An Analysis of Developing Country Adjustment Experiences in the 1970s: Low-Income Asia

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Feather, James K.
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This paper analyzes the adjustment experience of the low-income Asian countries in the aftermath of the oil price shock and in the face of other changes in the international environment over the 1970s. Inasmuch as the region's growth in the 1970s, though dampened, was not far off past trends, and all countries will enter the 1980s with comfortable debt service levels, the concern over the developing countries' adjustment problems has not focused as much on the low-income Asia region as on other countries—such as the low-income African countries, whose drought and oil-induced problems have been a cause of great concern, or on those countries whose debt difficulties have received much concerted attention. The low-income Asian case is nonetheless interesting because it illustrates the factors which can help to mitigate the impact of external shocks such as the oil price increase or abrupt changes in the trading environment. The low-income Asian case also serves to caution that, even though in the short and medium run the impacts of the shocks may have been somewhat muted, the longer-term effects may be equally severe unless the period of respite has been used to lay the groundwork for structural adjustments. The importance of appropriate and timely policy action is thus highlighted.
The author gratefully acknowledges the contributions of the staff of the South Asia Region and the comments of her colleagues on the World Development Report Core Team. The views and errors, of course, remain her own.
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I. Introduction

The salient change in the world economy in the past decade -- to which all developing countries must adjust -- is the rise in energy prices. At the same time, there have been other changes in the world economy -- most important among them the higher rates of world inflation, evidence of creeping protectionism, and slower growth in the OECD (Organisation for Economic Co-operation and Development) countries -- an important dynamic for third world progress. It is the adjustment and response of the low-income Asian countries to these "external shocks" that is analyzed in this paper.

The concern over the adjustment problems of the developing countries has not focused as much on the low-income Asian countries as on some other country groups, notably the low-income African countries, whose problems, induced by both oil and drought in this decade, have been a cause of great concern. The low-income Asian case is nonetheless interesting as an example of the sorts of mechanisms that can help mitigate the impact of oil or other external shocks and as a caution that, even though the short-term impacts of shocks may have been somewhat muted, the longer-term effects may not be. The low-income Asian case also highlights the importance of correct policy to forestall potential adverse consequences in the longer term.

The Developing World and the Challenge of Adjustment

The adjustment challenge facing the oil-importing developing world in the past decade can be briefly -- albeit not with complete justice -- described as the challenge of effecting the long-term transfer of real resources required to bring the balance of payments of these countries into a long-term sustainable equilibrium with a minimum loss of momentum in growth and, it would be hoped, without neglect of the goals of human development and improved income distribution.
In the case of energy, for example, successful adjustment to the new energy regime will imply making the relevant changes in the productive structure and consumption patterns of the economy, so that the economy is adapted to the new relative scarcities implied by higher energy prices. This will involve investments in energy production, conservation, and a reexamination of past policies and development strategies to ensure that these policies are consonant with higher energy costs. The challenge is finding policies that bring about the necessary international transfer of resources and other adjustments without inhibiting such domestic structural change, slowing social development, or jeopardizing growth.

The transfer of resources can be achieved in a number of ways. Countries can draw out the period of adjustment, effecting the resource transfer over an extended period of time by borrowing. Capital flows in the form of concessionary inflows will similarly obviate the need for immediate domestic adjustments. Alternatively, trade policy can provide the means of adjustment by involving either export promotion or import substitution to reduce deficits. Export promotion may also include promotion of exports of services, both factor and non-factor. Finally, a constrained balance-of-payments situation may be met by a curbing of overall domestic demand and a general slowing of growth through contractionary domestic policies, in the hopes that this will, pari passu, reduce demand for imports.

Each of these options has potential pitfalls. The borrowing strategy may lead to future problems of debt management and commits the debtor country to earn higher levels of foreign exchange in the future. And unless, during the "reprieve" allowed by borrowing, the required changes
in economic structure come about, the country will be worse off than before. Foreign assistance appears the ideal buffer. Aid, however, carries with it the danger of future dependence and susceptibility to changes in the global environment, and it is not available to all countries. Export promotion may make the country more vulnerable to changes in the trading environment and may not be possible in the short run. The same is true of import substitution, which is also likely to call for higher levels of imports in the medium term. Operating on imports through a curbing of domestic demand is likely to have very high costs—the excess capacity, reduced investment, and depressed demand which are a result of such a policy may make it very difficult subsequently to restore growth and revitalize the economy. Moreover, such policies typically take their worst toll on the poorest members of society, who have the least wherewithall to defend themselves. And, if the living standards of the poorest are compressed below their already depressed standards, the country may pay dearly in the longer term, because of damage to its human resource base.

This paper will examine the impacts that the external shocks of the 1970s have had on the low-income Asian countries and their policy responses to these shocks. The organization of the paper is as follows: After briefly summarizing the low-income Asian experience, the paper presents, in Section II, some of the salient economic and other characteristics of the countries in the region. Section III describes the nature and magnitude of the external shocks that buffeted the region and draws attention to the equally important internal shocks that rocked the economies in the 1970s. The fourth section covers policy responses in the region. Conclusions are presented in Section V.
The Low-Income Asia Adjustment Experience in Brief

The low-income Asian experience is an interesting one from the point of view of adjustment and provides a stark contrast to the experience of other low-income countries, especially the African countries. In general, the low-income Asian countries adjusted well to the buffeting of the 1970s in the sense that growth did not suffer unduly and, by and large, adverse income distribution movements and damage to human resources consequently did not take place.

The growth shortfall was largest in the first half of the 1970s, when the region's GNP grew at a very slow 2.7 percent. Poor harvests in the opening years of the decade, a war and its disruptions, and external shocks were among the factors leading to this outcome. This shortfall, however, was far less than that experienced by most other low-income countries which were more vulnerable, in general, to external shocks than were the large agriculture-dominated economies of low-income Asia. The region's growth pick-up in the latter half of the decade, at 5 percent, represented more rapid progress than in the decade of the 1960s; indeed, better by a wider margin still if seen in per capita terms.

However, the countries did not emerge from the decade of the 1970s unscathed. Growth performance in the 1970s, for the region as a whole, was over one percentage point lower in the 1970s -- 3.2 percent as opposed to 4.3 percent 2/ -- than in the buoyant 1960s. As Table I.1 shows, this was true of all the region's larger countries. Growth suffered most in the early 1970s in the direct aftermath of the oil price shock.

1/ The low-income Asian region comprises the following countries: Bangladesh, Burma, India, Maldives, Nepal, Pakistan, and Sri Lanka.

2/ World Bank data.
A notable feature of the low-income Asian experience is that, the slightly dampened growth for the decade notwithstanding, there is limited evidence of a fundamental interruption of the development effort. Progress continued in many fields, most notably in agriculture but also in population control, industry, the social sectors, and in infrastructure such as power. In general, short-run exigencies did not, with few exceptions, dictate a set of retrenching, near-term policies that were entirely at variance with development objectives and that forced development to take a back seat, although clearly for most countries there was some need to cut back on investment and imports.

