Growth and Structural Adjustment in East Asia

Parvez Hasan

WORLD BANK STAFF WORKING PAPERS
Number 529
Growth and Structural Adjustment in East Asia

Parvez Hasan

The World Bank
Washington, D.C., U.S.A.
ABSTRACT

The paper analyzes the economic performance of the five large market economies of East Asia -- Korea, Thailand, the Philippines, Malaysia and Indonesia -- during the last two decades. It focuses on the key factors explaining their remarkable economic and social progress. It examines the current economic difficulties resulting from marked increase in oil prices since 1979, a sharp rise in interest rates on international lending, and sharp slowing down of growth in international trade. It then identifies the main economic issues for the 1980s. It argues that the challenge for East Asian countries during the next decade is to reduce their current account balance of payments deficits without any significant downward adjustment in growth and while ensuring continued progress in reduction of absolute poverty. The burden of achieving these goals will fall mainly on economic management and policies. Increased efficiency in the use of economic resources especially of investment and energy resources will be central to the effort. The policy choices will not be easy. But, if the past record and the direction of economic policy reform in the last year or so are any indication, most East Asian countries should be able to make necessary structural adjustments and maintain momentum of growth.

This paper was presented at the International Symposium on "Two Decades of Asian Development and Outlook for the 1980s" on March 8-11, 1982 at Institute of Developing Economies, Tokyo, Japan.

The author is Chief Economist of the East Asia and Pacific Regional Office of the World Bank, Washington, D. C.; Mr. Martin Schrenk collaborated in the preparation.
Table of Contents

Page No.

Introduction . . . . . . . . . . . . . 1

PART I - ECONOMIC PERFORMANCE . . . . . . . . 2

Per Capita Growth . . . . . . . . . . . . . 2
Structural Changes . . . . . . . . . . . . . 2
Social Progress . . . . . . . . . . . . . . . . . 4
Factors in Economic Development . . . . . 4
Investment Trends . . . . . . . . . . . . . 7
Agricultural Performance . . . . . . . . . . 9
Export Expansion . . . . . . . . . . . . . 13
Adjustment Process after 1973 . . . . . 16

PART II - EMERGING ECONOMIC ISSUES . . . . . . 18

Agricultural Prospects and Issues . . . . . 19
Improving Energy Balances . . . . . . . . . 21
Exports of Manufactures Goods . . . . . . . 26
Investment . . . . . . . . . . . . . . . . . 29

PART III - CONCLUSION . . . . . . . . . . . . 31

Tables in the Text
1. GNP Per Capita & Growth of Production . . . . 3
2. Structure of Production . . . . . . . . . . . 4
3. Poverty Indicators, 1977 . . . . . . . . . 6
4. Major Welfare Indicators . . . . . . . . . 7
5. Investment and Financing . . . . . . . . . . 9
6. Rice Production in Selected Years . . . . . 12
7. Current Irrigated Paddy Yields . . . . . . 13
8. Exports . . . . . . . . . . . . . . . . . 13
9. Exports of Manufactured Goods . . . . . . . 15
10. Growth Rates of GNP . . . . . . . . . . . 17
Introduction

1. The last two decades have seen phenomenal growth in the developing market economies of East Asia. The economic performance of Korea, Taiwan, Hong Kong, and Singapore has attracted considerable international attention, while growth and structural change in Indonesia, Thailand, Malaysia has also been very rapid. The Philippines' economy has suffered somewhat in comparison with its East Asian neighbors, but even its GDP growth rate of 6.1% during 1970-79 exceeded the average of 5.5% per annum in other middle-income countries. By and large, Korea, the Philippines and Thailand, the major oil importers, were able to withstand the shock of the sharp rise in 1973 oil prices and the deep international recession of 1974/75 and made orderly adjustments without losing the momentum of growth. Meanwhile, Indonesia and Malaysia, as oil exporters, benefitted from improved terms of trade and were able further to accelerate the pace of economic and social development.

2. However, marked increases in oil prices since 1979 and the sharp deterioration in the international economic situation, characterized by a slowing down of growth in international trade, a sharp drop in many primary commodity prices, and a sharp rise in interest rates on international lending, have once again increased concern with the current account balance of payments deficits among the major oil importers in the region (Korea, the Philippines and Thailand). Malaysia and Indonesia will also be faced with considerable pressure on the balance of payments, due to the high (and positive) real interest rates.

3. Thus, all the five market economies of East Asia on which this paper focuses, face a new period of adjustment in which they must aim at strengthening the balance of payments without seriously reducing the growth rates of output and incomes and with continuing progress in the alleviation of poverty. This paper outlines the nature and magnitude of the structural adjustment problem the individual countries face, the progress they have made so far in tackling emerging issues, and the prospects for growth over the 1980s provided necessary policy improvements can be made. A full understanding of the current situation requires, however, a broad overview of the developments over the last two decades, especially factors which have contributed to the extreme dynamism of the growth process in East Asia. It is also useful to focus on the adjustment process in the wake of first oil price increases because the range of policy options and the urgency of specific policy responses during the 1980s are likely to be influenced by what has been achieved in the past. Part I of the paper provides a summary assessment of economic performance in the five major East Asian economies over the past two decades and highlights the key factors in success. It
also briefly reviews the experience since the oil price increase in 1973. Part II analyzes the growth prospects during the 1980s with special attention to the structural adjustment issues required to tackle them. Part III summarizes the main policy conclusion.

I. ECONOMIC PERFORMANCE

4. There is no single measure by which economic performance of a country can be judged. Growth in GNP per capita income is obviously an important indicator of gains in economic welfare and one which is most frequently used. But the success in structural transformation, human resource development and building-up of development institutions can be critical for the viability of future growth and thus is very relevant in considering past performance. Similarly, the progress in increasing food supplies, in meeting nutrition requirements, and in reduction in poverty in general are important dimensions of development experience. Without wide sharing of fruits of economic growth and broad participation in the development process, long-run sustained growth and social stability cannot be assured.

