table 6 reports current

Table 5. Terms of Trade and Interest Rate Effects, 1979–81 (cumulative percentage of annual GDP)

<table>
<thead>
<tr>
<th>Country</th>
<th>Terms of trade effect</th>
<th>Interest rate effect</th>
<th>Total effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Côte d'Ivoire</td>
<td>-10.3</td>
<td>-3.0</td>
<td>-13.3</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>-8.9</td>
<td>-0.5</td>
<td>-9.4</td>
</tr>
<tr>
<td>Chile</td>
<td>-5.0</td>
<td>-4.1</td>
<td>-9.2</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>-2.9</td>
<td>-3.4</td>
<td>-6.3</td>
</tr>
<tr>
<td>Thailand</td>
<td>-5.6</td>
<td>-0.5</td>
<td>-6.1</td>
</tr>
<tr>
<td>Cameroon</td>
<td>-4.2</td>
<td>-1.4</td>
<td>-5.6</td>
</tr>
<tr>
<td>Brazil</td>
<td>-3.0</td>
<td>-2.2</td>
<td>-5.2</td>
</tr>
<tr>
<td>Kenya</td>
<td>-2.9</td>
<td>-1.4</td>
<td>-4.3</td>
</tr>
<tr>
<td>Colombia</td>
<td>-3.1</td>
<td>-1.1</td>
<td>-4.2</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>-4.3</td>
<td>0.6</td>
<td>-3.7</td>
</tr>
<tr>
<td>Morocco</td>
<td>-1.4</td>
<td>-1.7</td>
<td>-3.1</td>
</tr>
<tr>
<td>Turkey</td>
<td>-1.3</td>
<td>-0.5</td>
<td>-1.8</td>
</tr>
<tr>
<td>Argentina</td>
<td>-1.0</td>
<td>-0.8</td>
<td>-1.8</td>
</tr>
<tr>
<td>Pakistan</td>
<td>-1.4</td>
<td>-0.4</td>
<td>-1.8</td>
</tr>
<tr>
<td>India</td>
<td>-0.4</td>
<td>-0.1</td>
<td>-0.6</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.2</td>
<td>-2.4</td>
<td>-0.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>11.9</td>
<td>-1.2</td>
<td>10.7</td>
</tr>
<tr>
<td>Nigeria</td>
<td>14.3</td>
<td>-0.9</td>
<td>13.4</td>
</tr>
</tbody>
</table>

Source: LCCR, table 42.
Table 6. Current Account Deficits
(percent of GDP)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>-1.8</td>
<td>-4.3</td>
<td>4.5</td>
<td>1.9</td>
</tr>
<tr>
<td>Brazil</td>
<td>2.7</td>
<td>3.5</td>
<td>6.0</td>
<td>-1.1</td>
</tr>
<tr>
<td>Cameroon</td>
<td>1.0</td>
<td>4.5</td>
<td>4.8</td>
<td>7.0</td>
</tr>
<tr>
<td>Chile</td>
<td>2.7</td>
<td>7.2</td>
<td>10.2</td>
<td>0.8</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.5</td>
<td>-1.9</td>
<td>8.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>7.5</td>
<td>10.6</td>
<td>12.2</td>
<td>4.2</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>9.6</td>
<td>11.7</td>
<td>14.4</td>
<td>12.8</td>
</tr>
<tr>
<td>India</td>
<td>0.5</td>
<td>-0.1</td>
<td>1.4</td>
<td>3.2</td>
</tr>
<tr>
<td>Indonesia</td>
<td>2.8</td>
<td>2.6</td>
<td>5.9</td>
<td>1.7</td>
</tr>
<tr>
<td>Kenya</td>
<td>5.3</td>
<td>13.1</td>
<td>5.0</td>
<td>5.6</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>2.2</td>
<td>2.2</td>
<td>3.7</td>
<td>-8.4</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.5</td>
<td>3.0</td>
<td>3.9</td>
<td>1.5</td>
</tr>
<tr>
<td>Morocco</td>
<td>-3.0</td>
<td>10.4</td>
<td>12.7</td>
<td>-2.2</td>
</tr>
<tr>
<td>Nigeria</td>
<td>0.0</td>
<td>6.2</td>
<td>7.9</td>
<td>0.7</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1.3</td>
<td>2.8</td>
<td>3.7</td>
<td>3.1</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1.2</td>
<td>2.5</td>
<td>11.4</td>
<td>5.8</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.4</td>
<td>4.8</td>
<td>2.9</td>
<td>2.4</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.4</td>
<td>1.7</td>
<td>2.9</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Note: minus indicates a surplus.
Source: ECR, table 5A.

account deficits for our countries for four selected years. Eleven countries experienced a worsening of their current account position by more than 3 percent of GDP between 1973 and 1982; all except Kenya and Thailand showed a deterioration between 1978 (the year before the second oil shock) and 1982 (the year of deep recession). It is noteworthy that all four oil exporters had larger deficits in 1982 than in 1978, despite the sharp increase in oil prices, and surpluses in 1979-80 by Indonesia and Nigeria. Recession reduced the demand for oil and domestic spending increased in all four countries in response to the oil boom, raising payments for imports faster than earnings on exports.

To finance current account deficits it is necessary to run down assets and/or borrow abroad. Borrowing increased substantially since there is a limit to depletion of assets. Table 7 reports the ratio of public and publicly guaranteed external debt to GDP for selected years. It shows sharp increases over time, more than five percentage points in 14 countries during the crisis years 1979-82, and over 100 percentage points for Costa Rica. The increases in public debt do not match current account deficits for several reasons: foreign exchange reserves could have been drawn down or built up; private capital flows may have occurred—outflows were especially important from Argentina and Mexico during these crisis years, and inflows were important for Chile.
Boom, Crisis, and Adjustment

in 1979–80; and the public authorities may have assumed responsibility for private external debt incurred in previous years, a phenomenon that was especially important in Costa Rica, Argentina, Chile, and Mexico.

It is noteworthy that while the sharp increase in interest rates from late 1979 undoubtedly caught debtors by surprise, much borrowing occurred following the rise in interest rates, so the subsequent debt burden can be blamed only in part on an unexpected rise in interest rates on floating rate debt.

Interest payments relative to GDP rose in all our countries between 1979 and 1982 (Table 7), by more than one percentage point in fourteen of them, and by an astounding eight percentage points in Chile. Interest payments had receded in eleven countries by 1988 even though external debt generally continued to rise during the 1980s largely because of a steady decline in interest rates between 1981 and 1988, when LIBOR dropped from an average of 16.8 percent to 7.8 percent. But eight countries were in arrears in their interest payments in the late 1980s and eight countries had rescheduled their debt during the period 1982–88 (see Table 1), thus reducing payments on principal and in some