Among the reasons for this ability to avoid retrenchment are that for many of the low-income Asian countries other factors served to offset the impact of the principal external shock, the oil price increase, on the balance of payments. For some of the low-income Asian countries the terms of trade recovered towards the latter half of the decade (see Table III.3).
Second, workers' remittances became an important source of foreign exchange, and thus the balances of payments of the region in this roundabout way benefited from the oil shock. Moreover, before 1974, the importance of oil in the balance of payments of the low-income Asian countries (see Tables III.2 and III.3), and consequently the real income loss through the decline in the terms of trade was relatively small. Finally, because the full implication of the new price trends had not yet been fully realized, and because of these favorable external circumstances, the adjustment measures taken immediately following 1974 were not as severe as elsewhere. Thus, the domestic impact of the shock was more muted than might otherwise have been the case.

For these same reasons the problems of the 1980s are likely to be very different in magnitude from those of the 1970s. The secular as opposed to cyclical nature of the price trend is fully established, and many of the easy adjustments have taken place. Increases in oil imports from 20 percent to 50 percent of imports are so quantitatively different from the earlier initial increases of import shares that the effects become qualitatively different. The high reserve levels which were built up in 1976-78 as oil prices stabilized, and that played an important cushioning role in the late 1970s for some countries are now being drawn down. Finally, the factors of the external environment -- such as the relatively rapid growth in world trade and the generous concessional capital inflows that provided a safety valve for many of the low-income Asian countries in the 1970s -- may be less beneficial in the next decade than in the last. And as for capital flows, considerably greater commercial borrowing is feasible for some of the low-income Asian countries, but borrowing must necessarily be carefully managed to avoid future debt problems.
While the problems of the 1980s are undeniable, the fact that some progress took place on almost all fronts -- especially in agriculture and in irrigation and water management, the most important sector for these economies -- throughout the 1970s leaves the countries of low-income Asia in a relatively stronger (although by no means strong) position to face the buffeting of the 1980s than that of many other low-income developing countries.

II. Salient Features and Stylized Facts: Low-Income Asia

Low-income Asia had a population of 890 million in 1979 (for this and other basic indicators, see Table II.1). This represents some 20 percent of the world's total population. Although not the poorest region in the world, poverty is deeply entrenched in these countries, whose per capita annual income is about US$180. 1/ The region contains one major country, Bangladesh, with a per capita income of less than half this amount. Although the region is diverse in many respects, low-income Asia has an ancient history of representation as a region. The history of the countries presently comprising low-income Asia (India, Pakistan, Bangladesh, Sri Lanka, Nepal, and Burma) overlaps, and many important cultural or religious aspects of one country are frequently part of the actual history of another in the group.

Human Resource Characteristics

Population growth continues to plague all the low-income Asian countries. For the region as a whole, the population continues to grow at about 2.1 percent annually. This is not high by comparison with most other

1/ World Bank data.
### Table II.1: Low-Income Asia: Basic Indicators

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<tr>
<th>Economic growth and structure</th>
<th>Low-income Asia</th>
<th>All low-income developing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GNP per capita (1979 dollars)</strong></td>
<td>176.0</td>
<td>190.0</td>
</tr>
<tr>
<td><strong>GNP growth, 1960-70</strong></td>
<td>4.3 a/</td>
<td>3.4</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>Industry</td>
<td>5.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Services</td>
<td>4.6</td>
<td>7.0</td>
</tr>
<tr>
<td><strong>GNP growth, 1970-80</strong></td>
<td>3.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Agriculture</td>
<td>2.2</td>
<td>2.1</td>
</tr>
<tr>
<td>Industry</td>
<td>3.5</td>
<td>4.4</td>
</tr>
<tr>
<td>Services</td>
<td>4.1</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Share of GDP (percent, 1980)</strong></td>
<td>40.8</td>
<td>38.0</td>
</tr>
<tr>
<td>Agriculture</td>
<td>22.3</td>
<td>27.0</td>
</tr>
<tr>
<td><strong>Investment/GDP (percent, 1980)</strong></td>
<td>21.6</td>
<td>24.0</td>
</tr>
<tr>
<td><strong>Savings/GDP (percent, 1980)</strong></td>
<td>19.1</td>
<td>20.0</td>
</tr>
<tr>
<td><strong>Trade and finance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exports as a percent of GDP</td>
<td>15.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Imports as a percent of GDP</td>
<td>10.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Export growth 1970-80</td>
<td>6.7</td>
<td>4.6</td>
</tr>
<tr>
<td>Import growth 1970-79</td>
<td>2.8</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Percent of manufacturing exports</strong></td>
<td>47.0</td>
<td>60.0</td>
</tr>
<tr>
<td>Debt-service 90% exports of goods and services</td>
<td>10.4</td>
<td>9.5</td>
</tr>
<tr>
<td><strong>Human Development</strong></td>
<td></td>
<td></td>
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<tr>
<td>Population (millions)</td>
<td>924.0</td>
<td>659.2</td>
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<tr>
<td>Population growth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1960-70</td>
<td>2.4</td>
<td>2.3</td>
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<tr>
<td>1970-79</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Adult literacy rate (percent)</td>
<td>34.0 b/</td>
<td>36.0</td>
</tr>
<tr>
<td>Percent labor force in agriculture</td>
<td>73.0 c/</td>
<td>71.0</td>
</tr>
<tr>
<td>Life expectancy</td>
<td>50.0 d/</td>
<td>52.0</td>
</tr>
<tr>
<td>Daily per capita calorie supplement d/</td>
<td>91.0 e/</td>
<td>91.0</td>
</tr>
</tbody>
</table>

b/ 1976 weighted by population.
c/ 1979 weighted by population.
d/ As a percent of requirement, 1977.
e/ 1977.

Source: World Development Indicators 1981; World Bank data.
low-income countries, and it does represent a decline from the 2.4 percent annual growth of the previous decade. Nonetheless, several features of this picture give pause. First, the absolute increases in the region's total population which this rate of increase implies are of a staggering magnitude -- low-income Asia's population could be half again as large by the year 2000. More importantly, in both Pakistan and Bangladesh, population growth rates have risen by 0.2 to 0.3 and 0.6 of a percentage point respectively in this decade. To the extent that concerted efforts are not made to reverse these trends, there is a veritable sword of Damocles hanging over the future of these countries. In Sri Lanka, progress has been best -- population growth is almost a full percentage point lower than in the 1950s and 0.5 percent lower than in 1960s, largely due to concerted efforts of the government in maternal and child health and public health and to the generally higher level of social indicators than in other low-income Asian countries. In India too, substantial progress has been made since the 1960s, although the results of the 1980 census have raised questions about whether recent progress has been as rapid as hoped.

As a result of these population growth rates, per capita incomes in low-income Asia grew at about 1.7 percent 1/ in the past decade. This is about one percentage point lower than for the low-income country group as a whole. 2/

In other basic human resource indicators, the low-income Asia region differs little from other low-income countries. Literacy rates range from 24 percent (Pakistan) to 85 percent (Sri Lanka). Life expectancies are

1/ World Development Indicators 1981, Table 2.

2/ Ibid.
marginally below the low-income country norm, as is food intake. Sri Lanka is the exception in each of these, with literacy rates, life expectancy, and food intake significantly above the low-income norm. In sum, the picture is one of poverty with all its attendant problems.