Per Capita Growth

5. The market economies of East Asia have done well by most performance indicators. GNP per capita in Korea expanded at an average annual rate of 7.1% during 1960-79, and the growth was broadly similar in Singapore, Hong Kong and Taiwan, being among the highest of the developing countries. Thailand, Malaysia and Indonesia showed per capita GNP growth during the same period of 4.6%, 4.0% and 4.1% per annum, respectively. Among the large developing economies (those with a population of over 10 million) only a few, Yugoslavia (5.4% per annum), Brazil (4.8%), Spain (4.7%), and oil-exporting Iraq (4.6%), exceeded the per capita GNP growth rates of Thailand, Malaysia and Indonesia, while growth rates in Turkey (3.8%), Colombia (3.0%), Mexico (2.7%), India (1.4%), and other emerging semi-industrial countries, were lower. However, the Philippines, with a growth rate of GNP per capita of 2.6% per annum during 1960-79, compared unfavorably not only with other East Asian countries but also with the weighted average of all middle-income countries (3.8% per annum).

Structural Changes

6. Table 2 shows changes in the structure of production of East Asian countries and compares these with shifts in other major middle-income countries and India. The figures show that structural change has generally been more rapid in East Asia than elsewhere. The share of agriculture in
<table>
<thead>
<tr>
<th>Country</th>
<th>GNP per cap. 1979</th>
<th>Growth Rates</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>590</td>
<td>8.2</td>
<td>7.7</td>
<td>5.5</td>
<td>4.0</td>
<td>11.6</td>
<td>10.4</td>
<td>11.0</td>
<td>11.4</td>
<td>9.0</td>
<td>7.7</td>
</tr>
<tr>
<td>Philippines</td>
<td>600</td>
<td>5.1</td>
<td>6.2</td>
<td>4.3</td>
<td>4.9</td>
<td>6.0</td>
<td>8.4</td>
<td>6.7</td>
<td>6.7</td>
<td>5.2</td>
<td>5.4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>370</td>
<td>3.9</td>
<td>7.6</td>
<td>2.7</td>
<td>3.6</td>
<td>5.2</td>
<td>11.3</td>
<td>3.3</td>
<td>12.5</td>
<td>4.8</td>
<td>9.2</td>
</tr>
<tr>
<td>Malaysia</td>
<td>1,370</td>
<td>6.5</td>
<td>7.9</td>
<td>N/A</td>
<td>5.0</td>
<td>N/A</td>
<td>9.9</td>
<td>N/A</td>
<td>12.4</td>
<td>N/A</td>
<td>8.4</td>
</tr>
<tr>
<td>Korea</td>
<td>1,480</td>
<td>8.6</td>
<td>10.3</td>
<td>4.4</td>
<td>4.8</td>
<td>17.2</td>
<td>16.5</td>
<td>17.6</td>
<td>17.8</td>
<td>8.9</td>
<td>8.8</td>
</tr>
<tr>
<td>India</td>
<td>190</td>
<td>3.4</td>
<td>3.4</td>
<td>1.9</td>
<td>2.1</td>
<td>5.5</td>
<td>4.4</td>
<td>4.8</td>
<td>4.5</td>
<td>4.6</td>
<td>4.5</td>
</tr>
<tr>
<td>Colombia</td>
<td>1,010</td>
<td>5.1</td>
<td>6.0</td>
<td>3.5</td>
<td>4.8</td>
<td>6.0</td>
<td>5.0</td>
<td>5.7</td>
<td>6.6</td>
<td>5.7</td>
<td>7.2</td>
</tr>
<tr>
<td>Turkey</td>
<td>1,330</td>
<td>6.0</td>
<td>6.6</td>
<td>2.5</td>
<td>3.7</td>
<td>9.6</td>
<td>7.9</td>
<td>10.9</td>
<td>7.7</td>
<td>6.9</td>
<td>7.5</td>
</tr>
<tr>
<td>Mexico</td>
<td>1,640</td>
<td>7.2</td>
<td>5.1</td>
<td>3.8</td>
<td>2.2</td>
<td>9.1</td>
<td>6.4</td>
<td>9.4</td>
<td>6.4</td>
<td>6.9</td>
<td>4.7</td>
</tr>
<tr>
<td>Brazil</td>
<td>1,780</td>
<td>5.4</td>
<td>8.7</td>
<td>N/A</td>
<td>5.0</td>
<td>N/A</td>
<td>9.6</td>
<td>N/A</td>
<td>10.9</td>
<td>N/A</td>
<td>8.7</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>2,430</td>
<td>5.8</td>
<td>5.9</td>
<td>3.3</td>
<td>3.0</td>
<td>6.3</td>
<td>7.2</td>
<td>5.7</td>
<td>7.6</td>
<td>6.9</td>
<td>5.7</td>
</tr>
<tr>
<td>Middle-income countries</td>
<td>1,420</td>
<td>6.1</td>
<td>5.5</td>
<td>3.6</td>
<td>3.0</td>
<td>7.4</td>
<td>6.5</td>
<td>7.0</td>
<td>6.6</td>
<td>5.5</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Source: WDR IV - 1981.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td>27.6</td>
<td>40</td>
<td>26</td>
<td>19</td>
<td>28</td>
<td>13</td>
<td>19</td>
<td>41</td>
<td>46</td>
</tr>
<tr>
<td>Philippines</td>
<td>29.4</td>
<td>26</td>
<td>24</td>
<td>28</td>
<td>35</td>
<td>20</td>
<td>24</td>
<td>46</td>
<td>41</td>
</tr>
<tr>
<td>Indonesia</td>
<td>49.2</td>
<td>54</td>
<td>30</td>
<td>14</td>
<td>33</td>
<td>8</td>
<td>9</td>
<td>32</td>
<td>37</td>
</tr>
<tr>
<td>Malaysia</td>
<td>20.3</td>
<td>37</td>
<td>24</td>
<td>18</td>
<td>33</td>
<td>9</td>
<td>16</td>
<td>45</td>
<td>43</td>
</tr>
<tr>
<td>Korea</td>
<td>60.7</td>
<td>37</td>
<td>20</td>
<td>20</td>
<td>39</td>
<td>14</td>
<td>27</td>
<td>43</td>
<td>41</td>
</tr>
<tr>
<td>India</td>
<td>112.0</td>
<td>50</td>
<td>38</td>
<td>20</td>
<td>27</td>
<td>14</td>
<td>18</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>Colombia</td>
<td>25.3</td>
<td>34</td>
<td>29</td>
<td>26</td>
<td>28</td>
<td>17</td>
<td>21</td>
<td>40</td>
<td>43</td>
</tr>
<tr>
<td>Turkey</td>
<td>56.5</td>
<td>41</td>
<td>23</td>
<td>21</td>
<td>29</td>
<td>13</td>
<td>21</td>
<td>38</td>
<td>48</td>
</tr>
<tr>
<td>Mexico</td>
<td>121.3</td>
<td>16</td>
<td>10</td>
<td>29</td>
<td>38</td>
<td>23</td>
<td>29</td>
<td>55</td>
<td>52</td>
</tr>
<tr>
<td>Brazil</td>
<td>204.8</td>
<td>16</td>
<td>11</td>
<td>35</td>
<td>38</td>
<td>26</td>
<td>28</td>
<td>49</td>
<td>51</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>61.5</td>
<td>24</td>
<td>12</td>
<td>45</td>
<td>44</td>
<td>36</td>
<td>31</td>
<td>31</td>
<td>44</td>
</tr>
<tr>
<td>Middle-income countries</td>
<td>22</td>
<td>14</td>
<td>30</td>
<td>38</td>
<td>21</td>
<td>24</td>
<td>47</td>
<td>48</td>
<td></td>
</tr>
</tbody>
</table>