Table 7. External Debt and Interest Payments on External Debt (percent of GDP)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>1.2</td>
<td>1.8</td>
<td>6.9</td>
<td>3.3</td>
<td>15</td>
<td>84</td>
<td>119</td>
</tr>
<tr>
<td>Brazil</td>
<td>0.9</td>
<td>1.6</td>
<td>4.5</td>
<td>3.5</td>
<td>31</td>
<td>36</td>
<td>26</td>
</tr>
<tr>
<td>Cameroon</td>
<td>0.6</td>
<td>1.1</td>
<td>2.6</td>
<td>2.1</td>
<td>37</td>
<td>37</td>
<td>45</td>
</tr>
<tr>
<td>Chile</td>
<td>0.6</td>
<td>2.5</td>
<td>10.6</td>
<td>6.3</td>
<td>45</td>
<td>77</td>
<td>77</td>
</tr>
<tr>
<td>Colombia</td>
<td>1.0</td>
<td>0.8</td>
<td>2.8</td>
<td>3.8</td>
<td>21</td>
<td>27</td>
<td>45</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>1.6</td>
<td>2.4</td>
<td>5.4</td>
<td>5.0</td>
<td>53</td>
<td>167</td>
<td>95</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>1.2</td>
<td>2.4</td>
<td>10.1</td>
<td>6.1</td>
<td>58</td>
<td>111</td>
<td>187</td>
</tr>
<tr>
<td>India</td>
<td>0.3</td>
<td>0.3</td>
<td>0.6</td>
<td>1.2</td>
<td>15</td>
<td>13</td>
<td>25</td>
</tr>
<tr>
<td>Indonesia</td>
<td>0.7</td>
<td>1.4</td>
<td>2.1</td>
<td>4.5</td>
<td>35</td>
<td>29</td>
<td>61</td>
</tr>
<tr>
<td>Kenya</td>
<td>1.2</td>
<td>1.8</td>
<td>3.7</td>
<td>2.9</td>
<td>46</td>
<td>57</td>
<td>72</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>1.9</td>
<td>1.6</td>
<td>5.7</td>
<td>1.7</td>
<td>32</td>
<td>52</td>
<td>16</td>
</tr>
<tr>
<td>Mexico</td>
<td>0.9</td>
<td>2.2</td>
<td>6.8</td>
<td>5.0</td>
<td>31</td>
<td>52</td>
<td>47</td>
</tr>
<tr>
<td>Morocco</td>
<td>0.7</td>
<td>2.3</td>
<td>4.9</td>
<td>4.6</td>
<td>53</td>
<td>84</td>
<td>101</td>
</tr>
<tr>
<td>Nigeria</td>
<td>0.2</td>
<td>0.1</td>
<td>1.4</td>
<td>5.1</td>
<td>8</td>
<td>14</td>
<td>119</td>
</tr>
<tr>
<td>Pakistan</td>
<td>1.3</td>
<td>1.0</td>
<td>1.2</td>
<td>1.7</td>
<td>43</td>
<td>38</td>
<td>46</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0.5</td>
<td>1.5</td>
<td>2.0</td>
<td>2.2</td>
<td>34</td>
<td>55</td>
<td>73</td>
</tr>
<tr>
<td>Thailand</td>
<td>0.5</td>
<td>2.0</td>
<td>3.0</td>
<td>2.4</td>
<td>23</td>
<td>35</td>
<td>34</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.4</td>
<td>1.7</td>
<td>2.9</td>
<td>4.5</td>
<td>22</td>
<td>38</td>
<td>54</td>
</tr>
</tbody>
</table>

a. Interest payments in arrears.

b. Public and publicly guaranteed debt, short-term and long-term.

Source: LCCR, tables 4.1, 5A, and 5.6.
cases on interest as well. Debt, however, remained at much higher levels than had been the case in late 1979, making many countries still vulnerable to a rise in interest rates.

Although Turkey and Costa Rica (among our countries) had already encountered debt-servicing problems before 1982, the debt crisis worldwide was precipitated by Mexico's inability to service its external debt in August 1982; banks everywhere re-evaluated their positions and became much more reluctant to lend to heavily indebted countries, especially those in Latin America. Since it is normal for outstanding debt to be routinely rolled over, the cessation of new lending created problems. When banks fear that other creditors will not roll over the debt they also hesitate, and a vicious cycle sets in.

Painful Adjustment

The combined effect of higher interest rates, worsened terms of trade (for most countries), and a decline in net new lending\(^6\) was a sharp decline in the inward transfer of resources (current account less interest payments plus remittances) from the rest of the world to many developing countries. Twelve of our countries experienced a decline in average annual resource inflows between 1977–82 and 1983–88 in excess of two percentage points of GNP, and for Côte d'Ivoire the decline was an astonishing 10 percent of GNP (table 8). For countries dependent on foreign capital for their development, such declines put a sharp crimp in economic growth, and indeed compelled serious retrenchment in their economies.

The eight countries that rescheduled their external debt experienced an average decline in net inward resource transfers of 6.6 percentage points of GNP in 1983–88 compared with 1977–82, and a roughly similar decline in investment from the (admittedly high) levels of 1977–82 (although the country-by-country fit is not so close). Those countries that did not reschedule, in contrast, had an average reduction in inward transfers of two percentage points of GNP and a reduction in investment of less than one percentage point over the same period of time. The reschedulers hardly had any increase in per capita income during the period 1982–89, compared with an average increase of three percent in the other ten countries (LCCR, table 5.2).

As can be seen in table 2, inflation rose everywhere during the 1970s, in developed as well as developing countries. The industrialized countries managed to reduce inflation during the 1980s below the levels of the late 1960s; in contrast, developing countries experienced a further acceleration of inflation during the 1980s.

Averages can deceive, however; the acceleration of inflation in developing countries is driven by a relatively few very high inflation countries. On the whole, countries that had low inflation during the
Table 8. Resource Transfers
(percentage of GNP)

<table>
<thead>
<tr>
<th>Country</th>
<th>Average inward resource transfer 1977-82</th>
<th>Average inward resource transfer 1983-88</th>
<th>Reduction in inward resource transfer</th>
<th>Maximum annual change in transfers</th>
<th>Year of maximum change in transfers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Côte d'Ivoire</td>
<td>2.7</td>
<td>-7.5</td>
<td>-10.2</td>
<td>-14.6</td>
<td>1984</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>9.8</td>
<td>0.8</td>
<td>-9.0</td>
<td>-15.8</td>
<td>1983</td>
</tr>
<tr>
<td>Chile</td>
<td>4.0</td>
<td>-4.1</td>
<td>-8.1</td>
<td>-9.9</td>
<td>1982</td>
</tr>
<tr>
<td>Mexico</td>
<td>1.0</td>
<td>-7.0</td>
<td>-8.0</td>
<td>-8.0</td>
<td>1983</td>
</tr>
<tr>
<td>Morocco</td>
<td>14.5</td>
<td>7.1</td>
<td>-7.4</td>
<td>-5.6</td>
<td>1983</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>2.0</td>
<td>-5.4</td>
<td>-7.4</td>
<td>-4.2</td>
<td>1986</td>
</tr>
<tr>
<td>Kenya</td>
<td>7.2</td>
<td>2.2</td>
<td>-5.0</td>
<td>-4.6</td>
<td>1982</td>
</tr>
<tr>
<td>Brazil</td>
<td>1.8</td>
<td>-2.9</td>
<td>-4.6</td>
<td>-3.2</td>
<td>1984</td>
</tr>
<tr>
<td>Turkey</td>
<td>5.2</td>
<td>1.7</td>
<td>-3.5</td>
<td>-4.9</td>
<td>1988</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1.4</td>
<td>-2.1</td>
<td>-3.5</td>
<td>-5.5</td>
<td>1984</td>
</tr>
<tr>
<td>Thailand</td>
<td>3.8</td>
<td>0.9</td>
<td>-2.9</td>
<td>-4.3</td>
<td>1982</td>
</tr>
<tr>
<td>Cameroon</td>
<td>2.8</td>
<td>-0.1</td>
<td>-2.9</td>
<td>-3.9</td>
<td>1984</td>
</tr>
<tr>
<td>Argentina</td>
<td>-1.0</td>
<td>-2.9</td>
<td>-1.9</td>
<td>-4.5</td>
<td>1982</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>11.3</td>
<td>11.2</td>
<td>-0.2</td>
<td>-9.4</td>
<td>1984</td>
</tr>
<tr>
<td>Pakistan</td>
<td>10.9</td>
<td>10.8</td>
<td>-0.1</td>
<td>-3.2</td>
<td>1987</td>
</tr>
<tr>
<td>Colombia</td>
<td>0.4</td>
<td>1.1</td>
<td>0.7</td>
<td>-5.3</td>
<td>1986</td>
</tr>
<tr>
<td>India</td>
<td>1.7</td>
<td>2.7</td>
<td>1.0</td>
<td>-0.5</td>
<td>1982</td>
</tr>
<tr>
<td>Indonesia</td>
<td>-1.1</td>
<td>0.4</td>
<td>1.4</td>
<td>-6.0</td>
<td>1984</td>
</tr>
</tbody>
</table>

Note: Resource transfer equals current account deficit minus interest payments plus remittances. The countries in italics rescheduled their debts during 1982-88. Minus sign indicates outward transfer. Reduction in inward resource transfer is the difference in inward resource transfers from 1977-82 to 1983-88. Negative sign represents reductions in inward transfer or shift to outward transfer.