Economic Structure

There are also similarities in economic structure among countries. The region is overwhelmingly agricultural, with agriculture generating some 40 percent of GNP and employing just over 70 percent of the labor force. In Bangladesh, these proportions rise higher still, with the sector contributing over 55 percent to GNP and providing work to over three-fourths of the labor force. Moreover, Bangladesh's largest manufacturing subsector, jute, depends directly on raw material from the agricultural sector; and agricultural processing of such items as food, beverages, and tobacco makes up a third of manufacturing value added.

As a result, the economic fortunes of the low-income Asian countries are dominated by the performance in this sector. In India, for example, agricultural growth has been slow and erratic, with performance largely a function of the monsoon, although with the development of irrigation infrastructure this is less and less true. Overall growth of the economy has therefore also been slow and erratic.

The importance of agriculture extends far beyond its share in GNP. In many countries of low-income Asia, slow agricultural growth has caused scarce foreign exchange to be used to import food, squeezing out imports required for productive capacity in industry to be developed. In the cases of Bangladesh and Sri Lanka, agricultural sector exports are also a major determinant of foreign exchange availability. In Bangladesh, exports of raw jute
and jute goods account for over three-fourths of the country's merchandise exports, and in Sri Lanka, the tree-crop sector (consisting of three major crops -- tea, rubber, and coconut) alone accounts for 60 percent of exports.

Agricultural performance is not outstanding in any of the low-income Asian countries, and with the exception of India, performance has been worse in the 1970s than in the 1960s. In some cases performance has been substantially worse, due to policies, similar to those followed in many developing countries, that are inimical to the sector's development.

**Investment.** Although the economies are poor and many people live close to subsistence, for the region as a whole investment rates are high, some 22 percent of GDP. In India the bulk of this, some 85 percent, is from domestic sources; other countries are far more dependent on external resource transfers. 1/ In Bangladesh and Pakistan, for instance, foreign savings finance constitutes close to 85 percent and 67 percent of investment, respectively; in Sri Lanka, the figure is just under half. 2/

Efficiency of investment, however, is not very high, with incremented capital-output ratios (ICORs) ranging between 5 and 7 over the decade.

The industrial sector, although relatively small (just over 20 percent of GDP), is remarkably broad in some low-income Asian countries, since a number of them have pursued import substitution policies for a

1/ World Development Indicators 1981, Table 5.

2/ Ibid.
relatively long period. In India, especially, there is a strong orientation towards heavy industry with substantial manufacturing capital and intermediate goods making up 70 percent of value added in industry. Bangladesh is the major outlier here, with the share of industry (including mining, construction, and utilities) of only about 13 percent, and that of manufacturing alone only 7 percent, much of it in agricultural processing activities.

In spite of this broad base, industrial growth has not been rapid enough to accelerate the overall growth of the economies; it averaged about 4.3 percent between 1970 and 1978, approximately the same as the rate for all low-income countries taken together.

Composition of Exports and Imports. As a result of the region's relatively broad industrial base, close to one half of the region's merchandise exports -- 47 percent in 1980 -- consists of manufactures. Nonetheless, although there has been scope for rapid growth of trade in these commodities, the countries in the region have not followed export-led growth strategies.

Trade in general remains a relatively small fraction of GDP. Exports and imports were 8 percent and 13 percent, respectively, of the region's GDP in 1979. Though manufacturing exports (including processing) have grown, primary product dependence remains high for all countries in the region. In Sri Lanka, for example, primary products, including petroleum re-exports, made up over 90 percent of exports in 1978. This country is consequently very vulnerable to swings in the terms of trade arising from primary product price fluctuations.
Imports consist largely of manufactured goods, which make up from 43 percent of total imports (for India) to over 55 percent (for Pakistan). 1/ As for almost all developing countries, the share of fuel imports has been rising sharply. For the region as a whole, the share of petroleum (both oil and lubricants) in total imports of goods and non-factor services was 3.9 percent in 1970, about four percentage points less than for all oil-importing developing countries taken together. By 1980, the share of net fuel imports had risen nearly ten-fold, to 33 percent, about 35 percent higher than for the group of all oil-importing developing countries. Thus, fuel imports continue to have a large impact on the balance of payments, notwithstanding the fact that three of the countries -- India, Pakistan, and Bangladesh -- have recently discovered substantial deposits of oil and/or gas and have already taken steps to develop and exploit these resources. Indeed, India and Pakistan are among the countries identified as having sufficient resources perhaps to be able to achieve self-sufficiency in oil and/or gas at some point in the future 2/

In most years, the low-income Asian countries have been food importers. In 1978, food imports ranged from less than 1 percent of total imports in India to 28 percent in Sri Lanka. Bangladesh has, on average been importing about 10 percent of its requirements each year, or about 1.5 million tons annually.

1/ World Development Indicators 1981.
Although food import dependence is gradually being reduced as agricultural performance improves -- India is now nearing self-sufficiency in foodgrains and in 1980 was even a net exporter -- the volatility of food imports remains a problem for all countries. In 1974/5, when India had an especially poor harvest, 6 million tons of foodgrain were imported. 1/ In the same year, harvests in Bangladesh were equally bad, and 2.5 million tons had to be imported in a year in which international foodgrain and fertilizer prices were skyrocketing. Unstable production and the erratic nature of these import needs, frequently coming in years when countries were faced by adverse price trends and other external pressures, were among the internal factors that exacerbated the external oil and other shocks, discussed in the next sections, which buffeted the low-income countries in the 1970s.

Trade Performance. The trade performance of the group has been moderate and steady. This statement holds true for most of the countries in the region. Exports have grown at 6.7 percent in volume terms between 1970 and 1980, as Table II.2 shows. Primary products grew most rapidly in the 1970s -- a reversal from the 1960s -- followed by manufactures, which grew at 7.4 percent. Growth of imports has been fairly slow -- some 2.8 percent annually from 1970 to 1980, a rate less than that for all the low-income countries as a group.

1/ World Bank data.
Table II.2:
Low-Income Asia: Export Growth -- Selected Commodity Groups
(annual percentage volume growth rates)

<table>
<thead>
<tr>
<th>Total exports</th>
<th>1970-75</th>
<th>1975-78</th>
<th>1970-80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports of goods and services</td>
<td>8.4</td>
<td>6.4</td>
<td>6.7</td>
</tr>
<tr>
<td>Non-factor services</td>
<td>2.2</td>
<td>5.1</td>
<td>3.1</td>
</tr>
<tr>
<td>Manufactures</td>
<td>9.2</td>
<td>9.5</td>
<td>7.4</td>
</tr>
<tr>
<td>Machinery and transportation</td>
<td>18.5</td>
<td>-1.6</td>
<td>8.6</td>
</tr>
<tr>
<td>Other</td>
<td>8.2</td>
<td>10.8</td>
<td>7.3</td>
</tr>
<tr>
<td>Primary</td>
<td>13.9</td>
<td>4.3</td>
<td>9.6</td>
</tr>
<tr>
<td>Food</td>
<td>13.3</td>
<td>6.5</td>
<td>10.0</td>
</tr>
<tr>
<td>Non-food agriculture</td>
<td>21.6</td>
<td>-0.3</td>
<td>12.2</td>
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<tr>
<td>Metals</td>
<td>34.9</td>
<td>-0.5</td>
<td>16.8</td>
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<tr>
<td>Fuels</td>
<td>-13.0</td>
<td>6.1</td>
<td>-5.1</td>
</tr>
<tr>
<td>Non-fuel primary products</td>
<td>16.7</td>
<td>4.3</td>
<td>10.9</td>
</tr>
</tbody>
</table>