Source: WDR IV - 1981.
the gross domestic product of middle-income countries dropped from 22% to 14% over the period 1960-79, while the share of manufacturing increased from 21% to 24%. In comparison, the shifts in Korea, Thailand and Malaysia were much larger. In the Philippines, which had a more developed structure of production already in 1960, the change has been more limited. In Indonesia, the share of manufacturing in total output has increased moderately to 9% in 1979 and this can be only partly explained by the sharp rise in share of oil in the total economy over the last decade. But while the manufacturing sector has, relatively speaking, lagged in Indonesia, it has expanded vigorously in Thailand and Malaysia. However, even in the latter the share of manufacturing is still low, compared to other middle-income countries and thus the scope for further structural change remains considerable.

Social Progress

7. The progress in increasing food supply and meeting basic needs of nutrition, education and health in East Asia has also been considerable and is reflected in a sharp decline in the incidence of absolute poverty, as well as in significant improvements in adult literacy and life expectancy (see Tables 3 and 4). Korea has achieved the most dramatic decline in the incidence of poverty compared to the 1960s, but there has also been very significant reduction in the proportion of poor households in Thailand and Malaysia. The incidence of poverty remains relatively high in Indonesia and the Philippines, but even in these countries the incidence of absolute poverty is distinctly lower than, say, in 1960. Life expectancy, which is an important indicator of nutritional standards, has increased faster in East Asian countries than in other comparable countries. For example, the improvement in the case of Indonesia markedly exceeded the improvement in India; Thailand and the Philippines exceeded Brazil; and life expectancy in Malaysia now exceeds that of all the other countries shown in Table 4, with the exception of Yugoslavia. In adult literacy and primary school enrollment, improvements in Indonesia substantially exceeded those in India. In secondary and higher education, Indonesia, however, still lags behind India. Both in Malaysia and Thailand, the adult literacy ratio is relatively low, and there is significant room for improvement in the quality and quantity of higher education.

Factors in Economic Development

8. This rather good record of economic and social progress can be attributed to a number of factors. These include political stability, generally strong commitment to development, a massive increase in savings

/1 Also see Parvez Hasan: Growth and Equity in East Asia," Finance and Development, Vol. 15, No. 2 (June 1978).
Table 3: POVERTY INDICATORS, 1977

<table>
<thead>
<tr>
<th></th>
<th>Population (million)</th>
<th>Poverty Line (US$ p.y.)</th>
<th>Pop. below poverty line (%)</th>
<th>Number of Poor (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thailand</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rural</td>
<td>37.2</td>
<td>82</td>
<td>20</td>
<td>7.5</td>
</tr>
<tr>
<td>urban</td>
<td>6.2</td>
<td>103</td>
<td>6</td>
<td>0.4</td>
</tr>
<tr>
<td>Total</td>
<td><strong>43.4</strong></td>
<td></td>
<td><strong>18</strong></td>
<td><strong>7.9</strong></td>
</tr>
<tr>
<td>Philippines</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rural</td>
<td>28.6</td>
<td>155</td>
<td>42</td>
<td>12.0</td>
</tr>
<tr>
<td>urban</td>
<td>15.9</td>
<td>180</td>
<td>35</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td><strong>44.5</strong></td>
<td></td>
<td><strong>39</strong></td>
<td><strong>17.6</strong></td>
</tr>
<tr>
<td>Indonesia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rural</td>
<td>111.2</td>
<td>91</td>
<td>43</td>
<td>47.8</td>
</tr>
<tr>
<td>urban</td>
<td>26.2</td>
<td>141</td>
<td>38</td>
<td>10.0</td>
</tr>
<tr>
<td>Total</td>
<td><strong>137.4</strong></td>
<td></td>
<td><strong>42</strong></td>
<td><strong>57.8</strong></td>
</tr>
<tr>
<td>Malaysia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rural</td>
<td>8.9</td>
<td>132</td>
<td>33</td>
<td>2.9</td>
</tr>
<tr>
<td>urban</td>
<td>3.7</td>
<td>147</td>
<td>10</td>
<td>0.4</td>
</tr>
<tr>
<td>Total</td>
<td><strong>12.6</strong></td>
<td></td>
<td><strong>26</strong></td>
<td><strong>3.3</strong></td>
</tr>
<tr>
<td>Korea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rural</td>
<td>17.1</td>
<td>163</td>
<td>7</td>
<td>1.2</td>
</tr>
<tr>
<td>urban</td>
<td>19.5</td>
<td>199</td>
<td>13</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td><strong>36.6</strong></td>
<td></td>
<td><strong>10</strong></td>
<td><strong>3.7</strong></td>
</tr>
</tbody>
</table>