Source: LCCR, table 5.1.

1960s also had low inflation during the 1980s, having gone through an inflationary period or two in the meantime (see table 9). The marked exceptions among our countries were Costa Rica, Mexico, Nigeria, and Turkey, all of which shifted from low to moderate or high inflation. Argentina and Brazil, high inflation countries during the 1960s, saw their inflation accelerate to hyper-inflationary rates by the late 1980s. Argentina in 1991 introduced a new monetary and fiscal regime that reduced that country's inflation drastically and held out some prospect for keeping it low. Costa Rica and Mexico also had reduced their inflation rates below ten percent by 1993.

Table 10 indicates possible reasons why some countries became deeply troubled in the early 1980s, and others did not. Countries that rescheduled their debt, and generally had low growth and often high inflation, did not generally have a worse condition in 1979 or a bigger
Table 9. Inflation Rates and Bubbles, 1960–89
(annual average CPI inflation rate)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>22.9</td>
<td>35.6</td>
<td>313.4b</td>
<td>238.7</td>
<td>123.3</td>
<td>755.3</td>
<td>3,079.8j</td>
</tr>
<tr>
<td>Brazil</td>
<td>45.9</td>
<td>19.7</td>
<td>28.2c</td>
<td>44.3</td>
<td>95.4</td>
<td>415.7</td>
<td>1,287.0l</td>
</tr>
<tr>
<td>Cameroon</td>
<td>2.0a</td>
<td>6.0</td>
<td>17.2e</td>
<td>10.9</td>
<td>14.9g</td>
<td>7.4</td>
<td>4.3</td>
</tr>
<tr>
<td>Chile</td>
<td>25.1</td>
<td>42.4</td>
<td>413.7</td>
<td>27.4h</td>
<td>21.3</td>
<td>15.9</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>11.2</td>
<td>9.8</td>
<td>22.7</td>
<td>23.9</td>
<td>26.2</td>
<td>22.3</td>
<td>27.0</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2.0</td>
<td>4.1</td>
<td>20.9</td>
<td>5.7</td>
<td>17.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>3.4a</td>
<td>2.7</td>
<td>17.4e</td>
<td>17.3</td>
<td>10.3</td>
<td>4.0</td>
<td>4.1</td>
</tr>
<tr>
<td>India</td>
<td>6.0</td>
<td>4.9</td>
<td>22.8d</td>
<td>2.4</td>
<td>12.2h</td>
<td>8.4</td>
<td>7.8</td>
</tr>
<tr>
<td>Indonesia</td>
<td>100.6</td>
<td>7.7</td>
<td>35.8d</td>
<td>13.8</td>
<td>17.1i</td>
<td>8.1</td>
<td>7.2</td>
</tr>
<tr>
<td>Kenya</td>
<td>1.8</td>
<td>3.9</td>
<td>18.5c</td>
<td>12.8</td>
<td>15.4</td>
<td>8.9</td>
<td>9.1</td>
</tr>
<tr>
<td>Korea, Republic of</td>
<td>12.0</td>
<td>13.7</td>
<td>24.8c</td>
<td>14.6</td>
<td>25.0h</td>
<td>3.8</td>
<td>6.4</td>
</tr>
<tr>
<td>Mexico</td>
<td>2.7</td>
<td>5.2</td>
<td>17.0</td>
<td>20.1</td>
<td>80.3h</td>
<td>82.5</td>
<td>20.0l</td>
</tr>
<tr>
<td>Morocco</td>
<td>2.5</td>
<td>3.1</td>
<td>17.6c</td>
<td>9.8</td>
<td>10.8</td>
<td>6.2</td>
<td>2.8</td>
</tr>
<tr>
<td>Nigeria</td>
<td>3.5</td>
<td>11.1</td>
<td>29.1b</td>
<td>17.9</td>
<td>20.8k</td>
<td>27.5</td>
<td>52.5</td>
</tr>
<tr>
<td>Pakistan</td>
<td>3.7</td>
<td>5.1</td>
<td>23.5</td>
<td>7.9</td>
<td>11.9h</td>
<td>6.2</td>
<td>8.3</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>2.2</td>
<td>5.0</td>
<td>11.0d</td>
<td>6.4</td>
<td>22.1h</td>
<td>10.5</td>
<td>12.8</td>
</tr>
<tr>
<td>Thailand</td>
<td>2.2</td>
<td>1.7</td>
<td>19.9d</td>
<td>7.4</td>
<td>16.2h</td>
<td>2.9</td>
<td>4.6</td>
</tr>
<tr>
<td>Turkey</td>
<td>3.5</td>
<td>11.5</td>
<td>16.8</td>
<td>32.1</td>
<td>110.2l</td>
<td>48.1</td>
<td>69.3</td>
</tr>
</tbody>
</table>


Source: LCCR, table 6.1.
Table 10. Disequilibrium Factors

<table>
<thead>
<tr>
<th>Country</th>
<th>Bad start</th>
<th>Big bad shock</th>
<th>Inaction</th>
<th>Recession 1980–82</th>
<th>Recession 1980–84</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Troubled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Brazil</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Chile</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Y</td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Mexico</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Morocco</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N&lt;sup&gt;b&lt;/sup&gt;</td>
<td>Y</td>
</tr>
<tr>
<td>Nigeria</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td><strong>Intermediate</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>N</td>
<td>N</td>
<td>Y&lt;sup&gt;d&lt;/sup&gt;</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Kenya</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td><strong>Untroubled</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cameroon</td>
<td>N</td>
<td>Y&lt;sup&gt;c&lt;/sup&gt;</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>India</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>Indonesia</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Korea, Rep. of</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y&lt;sup&gt;e&lt;/sup&gt;</td>
</tr>
<tr>
<td>Pakistan</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Thailand</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Turkey</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
</tbody>
</table>

Note: Whether or not a country could be characterized by the title of the column heading is indicated by a Y or N in the appropriate cell. Bad start—current account deficit/GDP > 5.6% in 1979. Big shock—total negative effect/GDP > –4.3% in 1979–81 (see table 5). Inaction—see LCCR text. Lack of fiscal control—see LCCR text. Recession—actual fall in annual GDP. Real exchange rate appreciation—percentage appreciation of the real exchange rate from 1979(1) to 1982(2) > 15%.

a. These countries all had periods of rapid real appreciation. In Argentina, there was a huge appreciation from 1978(1) to 1981(1), followed by a fall back to the levels of 1978. In Brazil the real exchange rate fell from 1978(1) to 1980(1), but then rose by 45% to 1982(3). In Costa Rica, the real exchange rate appreciated from 1978(1) to 1980(4), before falling back to 1978 levels.

b. The lack of real appreciation in the period 1979–82 does not imply that the currency was not overvalued during that period. In the case of Morocco our author argues that the dirham was overvalued relative to 1970, taken to be an equilibrium year for the exchange rate.

c. In Cameroon the terms of trade shock was offset by a rising volume of oil exports.

d. Fiscal stimulus until 1984, at cost of worsening external position.

e. In 1980 due to poor harvest.