Source: World Bank data.
Balance-of-Payments Trends. For the group as a whole, the current account deficit as a percentage of GDP is relatively low; this reflects both the dominance of India, for whom the share of trade in GDP is small, and the importance of workers' remittances, especially in the later years, in reducing the current account balance. This is perhaps the most striking feature of Table II.3 and provides an important clue to the low-income Asian countries' growth performance in the aftermath of the oil shock. From low levels in the early 1970s, workers' remittances rose to cover over 100 percent, then 150 percent, of the negative resource balance in the mid-1970s. Even with the substantial worsening of the resource balance since 1978, they have remained at 37 percent of the resource balance in 1980.

Debt service ratios in the region have declined substantially over the decade, from 18 to 20 percent of exports of goods and services in 1970 to 9 to 10 percent in 1979 (see Table II.4). Each of the major countries experienced such a decline. In India the ratio fell by half, from 20.9 percent to 9.5 percent; in Pakistan likewise. This decline is far greater than for all low-income countries taken together, and debt service for the region remains lower than the low-income country norm. The region's debt service ratios are projected to stay at this approximate level in the medium term because the region is expected to receive proportionately more concessional aid (between 90 and 95 percent of all disbursements of foreign capital have come from concessional sources in the past decade). By the same token, with debt service ratios still relatively low in most countries, the region is creditworthy for some commercial borrowing in the coming decade.
Table II.3:
Summary of Balance of Payments and Current Account Financing -- Low-Income Asia (millions of current U.S. dollars)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports of goods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and non-factor</td>
<td>3,790</td>
<td>9,471</td>
<td>10,533</td>
<td>12,791</td>
<td>13,869</td>
<td>19,530</td>
</tr>
<tr>
<td>services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imports of goods</td>
<td>4,739</td>
<td>12,520</td>
<td>11,569</td>
<td>14,100</td>
<td>17,943</td>
<td>28,971</td>
</tr>
<tr>
<td>and non-factor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource balance</td>
<td>-949</td>
<td>-3,050</td>
<td>-1,037</td>
<td>-1,209</td>
<td>-4,074</td>
<td>-9,441</td>
</tr>
<tr>
<td>Net factor income</td>
<td>-203</td>
<td>273</td>
<td>705</td>
<td>1,456</td>
<td>2,479</td>
<td>3,380</td>
</tr>
<tr>
<td>of which remittances</td>
<td>+214</td>
<td>+703</td>
<td>+1,074</td>
<td>1,885</td>
<td>2,669</td>
<td>3,500</td>
</tr>
<tr>
<td>Net private transfers</td>
<td>-1</td>
<td>150</td>
<td>201</td>
<td>181</td>
<td>313</td>
<td>478</td>
</tr>
<tr>
<td>Current account</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>balance a/</td>
<td>-1,159</td>
<td>-2,618</td>
<td>-131</td>
<td>329</td>
<td>-1,282</td>
<td>-5,683</td>
</tr>
<tr>
<td>Financed by:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Official development</td>
<td>1,040</td>
<td>3,410</td>
<td>2,933</td>
<td>2,538</td>
<td>3,091</td>
<td>4,120</td>
</tr>
<tr>
<td>assistance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private direct</td>
<td>37</td>
<td>15</td>
<td>-1</td>
<td>4</td>
<td>30</td>
<td>52</td>
</tr>
<tr>
<td>investment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium- and long-</td>
<td>77</td>
<td>56</td>
<td>60</td>
<td>159</td>
<td>158</td>
<td>136</td>
</tr>
<tr>
<td>term loans</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-term capital</td>
<td>168</td>
<td>-801</td>
<td>-495</td>
<td>-465</td>
<td>-528</td>
<td>239</td>
</tr>
<tr>
<td>Change in reserves</td>
<td>-164</td>
<td>-64</td>
<td>-2,365</td>
<td>-2,575</td>
<td>-1,469</td>
<td>1,135</td>
</tr>
<tr>
<td>Memo items</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current account</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>deficit a/ as a</td>
<td>-1.6</td>
<td>-2.2</td>
<td>-0.1</td>
<td>0.2</td>
<td>-0.8</td>
<td>-2.9</td>
</tr>
<tr>
<td>percent of GNP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remittances as a</td>
<td>22.5</td>
<td>23.0</td>
<td>103.6</td>
<td>150.9</td>
<td>65.5</td>
<td>37.0</td>
</tr>
<tr>
<td>percent of resource</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>balance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a/ Excluding official transfers.

Source: World Bank data.
Table II. 4:

Low-Income Asia: Debt Service Ratios -- Selected Countries

<table>
<thead>
<tr>
<th></th>
<th>1970</th>
<th>1979</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>20.9</td>
<td>9.5</td>
</tr>
<tr>
<td>Pakistan</td>
<td>23.6</td>
<td>12.0</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>-</td>
<td>8.4</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>10.3</td>
<td>6.5</td>
</tr>
<tr>
<td>All low-income countries</td>
<td>12.6</td>
<td>10.8</td>
</tr>
</tbody>
</table>

Note: Ratios calculated as a percentage of goods and services.

Source: World Development Indicators 1981.
III. Nature and Impact of External Shocks

The impact of the changes in the terms of trade was a strong one for all the economies of the region. For most countries, this "external shock" was also accompanied by important internal shocks. In Bangladesh, for example, these internal shocks -- which included revolution, floods, famine, and the need to rebuild a war-torn economy -- probably far outweighed the effects of the increase in oil prices. In India and Pakistan, harvest failures contributed to poor growth performance in the early 1970s, whereas in Sri Lanka growth through the mid-1970s was the cumulative result of the inheritance of earlier policies. And for countries such as Nepal, whose very low level of development and participation in trade insulates it from the world economy, internal dynamics were also clearly the more important determinants of growth achievement. Thus, the impact of the terms of trade and other external effects must share the billing with other internal domestic factors in any analysis of the 1970-78 period for this region. With this caveat in mind, this section begins with a discussion of the impact of fuel imports on the balance of payments of the low-income Asian countries.

Fuel Import Shares

Prior to the 1973 oil price shock, fuel imports -- at 3.9 percent of imports of goods and non-factor services -- represented a very minor share of the region's total imports, less than the import share for all oil-importing developing countries. 1/ After the 1973 price hike and shock, this reversed itself, with the low-income Asian countries' net fuel import

1/ World Bank data.
bills growing more rapidly than in the oil-importing developing countries as a whole, amounting by 1975 to 17.9 percent of imports. As oil prices fell in real terms, fuel import shares stabilized and even fell in some countries between 1976 and 1978. In terms of proportion of the import bill, oil imports absorbed the largest fraction in India, where by 1977 the share had risen to over 20 percent. But the increases were immense for all countries— from 5.3 percent in 1970 to 10.7 percent in 1978 in Pakistan, from 3.7 percent to 10 percent in Bangladesh, and from 5.9 percent to 14.5 percent in Sri Lanka. Table III.1 shows quite clearly the dramatic change which took place after the oil price increase of 1978-79. For the region as a whole, net fuel import shares rose to 33.5 percent of all imports by 1980.