**Table 4: MAJOR WELFARE INDICATORS**

<table>
<thead>
<tr>
<th></th>
<th>Indonesia</th>
<th>Korea</th>
<th>Malaysia</th>
<th>Philippines</th>
<th>Thailand</th>
<th>Brazil</th>
<th>Colombia</th>
<th>India</th>
<th>Mexico</th>
<th>Turkey</th>
<th>Yugoslavia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Life expectancy (years)</strong></td>
<td>1960</td>
<td>39</td>
<td>54</td>
<td>53</td>
<td>51</td>
<td>51</td>
<td>55</td>
<td>53</td>
<td>42</td>
<td>58</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>1979</td>
<td>53</td>
<td>63</td>
<td>68</td>
<td>62</td>
<td>62</td>
<td>63</td>
<td>63</td>
<td>52</td>
<td>66</td>
<td>62</td>
</tr>
<tr>
<td><strong>Infant mortality rate</strong></td>
<td>1960</td>
<td>159</td>
<td>62</td>
<td>N/A</td>
<td>98</td>
<td>62</td>
<td>128</td>
<td>77</td>
<td>78</td>
<td>194</td>
<td>78</td>
</tr>
<tr>
<td>(per 1,000)</td>
<td>1978</td>
<td>120</td>
<td>37</td>
<td>32</td>
<td>65</td>
<td>N/A</td>
<td>92</td>
<td>65</td>
<td>125</td>
<td>60</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Population per physician</strong></td>
<td>1960</td>
<td>47.0</td>
<td>3.5</td>
<td>7.5</td>
<td>6.9</td>
<td>8.0</td>
<td>2.6</td>
<td>3.7</td>
<td>4.9</td>
<td>1.8</td>
<td>3.0</td>
</tr>
<tr>
<td>(per 1,000)</td>
<td>1977</td>
<td>13.6</td>
<td>2.0</td>
<td>8.7</td>
<td>2.7</td>
<td>8.2</td>
<td>1.7</td>
<td>1.3</td>
<td>3.6</td>
<td>1.8</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Adult literacy rate (%)</strong></td>
<td>1960</td>
<td>39</td>
<td>71</td>
<td>53</td>
<td>72</td>
<td>68</td>
<td>61</td>
<td>63</td>
<td>28</td>
<td>65</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>1976</td>
<td>62</td>
<td>93</td>
<td>60</td>
<td>88</td>
<td>84</td>
<td>76</td>
<td>N/A</td>
<td>36</td>
<td>82</td>
<td>60</td>
</tr>
<tr>
<td><strong>Enrollment ratio (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>1960</td>
<td>71</td>
<td>94</td>
<td>96</td>
<td>95</td>
<td>83</td>
<td>95</td>
<td>77</td>
<td>61</td>
<td>80</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>1978</td>
<td>94</td>
<td>111</td>
<td>94</td>
<td>105</td>
<td>82</td>
<td>88</td>
<td>124</td>
<td>79</td>
<td>116</td>
<td>105</td>
</tr>
<tr>
<td>Secondary</td>
<td>1960</td>
<td>6</td>
<td>27</td>
<td>19</td>
<td>26</td>
<td>13</td>
<td>11</td>
<td>12</td>
<td>20</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>1978</td>
<td>22</td>
<td>74</td>
<td>48</td>
<td>56</td>
<td>28</td>
<td>24</td>
<td>43</td>
<td>28</td>
<td>39</td>
<td>41</td>
</tr>
<tr>
<td>Higher</td>
<td>1960</td>
<td>1</td>
<td>5</td>
<td>1</td>
<td>13</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>1977</td>
<td>2</td>
<td>11</td>
<td>4</td>
<td>24</td>
<td>5</td>
<td>13</td>
<td>10</td>
<td>8</td>
<td>11</td>
<td>8</td>
</tr>
</tbody>
</table>

**Sources:** Social Indicators Data Sheet (5/18) and WDR IV - 1981.
and investment levels, high priority given in almost all these countries to agriculture and export sectors, a favorable international economic environment, until relatively recently, reflected in rapid expansion of world trade and capital flows and, last but not least, pragmatic economic management and sound economic policies with no strong ideological bias. These factors have operated in varying degrees in the individual countries and consequently there have been significant differences, among them in efficiency in the use of resources, rates of growth in per capita consumption, and distribution of benefits of growth. But notwithstanding the considerable diversity among the five countries both in terms of speed and level of development, all have more in common among themselves than with most other developing countries in terms of success in economic management.

**Investment Trends**

9. The strong commitment to economic development in East Asian countries is perhaps best demonstrated by the sharp rise in savings and investment levels during the last two decades (see Table 5). The ratio of investment to GDP in Indonesia has risen from 5% in 1960 to 22% in 1980. This was made possible by a sharp rise in government oil revenues, the bulk of which was saved and invested, and by sizeable net foreign capital inflows running a relatively large current account surplus in the balance of payments, as the development program had not fully adjusted to the further sharp increase in oil revenues after mid-1979. In other countries, the ratio of investment to GDP was close to 30% in 1980, compared to the 1960 figures of 11% for Korea and 14-16% for the Philippines, Thailand and Malaysia. The investment rate in the latter group is clearly above the weighted average (25% of GNP in 1979) from the middle-income countries.

10. It should be emphasized, however, that the current investment levels in Korea, Thailand and the Philippines are being sustained by relatively large current account deficits in the balance of payments (6-8% of GNP) which are not viable in the long run. As will be discussed subsequently, these deficits must be brought down, so as to preserve creditworthiness and to keep the external debt service burden within manageable limits. Nevertheless the investment rates need not drop much, if at all, provided policies aimed at domestic resource mobilization are further strengthened. Thus, the very low rates of capital formation which in the 1950s were considered as a root cause of underdevelopment are not a critical issue. While resource mobilization efforts will remain important, the focus in these countries will be and should be increasingly directed on development strategies and effective use of resources, through improved economic policies and stronger developmental institutions.

11. In the past, the wide variations in the growth rates of GNP between, say, Korea and the Philippines have been attributable much more to
Table 5: INVESTMENT AND FINANCING