Source: LCCR, table 4.4, modified slightly in light of new information.
negative shock than countries that performed much better. Rather, the
differences lie largely in the speed with which they reacted to adverse
developments and in the policies they pursued, to which we now turn.

Macroeconomic Policy

Clearly there is a wide range of experience among our eighteen coun-
tries, even though they were all part of the same world economy and
to varying degrees were buffeted by the same shocks and offered the
same opportunities. Why did experience vary so much from country to
country? Was it due entirely to differences in circumstance, or did dif-
fferences in policy play an important role?

It is difficult to avoid the judgment that differences in policy played
the major role in determining performance. It is true that countries dif-
fered in their circumstances, and in particular in the magnitude of the
shocks that they experienced. But surprisingly we found no correlation
between the magnitude of the shocks and subsequent economic per-
formance, measuring the latter by growth in per capita income during
the 1980s and by rates of inflation. Even more surprising, there is no
correlation between economic performance and the sign of the shock:
countries that experienced positive external shocks—oil-exporting
countries in the mid-1970s and early 1980s, coffee-exporting countries
in the late 1970s—did not, on average, have superior performance
compared with countries experiencing negative shocks. The potential
benefits from positive shocks were too often squandered. What is the
possible explanation for this astonishing finding?

The answer seems to be that a sharp rise in export earnings causes a
kind of euphoria in government and perhaps also in private circles.
This euphoria weakens the normal financial disciplines and entices
government agencies and enterprises to go on a spending spree. The
extent of the euphoria varies from country to country, with some coun-
tries, Nigeria in 1979–80 for example, essentially having lost central
budgetary control for a period. State enterprises involved in the export
boom, Pertamina in Indonesia in 1974, for example, and Pemex in
Mexico in 1980–81, are especially difficult to control. Even when bud-
getary control remains the government may take the view, or behave
as if it takes the view, that the improvement in export earnings is
permanent rather than temporary, and it will budget accordingly. This
seems to have occurred following the 1976–77 coffee boom in Costa
Rica, Côte d'Ivoire, and Kenya. During this time recurring public
expenditures were increased in response to enlarged revenues that
turned out to be temporary and should have been known to be tempo-
rary. Other countries, however, managed to maintain budgetary disci-
pline in the face of an export boom. The Cameroon government adopted the simple expedient, not easily replicated elsewhere, of keeping its oil export revenues a secret and sequestering most of them abroad. This way they entered neither government revenues nor the domestic income stream.

So there is clearly a risk that an export boom, leading to higher government revenues, will create a euphoric optimism about future revenues and slacken budgetary discipline over the ever-present pressures to enlarge public spending. Long desired investment plans may be brought forward and implemented with little or no serious analysis of the likely returns. When revenues drop, the government is faced with the prospect of replacing them or cutting the recently increased expenditures, both of which are politically difficult. Cuts tend to be concentrated on investments, which are discrete and do not involve commitments of indefinite duration to employees as operating programs do. Governments under these circumstances are likely to postpone the difficult decisions if they can, and cover their deficits by borrowing abroad.

Growing Fiscal Deficits

Government expenditures rose in most countries over the 1970s, and more rapidly than revenues. As a result, budget deficits for all nonoil developing countries grew by 2.8 percent of GDP, from 3.5 percent in 1972 to 6.3 percent in 1982; in the industrialized countries deficits grew even more, by 3.2 percent of GDP. Over the subsequent five years from 1982 to 1987 deficits declined sharply in the industrialized countries but continued to rise in developing countries as expenditures rose slightly and revenues declined slightly.

Deficits must be financed, either by borrowing or (temporarily) by drawing down cash balances. Borrowing can be drawn from foreigners, public or private; or from domestic lenders, nonbanks or banks; and among banks, from commercial banks or from the central bank. It is noteworthy that in 1980, a year in which external funding was generally available, only four of our countries, Côte d'Ivoire, Morocco, Indonesia, and Kenya in order of relative size of external borrowing, financed more than half of their central government budget deficits externally. Even Sri Lanka, with its huge deficit, financed only a quarter of it abroad.

There was very little direct external borrowing by the federal governments of Argentina, Brazil, and Mexico, countries that subsequently became the three largest public debtors. Those countries later became large debtors because they had given guarantees on borrowing by state enterprises (SOEs) and because they assumed large amounts of private debt during the large devaluations and debt crises after 1982.
Indeed, SOEs were major sources of credit expansion in some of our countries, sometimes with direct access to foreign funds or to the central bank, and not always under close financial control (Argentina, Brazil, Costa Rica, Mexico, Turkey). In some federal countries state or provincial governments were also a source of external borrowing (Argentina, Brazil, Nigeria).

The remainder had to be borrowed from domestic sources. Financial markets are largely nonexistent in most developing countries. (Brazil and Mexico were the exceptions during much of our period.) But that did not stop them borrowing from nonbank financial institutions, such as savings banks, insurance companies, pension funds, and specialized lending agencies. Thus, a substantial fraction of government obligations are held by the nonbank public, especially in Costa Rica, Pakistan, and Sri Lanka, among our countries.

At the margin, however, almost all governments must turn to the banking system for incremental financing of budget deficits that cannot be financed overseas. This financing is sometimes done almost exclusively by the central bank, as in Mexico, Turkey, and Indonesia; sometimes, as in Korea and Thailand, it is done mainly through deposit money banks (DMBs), which in turn have access to the central bank. Such financing of course is inflationary, except insofar as the banks reduce their lending to private borrowers correspondingly, or output can grow sufficiently to satisfy the increased demand.

**Increasing Debt Burden**

Government borrowing accumulates over time as outstanding debt, which can come to represent a substantial charge on the budget. Interest payments for nonoil developing countries as a group rose from 7 percent of total central government expenditure in 1977 to 10 percent in 1982 and further to nearly 18 percent in 1987. Amortization of past debt, insofar as it could not be refinanced, increased the burden further. A budget deficit is sustainable only if there is some prospect that it can be financed in the future as well as in the current period. The long-run dynamics of budget deficits, which are all but universally ignored in the budgeting process, are such that the growth of future revenues must exceed the average interest rate paid on outstanding debt so long as the government is running a primary deficit (that is, a deficit exclusive of interest payments).

The notion of primary deficit is especially useful in a highly inflationary environment, where some portion of interest payments in effect amortizes the debt, since a given nominal debt is declining in value in real terms. Amortization is present both for external debt and for internal debt. It is especially important for internal debt willingly held by the public, such that holders will wish to preserve the real val-
ue of their claims on the government, and therefore will willingly rein-
vest the relevant portion of their interest earnings. In most of our high
inflation countries, however, domestic government debt was compul-
sorily acquired, for example, by financial institutions or by pension
funds. Such holders of debt will, if possible, allow the real value of
their claims to erode with inflation, preferring investments in other as-
sets. Under these circumstances, the inflation-corrected deficit under-
states the financing problem of the government.