Table III.1:
Low-income Asia: Net Fuel Imports as a Percent of Total Imports (Goods and Non-Factor Services)

<table>
<thead>
<tr>
<th>Year</th>
<th>Oil-importing developing countries</th>
<th>Low-income Asia a/</th>
<th>India</th>
<th>Pakistan</th>
<th>Bangladesh</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>7.9</td>
<td>3.9</td>
<td>5.0</td>
<td>5.3</td>
<td>-</td>
<td>5.9</td>
</tr>
<tr>
<td>1971</td>
<td>-</td>
<td>-</td>
<td>6.5</td>
<td>5.3</td>
<td>-</td>
<td>6.6</td>
</tr>
<tr>
<td>1972</td>
<td>-</td>
<td>-</td>
<td>6.6</td>
<td>3.1</td>
<td>3.7</td>
<td>9.2</td>
</tr>
<tr>
<td>1973</td>
<td>-</td>
<td>-</td>
<td>8.3</td>
<td>4.2</td>
<td>2.2</td>
<td>11.0</td>
</tr>
<tr>
<td>1974</td>
<td>-</td>
<td>-</td>
<td>23.1</td>
<td>6.0</td>
<td>4.9</td>
<td>17.8</td>
</tr>
<tr>
<td>1975</td>
<td>16.6</td>
<td>17.9</td>
<td>20.0</td>
<td>9.7</td>
<td>6.3</td>
<td>15.1</td>
</tr>
<tr>
<td>1976</td>
<td>19.0</td>
<td>19.6</td>
<td>22.3</td>
<td>10.5</td>
<td>10.3</td>
<td>22.5</td>
</tr>
<tr>
<td>1977</td>
<td>18.4</td>
<td>18.9</td>
<td>20.6</td>
<td>8.5</td>
<td>11.3</td>
<td>20.2</td>
</tr>
<tr>
<td>1978</td>
<td>16.0</td>
<td>17.8</td>
<td>15.6</td>
<td>10.7</td>
<td>10.0</td>
<td>14.5</td>
</tr>
<tr>
<td>1980</td>
<td>24.6</td>
<td>33.5</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

- Not available.

a/ Includes all petroleum, both oil and lubricants.

Source: World Bank data.
The growing importance of fuel imports has also caused petroleum to absorb a growing share of the region's export earnings (see Table III.2). What in 1970 absorbed less than 5 percent of the region's export earnings, and in 1975 absorbed 23 percent, now absorbs close to 50 percent of exports. In countries such as India, the proportion rose to over 50 percent by 1980. And this has occurred in spite of the fact that, in volume terms, the region's net oil imports grew at only about 5 percent between 1975 and 1978.

Table III.2:
Low-Income Asia: Net Fuel Imports as a Percent of Total Exports (Goods and Non-factor Services)

<table>
<thead>
<tr>
<th>Year</th>
<th>Oil-importing developing countries</th>
<th>Low-income Asia</th>
<th>India</th>
<th>Pakistan</th>
<th>Bangladesh</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>9.1</td>
<td>4.8</td>
<td>5.7</td>
<td>10.0</td>
<td>-</td>
<td>6.6</td>
</tr>
<tr>
<td>1971</td>
<td>-</td>
<td>-</td>
<td>8.1</td>
<td>9.3</td>
<td>-</td>
<td>7.2</td>
</tr>
<tr>
<td>1972</td>
<td>-</td>
<td>-</td>
<td>7.0</td>
<td>4.5</td>
<td>9.4</td>
<td>9.8</td>
</tr>
<tr>
<td>1973</td>
<td>-</td>
<td>-</td>
<td>9.5</td>
<td>5.0</td>
<td>5.2</td>
<td>11.5</td>
</tr>
<tr>
<td>1974</td>
<td>-</td>
<td>-</td>
<td>0.28</td>
<td>11.2</td>
<td>13.7</td>
<td>22.8</td>
</tr>
<tr>
<td>1975</td>
<td>20.8</td>
<td>23.0</td>
<td>21.6</td>
<td>19.5</td>
<td>22.7</td>
<td>19.2</td>
</tr>
<tr>
<td>1976</td>
<td>21.9</td>
<td>21.5</td>
<td>19.9</td>
<td>19.1</td>
<td>20.0</td>
<td>24.3</td>
</tr>
<tr>
<td>1977</td>
<td>20.6</td>
<td>20.9</td>
<td>17.8</td>
<td>17.6</td>
<td>25.7</td>
<td>18.2</td>
</tr>
<tr>
<td>1978</td>
<td>17.9</td>
<td>23.0</td>
<td>17.1</td>
<td>22.7</td>
<td>23.8</td>
<td>16.4</td>
</tr>
<tr>
<td>1979</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1980</td>
<td>28.7</td>
<td>49.6</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

_ Not available._

Source: World Bank data.
With fuel imports projected to grow in nominal terms at just under 16 percent annually in the coming decade, these proportions are likely to rise significantly. 1/ When debt servicing obligations are added to oil imports, by 1990 the share of export earnings absorbed by these two categories is projected to rise to close to 75 percent for the low-income Asia region as a whole. The vulnerability of the countries in this region to further oil price increases will be heightened as their purchases of non-fuel imports, which are important for growth and the expansion of productive capacity, become increasingly squeezed.

Terms of Trade

As the share of fuel in the total import bill has increased, the influence of oil prices on the real income loss arising through changes in the terms of trade has risen concomitantly. The region's terms of trade have declined substantially since 1970, falling by nearly 35 percent between 1970 and 1976, although some recovery has taken place since then. (see Table III.3). Export prices have played a relatively small part; the export price index grew at about 10 percent annually over the decade but not enough to offset the 15 percent annual increase in import prices, led by oil. Only toward the end of the 1970s, as oil price increases leveled off, did the rising import price trend stabilize.

The experience of individual countries exhibits some variance. In India, although oil prices were the primary factor in the terms of trade decline, skyrocketing world fertilizer and grain prices also played their parts. In Pakistan, oil prices have had a dual impact on the terms of

1/ World Bank data.
trade; as an exporter of refined products, Pakistan has also benefited from rising oil prices, and its terms of trade have deteriorated relatively less than the rest of the region.

Bangladesh fared worst of all countries in the region, with its terms of trade falling by over 60 percent between 1970 and 1976, and because of continued weak prices for its principal export, jute, the terms of trade have remained low, at about half their 1970 level. In Sri Lanka, the revival of tea prices in 1977 and 1978, and also the fact that Sri Lanka was a substantial re-exporter of petroleum products, by 1978 brought about some recovery in the terms of trade, which had fallen to almost 50 percent of their 1970 level in 1975.