<table>
<thead>
<tr>
<th></th>
<th>Thailand</th>
<th>Philippines</th>
<th>Indonesia</th>
<th>Malaysia</th>
<th>Korea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross domestic investment growth rate (%) p.a.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1960-70</td>
<td>16</td>
<td>8</td>
<td>5</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>1970-79</td>
<td>8</td>
<td>11</td>
<td>15</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>ICOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1960-70</td>
<td>2.8</td>
<td>4.5</td>
<td>2.2</td>
<td>2.8</td>
<td>1.9</td>
</tr>
<tr>
<td>1970-75</td>
<td>4.0</td>
<td>4.7</td>
<td>2.2</td>
<td>3.1</td>
<td>2.7</td>
</tr>
<tr>
<td>1975-80</td>
<td>2.9</td>
<td>4.6</td>
<td>3.4</td>
<td>2.9</td>
<td>5.4</td>
</tr>
<tr>
<td>(% of GDP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment in fixed assets: Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>7.7</td>
<td>7.6</td>
<td>N/A</td>
<td>N/A</td>
<td>10.1/a</td>
</tr>
<tr>
<td>Private</td>
<td>16.4</td>
<td>18.3</td>
<td>N/A</td>
<td>N/A</td>
<td>11.6/a</td>
</tr>
<tr>
<td>Total Fixed Investment</td>
<td>24.1</td>
<td>25.9</td>
<td>16.0</td>
<td>25.3</td>
<td>21.7/a</td>
</tr>
<tr>
<td>Investment in stocks</td>
<td>2.1</td>
<td>2.0</td>
<td>5.5</td>
<td>4.9</td>
<td>N/A</td>
</tr>
<tr>
<td>Total Gross Investment</td>
<td>26.2</td>
<td>27.9</td>
<td>21.5</td>
<td>30.2</td>
<td>21.7</td>
</tr>
<tr>
<td>Financing of Investment</td>
<td>(% of GDP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financed by:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public savings</td>
<td>2.1</td>
<td>1.5</td>
<td>1.5</td>
<td>N/A</td>
<td>10.7</td>
</tr>
<tr>
<td>Private savings</td>
<td>20.2</td>
<td>20.2</td>
<td>16.7</td>
<td>N/A</td>
<td>19.3</td>
</tr>
<tr>
<td>Total Gross Domestic Savings</td>
<td>22.3</td>
<td>21.7</td>
<td>18.2</td>
<td>25.2</td>
<td>30.0</td>
</tr>
<tr>
<td>Resource gap</td>
<td>3.9</td>
<td>6.2</td>
<td>3.3</td>
<td>5.0</td>
<td>-8.2/b</td>
</tr>
<tr>
<td>Total</td>
<td>26.2</td>
<td>27.9</td>
<td>21.5</td>
<td>30.2</td>
<td>21.7</td>
</tr>
</tbody>
</table>

/a Including changes in stocks.

/b Surplus.

Source: IBRD country data banks.
the differences in gross incremental capital output ratios (ICORS) than to
the dissimilarity in the investment ratios. Until at least the mid-1970s,
the ICORS in Korea were very low (averaging about 2.5 during the 1960-75,
but jumping to double that figure in 1975-80), while those in the
Philippines have remained quite high throughout (averaging over 4.5 during
1960-80).

12. These rather crude indicators of the efficiency with which capital
has been used in Korea and the Philippines do not appear to be related to
the relative roles of private and public investments. In Korea, public
investment has been historically less than one-quarter of the total fixed
investment. In the Philippines, public investment was barely 10% of the
total in the early 1970s. Since then, the public share has grown
substantially, due to a major thrust of investment towards rural
infrastructure and power (which were initially partly privately owned) but
in 1980 nearly three-fourths of the total investment was still in the
private sector. The shares of the public sector in investment were higher
in Indonesia (over 45%), Malaysia (35-40%) and Thailand (25-30%), and these
countries had capital/output ratios around 3.0 during the 1970s.

13. Sectoral ICORS are not easily available, and the impact of a
different sectoral composition of investment is hard to assess in the
absence of detailed data. It seems likely, however, that substantial
differences in aggregate capital productivity between the Philippines
and other countries were attributable primarily to differences in
industrial performance.

Agricultural Performance

14. The agricultural performance in East Asian countries has been
almost uniformly outstanding. The rate of agricultural growth in the low-
iccome countries (including China and India) during 1960-79 has been 2.3%
per annum. The Indonesian agriculture expanded by 3.2% per annum even
though this includes the highly chaotic years 1960-66; growth rate during
the 1970s has been close to 4% (see Table 6). In all other countries, the
average annual agricultural growth has been well above 4% per annum, with
Malaysia and Thailand nearly trebling their agricultural output over the
last two decades. The success of these countries in expanding agricultural
output and food supply per capita significantly has not received the
attention it deserves. Very few large countries have been able to match
this record in the recent past. Historically, the comparison can be made
with major agricultural expansion in Japan around the turn of the century, 1
when agricultural output doubled in 30 years between 1889-1919, showing
average annual growth of 2.5%.

1 Compare William W. Lockwood: "The Economic Development in Japan".
Growth and Structural Change; 1868-1938, p.86.
15. The contribution made by high agricultural growth rates to sustaining overall growth, to direct and indirect job creation, to strengthening the balance of payments, and to poverty alleviation is also not fully appreciated. Manufacturing has clearly been the leading sector and manufactured exports have often provided the cutting edge of expansion. However, even in Korea the ratio of manufactured exports to total manufacturing output does not exceed 30%. This ratio is less than 5% in Indonesia, 10-12% in Thailand and the Philippines, and around 20% in Malaysia. The home market for manufacturing thus remains crucial, and the rate of growth of agricultural production and incomes is an important determinant of the rate of expansion of this market. To the extent that manufacturing growth is stimulated by a more rapid agricultural expansion, employment effects are reinforced. There is also growing evidence of significant growth in nonfarm rural employment in Thailand and elsewhere which directly relates to agricultural expansion.

16. Contrary to general impressions, the availability of abundant land resources has not been the dominant element in agricultural expansion in East Asia. Generally speaking, increased irrigation, improved varieties, greater fertilizer use, and shift to higher value crops have been more important sources of agricultural growth than the expansion of cultivated area. Government agricultural programs, policies, and investments have in most cases combined with responsive and dynamic private sectors to offset the effect of increasing pressure of the population on land resources. Even in Thailand, where the increases in cultivated area have been dramatic (close to 4% per annum during 1960-80), and where yield improvements have been most disappointing, a substantial part of the agricultural growth of 5.4% per annum between 1960-79 can be attributed to extension of irrigation and crop diversification. For instance, the increase in rice production of 3% per annum over 1960-80 was mainly the result of an increase in irrigation acreage and yields because the additions to rainfed area under rice cultivation were largely offset by declining yields as cultivation expanded to lower productivity lands. On the other hand, the expansion of new crops, such as cassava, maize, rubber, and sugarcane, largely in response to export opportunities, has generally meant a shift in the cropping pattern to higher value crops.\1

17. In Malaysia new land development through the public sector for rubber and oil palm smallholders has contributed significantly to agricultural growth. But notwithstanding an increase in cultivated area of almost 2% per annum since 1960, the large part of the agricultural growth in

\1 The proportion of total planted area under rainfed rice dropped from 64% in 1960 to 44% in 1979.
Malaysia has also come through dramatic improvements in productivity, especially in rubber (4% per annum during the 1970s), diversification to higher value oil palm and expansion in irrigation for rice.