The notion of the primary deficit has another value as well. To the
extent that government debt is held by foreigners, or by institutions
(such as pension funds or life insurance companies) whose current dis-
bursements are unrelated to their current earnings, interest payments
by the government do not have the expansionary impact that other ex-
penditures do. In developed countries where government bonds are
widely held by the public, interest payments by the government in-
crease the effective purchasing power of the public. But in many de-
veloping countries the primary deficit may give a better measure of the
impact of government spending on the economy.

Although overall budget deficits on average were virtually un-
changed during 1982–87, primary budget deficits declined dramatical-
ly, the difference being the sharp relative increase in interest
payments, both to foreigners and to domestic holders of government
debt (see table 7 and LCCR, table 10.11, for the rise in interest pay-
ments). Indeed, by 1987 half of our countries ran primary surpluses.
The primary deficits grew significantly only for Brazil, Cameroon,
Costa Rica, and Pakistan. So the mid-1980s was a period of general
budgetary retrenchment—the inevitable reaction to a crisis of exces-
sive spending.

External debt poses another problem. Not only must future revenue
be increased to service the debt, but in effect the revenue must be
raised in foreign currency, since the debt is overwhelmingly denomi-
nated in U.S. dollars or another foreign currency. A few governments
enjoy direct ownership of exportable products such as petroleum or
other minerals; but most governments are unable to raise revenues di-
rectly in foreign currency. Instead, insofar as they can not borrow fur-
ther abroad they must buy the foreign currency directly or indirectly
from exporters. Large currency devaluations can play havoc with the
budget, since the local-currency interest payments on foreign debt
must rise abruptly by the amount of the devaluation. Even gradual
depreciations of the currency, as under a crawling peg regime, increase
external debt service requirements in terms of local currency; and
when these depreciations go beyond merely compensating for domes-
tic inflation, they raise the budgetary burden of external debt servicing
in real terms.
As noted above, most central governments did not borrow extensively abroad. We found, however, that extensive external borrowing was often done by SOEs, both nonfinancial and financial, and by private firms. Debt problems in many countries arose because these borrowers' debts were often guaranteed by the government or by the central bank. So if a currency devaluation led to a negative cash flow for the domestic enterprise, the government had to help resolve the problem. Typically, the external debts were directly or indirectly assumed by the central bank, which then ran the losses associated with application of the new exchange rate to debt servicing. Central bank deficits became especially large in Chile, Costa Rica, and Argentina and added to the fiscal pressures created by the budget deficits.

Among our countries, eleven experienced increases in the ratio of public or publicly guaranteed external debt to GDP in excess of ten percentage points between the end of 1979 and the end of 1982 (table 7), an astounding rate of increase that was clearly not sustainable in the long run. The increases were due partly to extensive borrowing, partly to government absorption of private external debt, but partly also to currency depreciation, which raised the value of external debt relative to GDP.

**Monetary Policy, Fiscal Policy, and Inflation**

Since on average about half of budget deficits in developing countries are financed by the banking system, there is a close connection between budgetary policy and monetary policy. A budget deficit leads to an expansion of the money supply. The typical developing country has a rapidly growing demand for money as the economy becomes more monetized and as households and firms increasingly hold assets in financial form. The rise in demand for money—more rapid than the growth in GDP, unless discouraged by high inflation—permits governments to earn substantial seigniorage, the difference between the face value of money and the cost of issuing it. Monetary expansion at a rate greater than this growing demand in an economy fully using its resources is inflationary. A rise in prices reduces the real value of outstanding money balances, which the public will want to replenish, at least in part. That desire leads to more seigniorage, this additional portion being an "inflation tax."

Governments can command real resources by inflating, and thereby inducing the public to spend less on goods and services, in order to replenish their cash balances in real terms. This process acts very much like a tax on cash balances. On average our eighteen countries raised 2.9 percent of GDP in seigniorage during the late 1970s.

The key point for stabilization policy is that the inflation tax is an important source of real resources for governments. A reduction in infla-
tion therefore requires that government expenditures must be cut correspondingly, or that alternative sources of revenue be found. Thus, reducing average inflation may be costly in terms of public finance. (Average seigniorage for our countries fell to 2.1 percent of GDP in the late 1980s.) This fiscal inhibition to reducing the average rate of inflation does not, of course, bear on the desirability of reducing fluctuations in inflation.

It has been noted that on average inflation accelerated in developing countries during the 1980s but that the diversity of experience was great. We found it useful to distinguish three types of inflation according to their duration and to some extent their motivation. Adjustment inflation shows a sharp increase followed by a decline in the rate of inflation (in other words, a once-for-all increase in the price level); seigniorage inflation is where the government relies on the inflation tax as a source of revenue; and spiral inflation is where wages and other factor costs adjust fully to the rise in prices. In the last case, inflation may accelerate over time, perhaps even reaching hyper-inflation (Conventionally defined as inflation over 100 percent a year or 47 percent a month, reached by Argentina and Brazil among other countries), and induce a sharp reduction in the demand for real money balances.

Adjustment inflation was common during the 1970s, as can be seen in table 9. Thirteen countries experienced a sharp increase in inflation, followed by a decline, during 1973-75, and ten during 1980-82. These were the periods of large increases in crude oil prices. Inflation contributes to and eases the adjustment to the new circumstances (here, much higher energy prices), because it is difficult and often costly in modern economies to reduce the general level of prices. While inflationary bubbles are probably inevitable in the presence of external shocks, they need not become spiral inflation. With proper management, the inflation will be temporary; once the adjustment has occurred, prices need not continue to rise. Several countries succeeded in restoring single digit inflation after the two-digit inflation of the mid-1970s, and even more after the inflation bubble of the early 1980s. Some countries (Argentina, Colombia, Mexico, for none of which was the first oil shock significant) found themselves at a new level of inflation after the shock, and still others (Brazil, Argentina after the second oil shock, Turkey) found themselves with accelerating inflation. But these cases of extremely high inflation were exceptional, not typical.

Inflation is difficult to control when it gets built into public expectations; and where it provides significant revenue to the government through seigniorage, it is difficult to reduce without finding an alternative source of revenue, as noted above. Spiral inflation, which might be triggered by a currency devaluation, arises when the competing claims on a country's output exceed its output, and institutional arrangements do not prevent the central bank from financing one or more of
the parties whose claims exceed their incomes, usually government, sometimes enterprises. Inflation reconciles the conflicting claims \textit{ex post} by reducing the real values of outstanding assets and liabilities and by reducing the real value of spending by some parties.

An excess demand for output can be satisfied by borrowing abroad to pay for imports, and that recourse was taken by many countries when their terms of trade deteriorated during the 1970s. When foreign credit became much scarcer following the debt crisis of the early 1980s, they had to face the need to reduce demand to fit total production. Some countries succeeded in reducing budget deficits, in practice a necessary component of stabilization programs, both to reduce demand and to influence expectations favorably. Others instead replaced foreign credit with credit from the banking system, and this substitution increased the inflation rate. In this respect inflationary pressures were a direct consequence of the debt crisis and the associated decline in net inflow of resources, which as shown in table 8 was significant for several countries.

Inflation, or at least moderate inflation, did not seem to have an adverse effect on growth. But high inflation is disruptive of both economic and social relations. Once high inflation takes hold it is difficult to reduce without a real reduction in demand. A reduction in demand often produces a recession and a rise in unemployment. This is particularly so if real wages rise as a result of formal or informal indexation based on lagged inflation or as a result of a devaluation associated with the stabilization program. In practice, successful stabilization programs have generally involved conscious government effort to restrain money wage increases; in some countries such “heterodox” measures may be necessary to avoid growing unemployment during a stabilization program, which if uncontrolled would result in political backlash against the program. Selected price controls may in turn be necessary to achieve wage restraint, but they create serious allocative problems; if associated with government enterprises, as they often are, they lead to increased subsidies (or reduced profits) and thereby work against the required fiscal restraint.