In spite of these limited recoveries for some countries, the region’s terms of trade remained low through 1978, at just under 70 percent of their 1970 level. In sum, it is clear that the oil and other price shocks to the balance of payments were very large for the low-income Asian countries, far worse than for the low-income group as a whole. Unlike the other low-income countries, prices, far more than export volumes, appear to have been the primary external shocks.
Table III.3:
Low-Income Asia: Terms of Trade, 1970-80
(1970=100)

<table>
<thead>
<tr>
<th>Year</th>
<th>Low-income developing countries</th>
<th>Low-income Asia</th>
<th>India</th>
<th>Pakistan</th>
<th>Bangladesh</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1971</td>
<td>-</td>
<td>-</td>
<td>109</td>
<td>90</td>
<td>90</td>
<td>93</td>
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<tr>
<td>1972</td>
<td>-</td>
<td>-</td>
<td>117</td>
<td>82</td>
<td>87</td>
<td>89</td>
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<tr>
<td>1973</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td>95</td>
<td>48</td>
<td>78</td>
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<tr>
<td>1974</td>
<td>-</td>
<td>-</td>
<td>73</td>
<td>106</td>
<td>45</td>
<td>68</td>
</tr>
<tr>
<td>1975</td>
<td>89.4</td>
<td>67.0</td>
<td>66</td>
<td>67</td>
<td>42</td>
<td>54</td>
</tr>
<tr>
<td>1976</td>
<td>95.2</td>
<td>66.7</td>
<td>72</td>
<td>71</td>
<td>38</td>
<td>74</td>
</tr>
<tr>
<td>1977</td>
<td>104.4</td>
<td>73.6</td>
<td>90</td>
<td>83</td>
<td>47</td>
<td>96</td>
</tr>
<tr>
<td>1978</td>
<td>93.7</td>
<td>68.2</td>
<td>85</td>
<td>81</td>
<td>51</td>
<td>94</td>
</tr>
</tbody>
</table>

- Not available.

Source: World Bank data.

Trade and Export Growth

As suggested by Table III.4, export performance of the low-income Asian countries worsened toward the end of the 1970s because of a slowing of overall export demand -- in part because of slower OECD growth, in part because of adverse price trends. Growth performance over the decade as a whole, however, was better than in the 1960s. As Table III.4 shows, in the 1970s low-income Asia did better than its low-income competitors in Africa. This represents another reversal from the 1960s, a period during which the other low-income countries, dominated by those in Africa, benefited from the primary commodity boom.
Table III.4:

Low-Income Asia: Nominal Export Trends (Goods and Non-Factor Services)
(annual growth rates)

<table>
<thead>
<tr>
<th>Period</th>
<th>Low-income Africa</th>
<th>Low-income Asia</th>
<th>India</th>
<th>Pakistan</th>
<th>Bangladesh</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965-70</td>
<td>14.4</td>
<td>4.9</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1970-75</td>
<td>9.5</td>
<td>20.1</td>
<td>20.3</td>
<td>25.2</td>
<td>-</td>
<td>10.8</td>
</tr>
<tr>
<td>1975-80</td>
<td>5.5</td>
<td>13.5</td>
<td>13.4</td>
<td>11.1</td>
<td>14.3</td>
<td>14.7</td>
</tr>
<tr>
<td>1970-80</td>
<td>8.0</td>
<td>17.6</td>
<td>17.6</td>
<td>19.7</td>
<td>9.8 a/</td>
<td>12.2</td>
</tr>
</tbody>
</table>

- Not available.

a/ 1973-78.

Source: World Bank data.

This relatively better performance was largely because of the low-income Asia region's relatively greater orientation to exports of manufactured goods and because the two largest exporters have substantial markets outside the industrial market economies undergoing recession. As Table III.5 shows, the shares of the low-income Asian countries' exports going to the industrial economies is less than for all low-income countries as a group. India and Pakistan and, to a lesser degree, Sri Lanka have done especially well in tapping the capital-surplus oil exporters' markets; and for Bangladesh and India, exports to the Eastern bloc continue to be very important. Because of these trends, the low-income Asia region was relatively more, although by no means completely, insulated from recessionary conditions in the industrial countries during this period.
Table III.5:  
Low-Income Asia: Destination of Merchandise Exports, 1979  
(percentage)

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
<th>Industrial market economies</th>
<th>Developing economies</th>
<th>Non-market industrial economies</th>
<th>Capital-surplus economies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-income countries</td>
<td></td>
<td>61</td>
<td>29</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>India</td>
<td></td>
<td>54</td>
<td>20</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Pakistan</td>
<td></td>
<td>47</td>
<td>35</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>Bangladesh</td>
<td></td>
<td>55</td>
<td>30</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td></td>
<td>50</td>
<td>35</td>
<td>5</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: World Development Indicators 1981.

Lending further support to the hypothesis that among trade shocks adverse international price trends were a more important factor than export volume declines is the fact that major losses in market shares have not taken place in the 1970s. As Table III.6 shows, there is only little reduction in the share of low-income Asia's exports in the exports of all oil-importing developing countries in the 1970s. The region's market shares, dominated by India, remained relatively constant over the decade, declining only slightly from 6.3 to 5.9 percent of all oil-importing developing countries' exports of goods and non-factor services. The performance of the previous decade, in which shares fell sharply between 1965 and 1970, from 10.0 percent in 1965 to 6.3 percent, did not continue in the 1970s.
Table III.6:

Export Market Shares, Low-Income Asia: Exports as a Percentage of Exports of All Oil-Importing Developing Countries

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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Exports of goods and NFS</td>
<td>10.0</td>
<td>6.3</td>
<td>6.0</td>
<td>5.9</td>
</tr>
<tr>
<td>NFS</td>
<td>1.5</td>
<td>1.6</td>
<td>1.7</td>
<td>1.6</td>
</tr>
<tr>
<td>Merchandise (f.o.b.)</td>
<td>8.9</td>
<td>4.7</td>
<td>4.3</td>
<td>4.4</td>
</tr>
<tr>
<td>Manufactures</td>
<td>2.9</td>
<td>2.6</td>
<td>1.8</td>
<td>2.3</td>
</tr>
<tr>
<td>Machinery and transport</td>
<td>-</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Other manufacturers</td>
<td>2.9</td>
<td>2.4</td>
<td>1.6</td>
<td>2.1</td>
</tr>
<tr>
<td>Primary</td>
<td>5.9</td>
<td>2.1</td>
<td>2.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Food and beverages</td>
<td>3.4</td>
<td>1.5</td>
<td>1.6</td>
<td>1.4</td>
</tr>
<tr>
<td>Non-food agriculture</td>
<td>1.9</td>
<td>0.3</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Metals and minerals</td>
<td>0.4</td>
<td>0.2</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Fuels</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Memo:
Regional exports as a percent of world exports (excluding CPEs) 0.8 1.0 0.9
Regional exports as a percent of world non-fuel exports (excluding CPEs) - 1.0 1.0 1.1

Note: NFS, non-factor services; CPEs, centrally planned economies; -, not available.
Source: World Bank data.

With respect to maintenance of market shares, what is true for the region also appears to be true for the major countries. As indicated by Table III.7, only Sri Lanka has experienced a loss of markets, the share falling by about 30 percent between 1970 and 1978. India, Pakistan, and Bangladesh have all maintained their markets.
The above data suggest that the slightly slower growth of nominal exports in the late 1970s in the low-income Asia region has had more to do with price effects than with the loss of markets and shares due to failure to promote exports.