18. In Korea, Indonesia and the Philippines, the increase in land availability has not been a major factor in agricultural production. Cultivated area in the Philippines increased by 1.5% per annum during 1960-70, and a further 1.0% per annum during 1970-75. But a substantial part of the increase was in upland corn areas with low productivity. In Indonesia, the area under major food crops fell over the last decade, and in Korea there was also a small drop.

19. In spite of the increasing land constraints, rice production has grown dramatically in almost all the countries.

Table 6: RICE PRODUCTION IN SELECTED YEARS (million tons)

<table>
<thead>
<tr>
<th></th>
<th>Indonesia</th>
<th>Thailand</th>
<th>Philippines</th>
<th>Korea</th>
<th>Malaysia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>n.a.</td>
<td>6.3</td>
<td>2.5</td>
<td>3.5</td>
<td>0.9</td>
</tr>
<tr>
<td>1965</td>
<td>9.9</td>
<td>7.2</td>
<td>2.4</td>
<td>3.9</td>
<td>1.0</td>
</tr>
<tr>
<td>1970</td>
<td>12.6</td>
<td>9.0</td>
<td>3.2</td>
<td>3.9</td>
<td>1.4</td>
</tr>
<tr>
<td>1975</td>
<td>14.5</td>
<td>9.0</td>
<td>3.5</td>
<td>4.7</td>
<td>1.7</td>
</tr>
<tr>
<td>1979</td>
<td>17.1</td>
<td>10.2</td>
<td>4.3</td>
<td>5.6</td>
<td>n.a.</td>
</tr>
<tr>
<td>Average growth rate (%)</td>
<td>4.1 /a</td>
<td>3.0</td>
<td>3.3</td>
<td>3.1</td>
<td>4.4</td>
</tr>
</tbody>
</table>

/α 1968-79 average.

20. The major source of increase in rice output has been the increase in area under irrigation and the improvement in yields related to increased irrigation, and the increasing use of new varieties, fertilizers and other current inputs. Yields on irrigated land in the Philippines grew at an annual rate of 3.5% per annum during 1960-79. In Indonesia, the increase was 2.7% per annum during 1968-80. In Korea, the long-run trend in rice yield growth has been around 2.9% per annum. In Malaysia, average rice yields expanded by 2.4% per annum during 1955-75. Indeed, as mentioned above, Thailand is the only country where there has been no significant increase of rice yields.
Table 7: CURRENT IRRIGATED PADDY YIELDS

<table>
<thead>
<tr>
<th>Country</th>
<th>Yield (US per ha)</th>
<th>Growth (% p.a.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>3.3</td>
<td>2.7 (1968-80)</td>
</tr>
<tr>
<td>Thailand</td>
<td>2.8</td>
<td>1.7 (1971-79)</td>
</tr>
<tr>
<td>Philippines</td>
<td>2.6</td>
<td>3.5 (1960-79)</td>
</tr>
<tr>
<td>Korea</td>
<td>4.6</td>
<td>2.9 (1961-79)</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2.9</td>
<td>2.4 (1955-75)</td>
</tr>
<tr>
<td>China</td>
<td>3.9</td>
<td>1.9 (1970-79)</td>
</tr>
</tbody>
</table>

/b Including rainfed.

Export Expansion

21. The rapid growth of the foreign trade sectors of the East Asian economies during the last two decades has been another key element affecting growth. In all countries, the ratio of exports of goods and nonfactor services to GDP has risen significantly, though the most dramatic expansion took place in Korea.

Table 8: EXPORTS

<table>
<thead>
<tr>
<th>Country</th>
<th>Merchandise</th>
<th>Rate of real growth</th>
<th>Exports of goods and nonfactor services (as % of GDP)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value (in $ billion)</td>
<td>1970-80</td>
<td>1960</td>
</tr>
<tr>
<td>Indonesia</td>
<td>22.4</td>
<td>10.2</td>
<td>13</td>
</tr>
<tr>
<td>Thailand</td>
<td>6.7</td>
<td>11.8</td>
<td>17</td>
</tr>
<tr>
<td>Philippines</td>
<td>5.9</td>
<td>5.6</td>
<td>11</td>
</tr>
<tr>
<td>Malaysia</td>
<td>12.6</td>
<td>7.5</td>
<td>54</td>
</tr>
<tr>
<td>Korea</td>
<td>17.5</td>
<td>23.5</td>
<td>3</td>
</tr>
<tr>
<td>Middle-income countries</td>
<td>4.3 /b</td>
<td>16 /a</td>
<td>20</td>
</tr>
<tr>
<td>Industrial market economies</td>
<td>5.9 /b</td>
<td>12 /a</td>
<td>19 /a</td>
</tr>
</tbody>
</table>

/a Weighted Average.
/b Median; 1970-79.
Almost all of these economies are more open than either an average middle-income country or a typical industrial market economy. Malaysia has now a higher ratio of exports to GNP (58%) than Belgium (55%) or Netherlands (52%). Korea has a higher ratio (30%) than Germany (26%) or U.K. (29%) and a much higher ratio than Japan (12%), though Taiwan, Singapore and Hong Kong are much more dependent on trade than Korea. Thailand and the Philippines, with ratios of exports to GNP of 23% and 21%, respectively, are more export-oriented than most large semi-industrial countries such as Brazil (7%), Mexico (12%), Colombia (18%), Yugoslavia (14%)

Many factors have contributed to this vigorous export expansion. In Indonesia, and to a smaller extent in Malaysia, primary commodities (petroleum, timber, minerals) have accounted for a substantial portion of the growth in exports. However, in others the bulk of the growth has come from broad-based growth in agricultural and/or manufactured products. It is interesting to note that agricultural exports (excluding timber) from Thailand and Malaysia appear to have grown faster than the output of the respective agricultural sectors. Still, it is the growth in manufactured goods exports which has emerged as the most dynamic factor in export expansion and the one which will crucially influence whether or not exports continue to grow faster than GNP.

The outstanding success of Korea in expanding manufactured goods is well known. But in the Philippines, Malaysia and even Thailand, manufactured goods exports have risen at rates averaging 20-30% per annum for a decade. In Thailand, manufactured goods exports (including sugar) accounted for about 55% of the incremental export earnings during 1970-80. In the Philippines, about 75% of the increase of exports during this period was attributable to manufactured goods exports. Even in Malaysia, where petroleum, timber, rubber and palm oil exports have risen dramatically in recent years, manufactured goods exports have accounted for over 35% of the incremental export earnings in the past decade. As a result, the structure of exports has undergone a major change in all countries except Indonesia. However, as mentioned earlier, the share of manufactured goods exports in total manufacturing output, though growing rapidly, is still small, except in Korea and Malaysia. Nevertheless, manufactured goods exports which, in line with the comparative advantage of these countries, have consisted chiefly of labor-intensive products, have begun to contribute significantly to job creation not only in Korea and Malaysia but also in Thailand and the Philippines.