\textit{Exchange Rate and Trade Policies}

In pursuit of price stabilization several countries have fixed their exchange rate, either directly to another currency or to a pre-announced “tablita” of devaluations at rates lower than the rate of inflation. The record has been mixed. Two noteworthy cases were Argentina and Chile in the late 1970s; both failed, although for quite different reasons. Argentina failed to exercise fiscal restraint, leading to capital outflow and a payments crisis. Chile ran a surplus in its budget and experienced substantial \textit{inflows} of capital for a while, but suffered
from a strong rise in real wages because of lagged indexation, followed by a sharp worsening in its terms of trade, which also created a payments crisis.

On the other hand, Mexico's exchange rate stabilization in the late 1980s and Argentina's in 1991, both combined with severe fiscal restraint and other measures, may have played an important role in altering expectations about future inflation in those countries.

The move to generalized floating among major currencies in 1973 compelled developing countries to choose between letting their currencies float or fixing them to one or another of the major currencies. Most chose initially to fix their exchange rates, usually to the U.S. dollar but sometimes to another currency or to a basket of currencies. A few countries, notably Brazil and Colombia, had already adopted a crawling peg, fixed from day to day but changed frequently. The terms of trade shocks of the mid-1970s, and again in the early 1980s, led many countries on fixed exchange rates to devalue, and led several to shift to a regime of managed floating exchange rates. By the end of the 1980s most of our countries had adopted more flexibility in the management of their exchange rates and on the whole seemed to benefit from it. The most important exceptions were Cameroon and Côte d'Ivoire; these were in multinational currency unions with their currency, the CFA franc, fixed to the French franc and hence, loosely, to all the currencies in the European Monetary system. Both countries were suffering in the early 1990s, partly because their export products were not fully competitive in the world market, and indeed the CFA franc was devalued for the first time in early 1994. Table 11 reports the major devaluations and changes in exchange rate regime in the eighteen countries.

Fixing the currency to a relatively stable major currency, if it can be done credibly, has the advantage of creating expectations within the country that inflation will be kept low by virtue of the exchange rate commitment. But it has two important disadvantages. First, developing countries have been, and no doubt will continue to be, subject to substantial shocks in their terms of trade, or to other major economic disturbances. Adjustment to these shocks will require changes in factor prices. Unless wages and other factor prices are quite flexible, these shocks will lead to unemployment and economic distress. Allowing the exchange rate to change will not eliminate the pain, but will ease the process of adjustment. Real wages appear to be quite flexible in developing countries; in particular, currency devaluation does not get rapidly translated into corresponding increases in money wages. Thus, nominal depreciation generally leads to real depreciation, and that stimulates exports.

The experience of our countries suggests that flexible exchange rates need not lead to higher inflation. Indonesia, Korea, and Morocco all switched from fixed exchange rates in the 1970s to flexible rates in the 1980s, yet managed to lower their rates of inflation (LCCR, table 8.5).
Table 11. Devaluations and Regime Changes in Sixteen Countries

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameroon</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>Colombia</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>(1985-86)</td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>India</td>
<td>(1966)</td>
<td>R</td>
<td></td>
<td>(1985-88)</td>
</tr>
<tr>
<td>Morocco</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>R (1984-85)</td>
</tr>
<tr>
<td>Nigeria</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>R (1985-88)</td>
</tr>
<tr>
<td>Thailand</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>R (1984)</td>
</tr>
</tbody>
</table>

Note: R is regime change during period at heading; from fixed to flexible, or opposite.
Dates of nominal devaluations in the first three periods (if more than 10 percent) and of real devaluations in last period.
a. Fixed rate regime at end of period. All others have flexible rate.
b. Tablita at end of period.
Source: LCCR, table 8.2.

Second, over the years many developing countries have adopted substantial restrictions against imports, which remain high even after the import liberalizations of the 1980s. Further liberalization will almost surely require currency devaluation to stimulate exports enough to cover the enlarged import bill. Fixing the exchange rate makes currency depreciation more difficult.

Historically, countries often responded to balance-of-payments crises by imposing restrictions on imports. We found that such restrictions usually did not solve the payments problem, and they often starved domestic production of critical inputs or parts, leading to a decline in production. Trade liberalization in such cases is highly desirable to permit increases in production and to increase the flexibility of economies to respond to unforeseen disturbances.

Political Economy and Performance

It is sometimes suggested that difficult economic reforms or stabilization, especially tight fiscal discipline, can only be carried out by authoritarian governments. The experience of our eighteen countries does not support this view. The form of government—democratic or
authoritarian—did not determine success or failure in macroeconomic policy. It is true that some of the most successful economies, notably Korea and Indonesia, were authoritarian; but some were some of the least successful, such as Argentina in the late 1970s, Côte d'Ivoire, and Nigeria. Transitions to democratic rule may create or intensify macroeconomic problems as in Argentina and Brazil in the 1980s but not, however, in Chile in 1990. Both authoritarian Pakistan and democratic India followed conservative macroeconomic policies. Sound or cautious policies can be pursued under many forms of government. Table 12 organizes our countries according to whether they were economically successful, measured by per capita economic growth during the 1980s; whether they had stable or unstable governments during the late 1970s and early 1980s; and whether their citizens enjoyed a high or a low degree of civil liberty, as measured by Freedom House. There is no evident correlation between economic performance and form of government or degree of authoritarianism.

It is also clear that tradition and history—notably traumatic experiences of chaos or inflation—influence current attitudes of elites and the general public. Some countries have long established traditions of fiscal conservatism. In others, to simplify, things may have to get worse—possibly very bad indeed—before they get better. The stabilization success of Mexico after 1988 and the possible success of Argentina since 1991 seem to bear this out. But there is no real policy lesson here, since one would not advocate creating chaos or a hyperinflation in order to

<table>
<thead>
<tr>
<th>Economic performance</th>
<th>Stable</th>
<th>Unstable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India\textsuperscript{a}</td>
<td>3.0</td>
<td>Thailand\textsuperscript{a}</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3.3</td>
<td>Turkey\textsuperscript{a}</td>
</tr>
<tr>
<td>Korea</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>Pakistan</td>
<td>2.9</td>
<td></td>
</tr>
<tr>
<td>Sri Lanka\textsuperscript{a}</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil\textsuperscript{a}</td>
<td>0.2</td>
<td>Argentina\textsuperscript{a}</td>
</tr>
<tr>
<td>Cameroon</td>
<td>-0.8</td>
<td>Nigeria</td>
</tr>
<tr>
<td>Costa Rica\textsuperscript{a}</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Côte d'Ivoire</td>
<td>-3.2</td>
<td></td>
</tr>
<tr>
<td>Kenya</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Mexico\textsuperscript{a}</td>
<td>-1.0</td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{a} Countries in upper half of Freedom House list.

\textit{Note:} Trend annual growth rate in GDP per capita over the period 1980-1990 follows each country.

\textit{Source:} LCCR, table 12.2.
teach the community the need for macroeconomic discipline or common sense. Those who determine government policy must be convinced of the correctness of responsible macroeconomic policies. In a democracy the relevant group may be the larger community or a limited elite, and in an authoritarian state it may be just one or few individuals or perhaps influential members of the military. If high inflation is to be avoided, they must believe that inflation is undesirable and they must understand that financing budget deficits by monetization is likely to be inflationary; they must also understand that continuous debt-financing, whether at home or abroad, will lead to trouble eventually if the debt grows too rapidly. In short, they must appreciate the need for financial control.