The Impact of External Shocks: Quantification

The magnitude of these external shocks -- the shock deriving from the terms of trade and the slow-down in export volume growth -- has been quantified for three major low-income Asian countries, adapting the methodology developed by Balassa, in which actual magnitudes are compared with trend values arrived at through extrapolations based on historical parameters. 1/ To estimate the extent of the shock deriving from the terms of trade, a comparison was first made of the changes in the prices received

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Table III.7:
Export Market Shares -- Selected Low-Income Asian Countries' Exports as a Percentage of Exports of All Oil-Importing Developing Countries

<table>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>3.7</td>
<td>3.5</td>
<td>3.5</td>
</tr>
<tr>
<td>Pakistan</td>
<td>0.7</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>-</td>
<td>0.2</td>
<td>0.3</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>0.6</td>
<td>0.4</td>
<td>0.4</td>
</tr>
</tbody>
</table>

Source: World Bank data.

by the low-income Asian countries for their exports with the general trend in world prices (measured from a 1971-73 base). The low-income Asia region was found, in this exercise, to have experienced a relative improvement; that is, the index of low-income Asian export prices rose more rapidly than the unit value index of developed countries' manufactured exports, taken to represent "world" prices. The relative improvement was small, however, and the gain in purchasing power accruing to the region from this relative increase in export prices was modest -- 0.19 percent of average 1974-78 GNP.

On the import side low-income Asia's import prices rose more rapidly than did world prices, on average, so that purchasing power was lost. The extent of this decline in purchasing power came to 1.45 percent of the region's 1974-78 GNP. Putting the two countervailing effects together, it was estimated that the region as a whole suffered from adverse international price movements since 1971-73, which totaled 1.26 percent of 1974-78 GNP.

The impact of changes in the expansion of world trade on low-income Asian exports was also estimated using a similar methodology. To capture and isolate the effect of trade expansion, it was assumed that low-income Asia's shares in total world exports of primary products and in developing country exports of manufactures remained unchanged from their 1971-73 base. The difference between the estimated level of regional exports (at constant market shares) extrapolating from historical trends (1963-73), and the estimated level of regional exports (at constant market shares) based on the actual growth rates prevailing since 1971-73, provides the measure of export volume shortfall arising from a slower overall growth of trade since 1971-73, compared with growth in the previous decade. For low-income Asia the difference between the two export estimates was estimated to be 0.69 percent of GNP.
Adding the price and volume shocks together, the full cost of the external trade shocks to the low-income Asia region was some 1.95 percent of GNP. 1/ This compares with shocks amounting to 1.81 percent of GNP estimated for semi-industrial countries, 3.5 percent for primary producing countries, and 1.5 percent of GNP for the least developed country group.

For the longer run, because of the region's heavy dependence on imports, the relatively small size of these shocks relative to GDP may be misleading; such shortfalls in foreign exchange earnings and losses in purchasing power of exports may be quite serious, especially when the impact of fuel imports on the capacity to imports other goods is factored in. Should imports necessary for growth of productive capacity and to sustain import substitution become scarce, growth of these countries' manufacturing sectors, which contribute in large measure to the economies' overall dynamism, could be adversely affected.

External Shocks and Growth: A Summary

Quantifying the relation between these external shocks and economic growth is a difficult exercise at best. As noted in the introduction, a number of factors, both internal and external, operated at the same time, and the effect of any one of them is difficult to isolate. As noted in Section I, for the low-income Asian countries there was a weaker relationship between the magnitude of the shock and growth impact than in other country groups, excluding the semi-industrial countries. This relatively weak relationship between external shocks and growth performance over the decade is not an indication that such shocks

1/ The methodology whereby the external shocks are quantified is described in brief in World Development Report 1981, Technical Appendix.
were not important. It simply points to the fact that in these large agriculture-dominated economies, this sector is the primary determinant of growth performance in the short run, and internal developments are very important. The low-income Asian experience also highlights the importance of the expansion of opportunities for labor export and remittances, and of international capital flows in mitigating the potentially very adverse impacts of these shocks by allowing structural adjustments to be made over time.

IV. Policy Responses

Section I briefly noted the various measures open to developing countries confronted by the external shocks outlined above: increasing external financing; increasing export earnings; reducing imports, either by slowing down domestic demand or by developing import-substituting industries and thereby replacing imports with domestic products.

For low-income Asia, additional external financing appears to have been a very important factor in the adjustment process. Private and concessional flows were larger than in the past, and the region benefited from sizeable flows of workers' remittances derived from labor exports to the Middle East. In India, for example, workers' remittances rose to US$1.5 billion by 1979; substantial use was made of the IMF, including the oil facility; food aid was forthcoming, including a million-ton wheat loan from the USSR; and an increase in aid disbursements from many consortium countries took place in response to the difficulties of this period. In Pakistan, in addition to the substantial remittance flows, balance-of-payments support came from OPEC countries, especially from Iran, as well as
from the IMF. Bangladesh also benefited from continued high levels of external assistance, which has helped to finance much of the current account balance between 1970 and 1978. Much of this assistance has been channeled through the Bangladesh Aid Group established in October 1974. A standby agreement with the IMF, which Bangladesh entered into in 1975, also provided assistance.

The contribution of these mechanisms was measured in the *World Development Report* for various country groups. Essentially, historical trends or hypothetical values of the variables noted above -- financial flows, exports, import levels -- were compared with their actual values. Thus, for example, the difference between the actual average 1974-78 resource gap and the trend resource gap (defined as trend exports of goods minus trend imports of goods) \(^1\) was taken as a measure of the extent to which more additional resources -- such as workers' remittances, concessional assistance, drawings on the IMF, external borrowing, commodity loans, etc. -- became available to cover this trade gap than had been available in the past. For low-income Asia the actual resource gap in the 1974-78 period was substantially above the trend, and the region benefited from additional external financing in amounts higher than in the past, estimated as amounting to 2.35 percent of 1974-78 GNP.

Another key element in structural adjustment and policy response to shocks is export promotion. In the low-income Asia region performance in exports, as one might expect from the earlier discussion, did not contribute

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\(^1\) Trend exports are estimated as that level of exports which would have been attained had the region's exports grown at historical rates (1963-73), assuming constant 1971-73 market shares. Trend imports are estimated as the import level which would have prevailed had import elasticities remained at their historical (1963-73) levels throughout the subsequent period, with GNP also growing at 1963-73 rates.
substantially to improvement in the adjustment picture. In India, export incentives were introduced, but, at least until 1978, they do not seem to have had significant effects. As part of the standby agreement and stabilization program agreed with the IMF, Bangladesh undertook a substantial devaluation of its currency. Although exports responded quickly, the devaluation served only to re-establish the export levels of the early 1970s, with exports in 1975/6 only very slightly higher than in 1972/73.