Even though the share of manufactured goods in total exports in Malaysia is smaller than in Thailand and the Philippines, the size of the export sector in relation to the economy is much larger. Furthermore, the share of manufacturing output is smaller in Malaysia than in Thailand and the Philippines. Thus, the apparently paradoxical result that, while manufactured goods exports in relation to total exports are less important in Malaysia than in her neighbors, she has a much more export-oriented manufacturing sector.
Table 9: EXPORTS OF MANUFACTURED GOODS

<table>
<thead>
<tr>
<th></th>
<th>Value (in $ billion)</th>
<th>Rate of growth (% p.a.)</th>
<th>Share of manufactures in total exports (merchandise) (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>0.8</td>
<td>24</td>
<td>-</td>
</tr>
<tr>
<td>Thailand</td>
<td>2.9</td>
<td>23</td>
<td>2</td>
</tr>
<tr>
<td>Philippines</td>
<td>2.2</td>
<td>30</td>
<td>4</td>
</tr>
<tr>
<td>Malaysia</td>
<td>2.8</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td>Korea</td>
<td>15.7</td>
<td>19</td>
<td>14</td>
</tr>
<tr>
<td>Middle-income countries</td>
<td>13</td>
<td>38 /b</td>
<td></td>
</tr>
<tr>
<td>Industrial market economies</td>
<td>66</td>
<td>77 /b</td>
<td></td>
</tr>
</tbody>
</table>

/a Share of manufactured exports in non-oil exports was 14%.
/b 1978.

25. In expanding manufacturing goods exports, the East Asian countries have taken advantage, first of all, of the favorable international developments. World economic activity has shown sustained growth during the last two decades, and world trade has grown substantially faster than world output. Even with the slowing down of OECD growth, world trade in manufactures doubled in volume during 1970-80 and manufactured exports of developing countries expanded by 12.9% per annum. But clearly the countries of East Asia were able to increase their market share relative to other developing countries. This was mainly due to their domestic policies which either avoided discrimination against exports or compensated the exporters for the bias in favor of domestic industry. Korea maintained a set of policies most favorable for export expansion, and Malaysia and Thailand have generally avoided protection for domestic industry.

26. In the Philippines, the industrial policy framework has been heavily protectionist with a strong bias towards import substitution. This did not initially hamper manufactured exports because the system of customs duty rebates and bonded warehouses gave at least some exporters access to raw materials and intermediate products at international prices. However, this tended to limit exports to relatively simple items such as garments and electronics; backward linkages between the export sector and domestic supplies remained weak because of the high cost of domestic manufacturing.
In general also, the low productivity of capital and low growth rates of manufacturing and employment have been a serious drag on the overall economic growth rate in the Philippines. The Government is moving towards a freer trade regime by removing import restrictions and reducing tariffs. It also plans to rationalize the industrial structure by assisting selected industries which will be hard hit in a less protectionist environment. Unless a high growth rate of output of labor-intensive manufactured goods can be sustained, and unless the productivity of capital in the Philippine industry can be increased, progress toward the twin objectives of accelerating employment growth and reducing the balance of payments deficits will be difficult.

27. In Indonesia, even though the overall manufacturing growth rate has been high, the manufacturing exports have yet to emerge as a significant source of increment of output and exports of manufactures. The urgency of promoting labor-intensive exports in Indonesia derives also from the long-run balance of payments considerations. This will involve, among other things, greater encouragement of the private sector, less pre-occupation with large capital-intensive projects, liberalization of investment control procedures, reduction of domestic effective protection, and strengthening of export incentives.

Adjustment Process after 1973

28. Korea, the Philippines and Thailand, the major oil importers in the region, were hard hit by the sharp rise of oil prices in 1973 and the subsequent slowdown in international economic activity (Table 10). But by and large, these countries showed resilience to the eternal shocks, and in fact the overall growth rates for all three countries were higher during 1974-79 than they were in 1964-73 (Table 1). This was partly because agricultural growth remained good and manufactured exports expanded significantly faster than those of other developing countries. But it was also because the adjustment to the oil shock was reflected mainly in the large current account deficits in the balance of payments of these countries. The cumulative deficits in Korea, the Philippines and Thailand during 1974-79 amounted to US$9.5 billion, US$5.8 billion and US$5.1 billion, respectively, and both in real terms and as a percentage of GNP (except for Korea) were substantially larger than in 1970-73. The total outstanding external debt (medium and long term) of the Philippines increased from US$1.8 billion at the end of 1972 to US$9.7 billion at the end of 1980. The corresponding increases in Korea and Thailand were from US$3.0 billion to US$16.7 billion and from US$0.9 billion to US$6.0 billion, respectively. The five to sixfold increase in the nominal value of debt in a relatively short period has not, however, resulted in a heavier real burden because (a) the bulk of the borrowing as at fixed interest rates which, given inflationary trends in the world economy, turned out to be negative in real terms; and (b) growth in export volumes was also quite rapid. In Thailand and Korea, the ratio of
Table 10: GROWTH RATES OF GNP
(\% PER YEAR)

<table>
<thead>
<tr>
<th></th>
<th>1964-73</th>
<th>1974-79</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korea</td>
<td>9.6</td>
<td>11.2</td>
</tr>
<tr>
<td>Philippines</td>
<td>5.3</td>
<td>6.1</td>
</tr>
<tr>
<td>Thailand</td>
<td>8.0</td>
<td>8.4</td>
</tr>
<tr>
<td>Indonesia</td>
<td>7.3</td>
<td>6.6</td>
</tr>
<tr>
<td>Malaysia</td>
<td>6.6</td>
<td>7.6</td>
</tr>
</tbody>
</table>

Debt service payments to exports of goods and services at 15\% and 14\%
respectively in 1980 was almost unchanged from 1973, and in the Philippines
this ratio at 17%/1 was significantly lower than in early 1970s.