In those countries where macroeconomic policy has, on the whole, been a success, there have usually been particular individuals in high government positions—above all the Ministry of Finance—who have been well qualified and who have been able to carry weight with the ultimate decision makers. They have been the actual makers and implementors of policy. In recent years these have often been professional economists. Such persons are increasingly available in many countries. Whether they hold high positions or not, their ability to persuade and to carry weight has been crucial. This has, among other things, depended on tradition, historical experiences, and the strength of pressure groups. In authoritarian states the personal views of the key individuals have obviously been decisive.

A Brief Postscript

History does not stop with the publication of a volume. A number of important events have occurred since the events reported here. Some have already been mentioned: Argentina in 1991 introduced a significant new stabilization program, accompanied for a change by tight fiscal discipline. It was still holding three years later. The CFA franc was devalued by 50 percent in early 1994, affecting both Cameroon and Côte d'Ivoire among our countries. The latter country also embarked on serious structural reforms in 1991. India in 1991 introduced a program of liberalization of trade, and of industrial and financial controls. Colombia, Korea, and Mexico continued their previous programs of trade liberalization, and Mexico joined a free trade area with Canada and the United States in early 1994.

Turkey, except for its high inflation rate a moderately good performer during the 1980s, ran into a serious fiscal crisis in 1994. After a bold run at liberalization and stabilization by President Collor in 1990, Brazil's inflation resumed its acceleration, reaching over 2000 percent dur-
Another attempt at stabilization occurred in mid-1994. Other countries generally continued on the courses that had been established by the late 1980s.

Policy Advice

We can sum up our policy advice, derived from our findings in this study, in nine injunctions to policymakers:

1) Assert firm overall budgetary control and budgetary accountability, including control over access of governmental entities or agencies to the central bank and to international capital markets.

2) Be aware of the implications for the future of both external and domestic government debt; relate borrowing to returns on investment, to borrowing rates, and to the prospective growth of exports and of government revenues.

3) Be sensitive to the maturity of debt, both external and internal; maintain creditworthiness.

4) Pursuit of the first three points will normally permit the use of monetary and fiscal policy to help stabilize nonagricultural output around its long-run trend.

5) Resist euphoria when export prices rise exceptionally, new resources are discovered, or new borrowing opportunities open.

6) Avoid jerky movements in the real exchange rate and thus periods of over-valuation, which can have adverse effects on tradable goods industries. It is generally better to have a flexible exchange rate regime, with frequent adjustments. Do not commit to a fixed exchange rate if there are still extensive trade restrictions.

7) Avoid using import controls, except in extremis, and then remove them as soon as macroeconomic circumstances permit; if pursued credibly, this stance will enhance the effectiveness of import controls on the rare occasions they are used.

8) Avoid building rigidities into the economy, such as persistent import controls or extensive wage indexation.

9) Maintain flexibility in policy, within an articulated medium-term framework, and in particular correct mistakes quickly.
Notes

1. By Ian M.D. Little, Richard N. Cooper, W. Max Corden, and Sarath Rajapatirana, Oxford University Press, December 1993, hereafter LCCR. I am grateful to my co-authors for comments on this summary. Several of the first phase studies have also been published, or are in the process of being published.

2. Korea was added to the original list, making eighteen countries in all, because much material was available and Cooper was working independently on a book on Korea.

3. Table 5 shows that Cameroon experienced an adverse movement in its terms of trade in 1979–81. This is seriously misleading. Oil, with rapidly rising prices from early 1979, was a new export for the country, while the statistics reflect export-weighting of several years earlier. All the statistics reported here should be interpreted as rough indicators rather than accurate measurements.

4. Two-thirds of this extraordinary increase was caused by the 1981 devaluation of the colon, which reduced GDP in dollar terms without reducing the external debt. The domestic burden of servicing external debt rises correspondingly following currency devaluation.

5. Three-fourths of the sharp increase in Chile’s debt service, relative to GDP, was due to a devaluation of the peso in 1982.

6. Globally, net new private capital flows to developing countries fell from $74 billion in 1981, the peak year, to a low of $27 billion by 1986.

7. Indeed, too little serious cost-benefit analysis of major public investments is undertaken even in normal times.

8. This formulation treats borrowing from the central bank as debt, on which interest should in principle be paid, even though under favorable circumstances most of that will be returned to the government in the form of earnings on seigniorage, discussed below. In fact, most governments do not pay interest on their debts to the central bank, so that portion of the debt should be excluded from this discussion.

9. The notable exception was Brazil, where domestic debt was indexed, first (roughly) to the rate of inflation, then after 1982 to the exchange rate, and a substantial portion of the government deficit was financed by sales of securities to the nonbank public. In this case the notion of operational (inflation-corrected) deficit made some sense, as the Brazilian government persuaded officials of the International Monetary Fund.

10. Where oil or other export revenues accrue directly to the government, by the same token, currency devaluation results in a proportionate increase in domestic currency revenue.

11. Not reported in table 12 are three countries with mixed performance over the 1980s: Colombia (with growth in per capita income of 1.1 percent a year), a stable democracy; Morocco (1.9 percent), a stable authoritarian country; and Chile (1.4 percent), authoritarian until 1990. For use of Freedom House ranking, see LCCR, p. 363.
World Bank Publications Order Coupon

CUSTOMERS IN THE UNITED STATES:
Complete this coupon and return to
The World Bank
Box 7247-8619
Philadelphia, PA 19170-8619
U.S.A.

Charge by credit card by calling (202) 473-1155
or fax this completed order coupon to (202) 676-0581.

CUSTOMERS OUTSIDE THE UNITED STATES:
Contact your local World Bank Publications
distributor for information on prices in local
currency and payment terms. (See opposite page
for a complete list of distributors.) If no distributor
is listed for your country, use this order form and
return it to the U.S. address. Orders that are sent
to the U.S. address from countries with
distributors will be returned to the customer.

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Title</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boom, Crisis, and Adjustment: The Macroeconomic Experience of Developing Countries (Full Text)</td>
<td>$42.99</td>
<td></td>
</tr>
</tbody>
</table>

Subtotal US$: __________
Postage and handling* US$: __________
Total US$: __________

* If a purchase order is used, actual postage will be charged. If payment is by check or credit card, postage and handling charges are US$5.00 per order. For air mail delivery outside the U.S., include US$8.00 for the first item and US$6.00 for each additional item.

CHECK METHOD OF PAYMENT

☐ Enclosed is my check payable to The World Bank.

☐ Charge my  ☐ VISA  ☐ MasterCard  ☐ American Express

Credit card account number __________________________
Expiration date __________________________ Signature __________________________

☐ Bill me. (Institutional customers only. Purchase order must be included.)

PLEASE PRINT CLEARLY

Name ____________________________________________

Firm ____________________________________________

Address ____________________________________________

City __________________________ State ____________ Postal code ____________

Country __________________________ Telephone __________________________
Distributors of World Bank Publications

ARGENTINA
Carlos Hirsch SRL
Calle Gurruchaga 230
San Telmo 1120
Buenos Aires

AUSTRALIA
Paula New
Crestomere House
55/57 Kooyong Rd
Malvern East
Vic 3145

BANGLADESH
Micro Industry Development Assistance Society (MIDAS)
House 5, 7th Floor
Dhanmondi 30
Dhaka 1000

BELGIUM
Jean De Lenee
Av. du Rat 202
1050 Brussels

BRAZIL
Publicacoes Tecnicas Inter-Americanas Ltda.
Rua Primeiro de Maio, 201
01409 Sao Paulo, SP

CANADA
Le Diffuseur
15A Boul. de Montagne
Beaucheville, Quebec
J4B 5B6

CHINA
China Financial & Economic Publishing House
8, De 30, D, Dong He
Beijing

COLOMBIA
Informasol Ltda.
Apartado Aereo 24270
Bogota D.C.