Analysis of export performance and export market penetration for the region as a whole, as quantified by this methodology, supports the view that export performance contributed very little to overall adjustment up to 1978. Export market penetration performance was measured as the difference between low-income Asia's actual exports in the 1974-78 period and the region's hypothetical exports (that is, what 1974-78 exports would have been had the region maintained its (1971-73) shares in traditional and non-traditional export markets, with exports growing at their actual rate since 1973). As table III.6 indicated, the share of low-income Asia in the exports of all oil-importing developing countries fell very slightly in the 1970s. This small decline in market shares meant that actual exports were also slightly lower, by some 0.5 percent of GNP, than they would otherwise have been.

Import substitution is the third aspect of structural adjustment and balance of payments accommodation to external shocks quantified in the methodology. Many of the low-income Asian countries have long pursued import substitution, and, as attested by both the share of manufacturing in industrial output and the depth of the manufacturing
sector, have done so quite successfully. During the period, import substitution continued to contribute to saving foreign exchange. However, as measured by this methodology, it did not represent a major factor in low-income Asia's overall adjustment. Import substitution is measured as the difference between actual imports in a given year and hypothetical imports in the same year; that is, what 1974-78 imports would have been assuming that the decline in import elasticity associated with import substitution over the 1963-73 period had not taken place. For low-income Asia, there was only a small reduction in the import elasticity from the pre-1973 value. The growth of imports was therefore only slightly lower than would have been expected on the basis of extrapolation of the trend elasticity estimate. Measured in this manner, import savings amounted to 0.2 percent of 1974-78 GNP.

Finally, balance-of-payments accommodation can come about through a reduced level of imports due to slower GNP growth. The extent to which imports are lower than they would otherwise be because GNP has grown slowly represents the final element of accommodation to external shocks. The adjustment methodology suggests that in the case of the low-income Asian countries, slower growth with concomitant effects on import levels has not been a significant feature of the adjustment picture. Trend imports (the level of imports which would prevail assuming that GNP growth since 1971-73 had continued at the rates of the pre-oil shock period (1963-73) and that no decline in import elasticity had occurred) were only very slightly different from the level imports hypothetically would have reached had GNP grown at its actual rate from 1971-73 onward and had the same import elasticity prevailed. The very slightly higher rates of GNP growth from 1971-73 onward compared with the 1963-73 base period therefore implied a
slight increase of import demand, 1/ contributing very slightly negatively to overall adjustment with the difference between trend and hypothetical imports amounting to -0.09 percent of GNP.

Table IV.1:
Low-Income Asia:
Contribution of Policy Responses as a Percentage of GNP

<table>
<thead>
<tr>
<th>Response</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional external flows</td>
<td>2.35</td>
</tr>
<tr>
<td>Export expansion</td>
<td>-0.51</td>
</tr>
<tr>
<td>Import substitution</td>
<td>0.20</td>
</tr>
<tr>
<td>Slower growth</td>
<td>-0.09</td>
</tr>
<tr>
<td><strong>Total policy response</strong></td>
<td><strong>1.95</strong></td>
</tr>
</tbody>
</table>


To summarize, for the low-income Asian countries as a whole, balance-of-payments adjustment to external shocks took place primarily by means of a level of external flows of remittances and other service earnings, and capital flows higher than in the past. Export expansion was not sufficient in the 1974-75 period to contribute positively to alleviating balance-of-payments pressures. Generalizing for the region as a whole, import substitution did make a small contribution to adjustment; about 10 percent of the total balance-of-payments accommodation came through this source. Adjustment through slower growth was not a feature of the low-income Asian experience.

1/ This slightly counterintuitive (growth in the 1970s for the region was a full percentage point lower than in the 1960s) result occurs because of the choice of the 1963-73 base period, which encompasses bad years at the outset of the 1970's decade, and eliminates part of the 1960's boom. With a different choice of base period (1960-70), growth effects would be seen to have contributed more to adjustment.
These external balance-of-payments adjustments were not the only policy responses made in response to the external shocks; many policy measures have been taken which cannot be captured in this methodology. It is clear that the limitations of examining a limited historical period obscure the contribution to adjustment of many policy changes which were undertaken subsequent to the period under review, or which may have been initiated during that period and have not yet come to full fruition but which nonetheless represent the groundwork for fuller structural adjustment. Under this heading, for example, come the initiatives taken in the agricultural and energy sectors of many of the low-income Asian countries. India has undertaken many such long-term measures: oil exploration efforts have been stepped up; steps have been taken to increase coal production, including opening of new mines; and plans were made to expand hydroelectric generation capacity. On the demand side, the objective is to reduce the energy intensity of output by one-third. Agriculture, irrigation, and rural development remain high priority areas of Plan investment, and, as noted earlier, foodgrain self-sufficiency is no longer a distant goal for India. These policy initiatives represent the basis for structural adjustment in which import substitution, including energy import substitution, represents a far larger share of the overall response to external shocks than in the past. In Pakistan a new package of incentives designed to attract foreign investment in oil and gas exploration was drawn up which resulted in a substantial increase in drilling activity. The steps which have been taken over the past decade to strengthen Pakistan's agriculture, including better water management and credit support, will also continue to bear fruit. Bangladesh has also stressed, in its investment program, the priority of agriculture; and a shift in investment resources toward short-gestating,
low-cost irrigation projects is envisaged in the Plan. The development of Bangladesh's natural gas reserves, which is proceeding apace, should also help restrain the growth of the petroleum import bill by the mid-1980s. Similar initiatives characterize Sri Lanka. Steps are being taken to develop this country's hydroelectric potential; further attention to replanting for the tree-crop sector — which had become a casualty of the need for higher export earnings in the short run — should enable a more flexible long-run production response in the export sector, enabling a greater share of the overall policy response to come from export expansion in the future.

VI. Summary and Conclusions

For the low-income Asian countries, the decade of the 1970s closed with a growth performance only slightly less — about one percentage point — than it was in the 1960s. To some extent, then, it can be said that these countries adjusted relatively well inasmuch as the external shocks were endured without undue sacrifice of growth.

This, however, would be only a superficial view. As the general regional analysis makes clear, the region's performance had as much to do with fortuitous internal and external factors (such as good weather and remittances) as with the countries' own policy initiatives. The immediate responses to the region's deteriorated longer-run trade prospects were somewhat limited in the early 1970s, both because the full impact of the higher oil prices was not fully realized and, especially, because "additional financing," especially migrant workers' remittances, lent temporary strength to the balance of payments and the need for such immediate adjustments was forestalled. As a
result, initiatives in the longer-run adjustments in trade policy and, internally, in investment allocations (both of which were necessary to adapt to the changed external environment) were not taken as quickly as they otherwise might have been.

The second round of oil price increases and fear of its potential growth impact have created a far greater sense of urgency in the low-income Asia region and an acknowledgment of the need for substantially more structural change in the economies. Some of the early initiatives are now coming to fruition; further reallocations, of investment priorities to agriculture, realignment of priorities within the industrial sector, and programs to hasten the development of indigenous energy resources are also being pursued. External assistance can help to provide the wherewithall for the imports which such programs are likely to require. On the trade front, exports have received new attention, and non-traditional exports are being developed. It remains to be seen whether these initiatives will be pursued with sufficient tenacity in the low-income Asian countries and whether sufficient assistance continues to be forthcoming to bring about and to support the adjustments needed.
References


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An analysis of developing country adjustment experiences in the 1970s.