COTE DIVoire
Centre d'Information et de Diffusion Africaines (CIDEA)
01 B.P. 504
Abidjan 04 Plateau

CYPRUS
Center of Applied Research
cyprus
college
6, dimossiaros street, enagio
P.O. Box 3206
nicosia

DENMARK
Samfundshistorisk Forlag Rosenmark Allee 11
DK-1910 Frederiksberg C

DOMINICAN REPUBLIC
Editorial Tablas, C.p. Ar.
Remesal de la Juventud, Calle Karolino
Apartado de Correos 21922
Santo Domingo

EGYPT, ARAB REPUBLIC
Al Alam
Al Cairo Street
Cairo

FINLAND
Akatemia Kirjakauppa
P.O. Box 316
SF-00310 Helsinki 10

FRANCE
World Bank Publications
64, avenue d'Issy
75116 Paris

GDR
UNICOLY
UNICOLY
P.O. Box 613
Pepperkornstrasse 55
10117 Berlin

GRANADA
Pepitaciones S.A.
35, Stewart Str.
104 82 Athens

HONG KONG, MACAO
Asia Book Co. Ltd.
64-48 Wyndham Street
Winning Centre
7th Floor
Central Hong Kong

HUNGARY
Foundation for Market Economy
Dohmeshu ut 17-19
H-1117 Budapest

INDIA
Allied Publishers Private Ltd.
733 Mount Road
Madras - 600002

INDONESIA
Pt. Indra Limited
Jalan Bambang 20
P.O. Box 181
Jakarta 10220

IRAN
Koolab Publishers
P.O. Box 15975-511
Tehran

IRELAND
Government Supplies Agency
4-5 Hanover Road
Dublin 2

ISRAEL
Yemana Literature Ltd.
P.O. Box 50555
Tel Aviv 61560

ITALY
Ligur Conscriptiamente Sanitario SPA
Via Dea DI Circeo, 111
Cassino Ponte 352
31023 Venice

JAMAICA
Ian Roulfe Publishers Ltd.
236 Old Hope Road
Kingston 6

JAPAN
Eastern Book Service
Hongo 3-Chome, Bunkyo-ku
113 Tokyo

KENYA
Africa Book Service (B.A.) Ltd.
Quarantine House, Mombasa Street
P.O. Box 4245
Nairobi

KOREA, REPUBLIC OF
Korea Book Corporation
P.O. Box 662
Kwangwansan
Seoul

Kuwait Stock Book Centre
P.O. Box 34
Yacida
Seoul

MALAYSIA
University of Malaya Cooperative Bookshop, Limited
P.O. Box 1187, Jurong Postal
57900 Kuala Lumpur

MEXICO
INFOPERC
Apartado Postal 25-890
74000 Toluca, Mexico D.F.

NETHERLANDS
De Lindenhout & ZO Book Publishers
P.O. Box 332
4740 AB Helmond

NEW ZEALAND
Unicorp NZ Ltd.
Private Mail Bag 59914
Newmarket
Auckland

NIGERIA
University Press Limited
Three Crescent Buildings
Private Mail Bag 1005
Ibadan

NO RWAY
Narvassen Information Center
Book Depositories
P.O. Box 719
7503 Oslo 7

PAKISTAN
Mirza Book Agency
65, Shahbaz-Quaid-d-Azam
P.O. Box 979
Lahore 54000

PERU
Editorial Desarrollo SA
Apartado 2024
Lima 1

PHILIPPINES
International Rock Center
Suite 1703, Cipriano 10
Consolation Tower 1
Ayala Avenue, Corner H.V.
da Costa Extension
Makati, Metro Manila

POLAND
International Publishing Service
UL. Powsin 31/37
03-672 Warsaw

POUTUGAL
Univrsidade Portugal
Rua Do Carmo 70-74
1200 Lisbon

QATAR
Sahid Araba, Qatar
Jew Book Store
P.O. Box 3916
Riyadh 1171

SINGAPORE, TAIWAN,
MYANMAR, HONG KONG
Coober Asia Pacific Pte Ltd.
Golden Wheel Building
41, Kallang Paddin, 094-03
Singapore 138

SOUTH AFRICA, BOTSWANA
Fairstock Limited
University Press Southern Africa
P.O. Box 1141
Cape Town 8000

SOUTH AFRICA
Fairstock Limited
University Press Southern Africa
P.O. Box 1141
Cape Town 8000

SPAIN
Libreria Internacional AEDES
Cnel. de Castil, 301
28015 Barcelona

SWEDEN
Foreign school
Franska Folksholenetuset
Ryegrunden, 12, Box 1626
S-160 17 Stockholm

SWITZERLAND
Foreign sales
Librarie Payot
Casarna postale 3012
CH 1102 Lavaux

THAILAND
Central Department Store
306 Si Rama Road
Bangkok

TURKEY
Antiquaria Ruda,
Bardados, Dominaica,
Crenada, Guyana
Jamaica, Montserrat, St.
Kitts & Nevis, St. Lucia,
St. Vincent & Grenadines
Systematics Studies Unit
57 Water Street
Camps
74, 013, West Indies

UNITED KINGDOM
Microdial Ltd.
P.O. Box 3
Albers, Hopewell GL34 2PC
England

ZIMBABWE
Longman-Zimbabwe (Pvt.) Ltd.
Tsvant Road, Ardfenge
P.O. Box ST 125
Southern
Harare
World Bank Comparative Macroeconomic Studies

Boom, Crisis, and Adjustment: The Macroeconomic Experience of Developing Countries (Full text)

Other related titles:

Macroeconomic Policies, Crises, and Long-Term Growth in Indonesia 1965–90


Macroeconomic Policies, Crises, and Growth in Sri Lanka, 1969–90

Economic Crises and Long-Term Growth in Turkey
Customer Order Coupon

**World Bank Publications Order Coupon**

**CUSTOMERS IN THE USA:**
Complete this coupon and return to:
The World Bank
Box 7247-8619
Philadelphia, PA 19170-8619
U.S.A.

Charge by credit card by calling (202) 473-1155 or fax this completed order coupon to (202) 676-0581.

**CUSTOMERS OUTSIDE THE USA:**
Contact your local World Bank Publications distributor for information on prices in local currency and payment terms. If there is no distributor for your country, use this order form and return it to the U.S. address. Orders that are sent to the U.S. address from countries with distributors will be returned to the customer.

<table>
<thead>
<tr>
<th>Qty</th>
<th>Stock #</th>
<th>Title</th>
<th>Price</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* If a purchase order is used, actual postage will be charged. If payment is by check or credit card, postage and handling charges are US$5.00 per order. For air mail delivery outside the U.S., include US$8.00 for the first item and US$6.00 for each additional item.

**CHECK METHOD OF PAYMENT**

- Enclosed is my check payable to The World Bank.
- Charge my [ ] VISA  [ ] MasterCard  [ ] American Express

Credit card account number __________________________

Expiration date __________ Signature ____________________

- Bill me. (Institutional customers only. Purchase order must be included.)

**PLEASE PRINT CLEARLY**

Name ____________________________________________

Firm ____________________________________________

Address __________________________________________

City ______________________ State __________ Postal code __________

Country _______________________ Telephone __________