29. However, the ability to sustain larger balance of payments deficits
than would normally have been prudent delayed domestic policy adjustments
aimed at energy conservation and production, financial resource mobilization
and increased efficiency in the use of investment resources. In retrospect,
investment expansion during the latter part of the 1970s was excessive in all
three countries in relation to the availability of real resources, and the
reliance on inflationary financing tended to increase. In Thailand, the
fiscal deficits widened significantly as necessary price adjustments in energy
were delayed. In the Philippines, the urgent industrial policy reform was not
initiated until 1980 and the plans for large-scale industrial projects for the
1980s were initially quite unrealistic. In Korea, the balance of payments at
first showed dramatic improvements after 1975 through a strong expansion of
exports, made possible by a remarkable diversification of markets and
products, and astounding success in securing of construction contracts in the
Middle East. However, the recovery in the balance of payments was short-lived
as doubling of real fixed investment between 1975 and 1978, combined with a
similar growth in exports, seriously overstrained the economy. The fact that
a disproportionate amount of investment was directed towards heavy and
chemical industries and was financed by government-directed and subsidized
credit compounded the problem of financial balance, led to poor capacity
utilization in industry and meant further increase in energy intensity and
import dependence on oil.

/1 In addition to factors mentioned above, there was a significant improve-
ment in terms and maturity structure of the Philippine debt due to
substantial increase in official assistance.
II. EMERGING ECONOMIC ISSUES

30. The further doubling of oil prices between 1978 and 1980 and a sharp increase in interest rates on international lending, which are now strongly positive in real terms, have brought the issues of structural adjustment to the forefront again. The 1980 levels of current account deficits in the balance of payments (10%, 7.2% and 5.8% of GNP respectively in Korea, Thailand, and the Philippines) are clearly not sustainable in the long run and will, if continued for any length of time, create major debt management problems. A large current account balance of payments deficits (9% of GNP) also emerged in Malaysia during 1981 and is likely to persist during 1982. The sharp drop in Malaysia's primary exports and extraordinary investment goods imports have no doubt contributed to the record deficits. But for the first time long-term balance of payments and debt management are emerging as an issue in Malaysia because several major primary exports of notably rubber, timber, and tin will show little or no growth over the 1980s. The outlook for energy exports is somewhat uncertain, but a preliminary assessment suggests that the combined net exports of crude oil and gas might show little growth between 1980 and 1990. Fortunately, Malaysia's public external debt remains relatively small (US$3.1 billion in 1980) and the debt-service ratio has averaged around 5-6% during the last few years, only slightly higher than in the early 1970s. But even Malaysia could not prudently afford a current account deficit of US$2 billion a year through the 1980s unless export prospects improve dramatically. In Indonesia, the current softness in the market for crude oil, which accounts for about 75% of gross exports (and about two-thirds of total exports with oil on a net basis) has brought about a dramatic change in the balance of payments forecasts. Whereas in 1979-80 and 1980-81 sizeable current account surpluses were recorded in the balance of payments, a large deficit is likely to emerge during 1982-83. The longer-term balance of payments outlook for Indonesia is even more difficult. Since net exports of oil and LNG are unlikely to grow very much during the 1980s (and could decline in the 1990s), other primary and manufactured goods exports will have to grow annually by 5% and 20% respectively over the next decade, even to attain a modest overall export growth rate of 4-4.5% per annum. The relatively low present level of external debt (US$15 billion at the end of 1980) and a debt-service ratio of 7-11% (depending upon whether oil exports are treated as gross or net), however, provide some room for maneuver.

/1 The 1981 and 1982 current account balance of payments deficits is estimated at US$2.3 billion and US$2.5 billion respectively.
31. The need for structural adjustment in the narrow sense of reducing the presently large current account balance of payments deficits to 3-4% of GNP by the mid- and late 1980s so as to preserve creditworthiness and keep the external debt-service burden within manageable limits, thus appears to exist for all of the above countries. However, an equally important objective of adjustment programs is to avoid disruption of the momentum of economic growth. With suitable adjustment policies, it is hoped that growth will not only be higher than otherwise, but almost as high as in the second half of the 1970s. The high growth rates are essential for creating employment opportunities in line with labor force growth, which in the 1980s is expected to be at a record rate. Rapid expansion of employment opportunities is in turn a key to continued progress toward poverty alleviation. In the long run, tightening of labor markets and rise in real wages are essential to reduction of absolute poverty. Thus, in looking at the structural adjustment process, the countries must give serious attention to bringing about an orderly reduction in the balance of payments deficits, while taking an integrated view of economic and social developments over the next decade. And it must focus on policy improvements which are required to maintain financial strength but without unduly sacrificing growth in consumption and employment.

32. The four broad areas which are relevant from a policy viewpoint for bringing about an orderly medium-term adjustment in the balance of payments, while keeping economic growth rates high, are: (a) agriculture; (b) energy; (c) exports; and (d) investment.

Agricultural Prospects and Issues

33. Continued high agricultural growth will remain crucial even in the quickly industrializing countries of East Asia. In Korea, the agricultural labor force is now dropping, and in Malaysia employment in agriculture may level off after the next few years. However, in Indonesia, Thailand and the Philippines, agriculture must continue to provide a significant part of the growth in employment at least for the next two decades. Moreover, as recent CPPs have shown, without an agricultural export growth rate of around 5% per annum during the 1980s it would be difficult for Indonesia, Thailand and the Philippines to attain their balance of payments goals. Malaysia also cannot afford an erosion of its important agriculture base. Faced with prospect of labor scarcity, both Korea and Malaysia will need long-term agricultural policies which will assist in the orderly transformation of the structure of employment through

/1 For a further discussion of employment problem and need for high growth see Economic Trends and World Bank Lending in East Asia, November 21, 1978 - East Asia and Pacific Regional Office.
elimination of very low productivity jobs in agriculture. These policies should aim at increasing labor productivity in agriculture (through labor-saving investments and increase in land/labor ratio) while stressing labor mobility and reducing fragmentation in labor markets. In all countries, growth in agricultural incomes will remain an important source of sustaining the crucial home market for manufactured goods, though quite obviously the differences in this regard between, say, Indonesia and Korea will be substantial.

34. Fortunately, the prospects for maintaining reasonably high agricultural growth rates through the 1980s appear good partly because the full impact of the spurt in agricultural investments, especially in irrigation, agricultural research, and extension during the 1970s, will continue to be felt in the coming years. Nonetheless, it will be essential to maintain the momentum of agricultural programs and investments and to strengthen agricultural incentives through pricing policies especially in Thailand but perhaps also in Malaysia. In all countries except Korea, yields are still relatively low and the possibilities for increasing output through intensive application of modern inputs are by no means exhausted.

35. While there are grounds for general optimism about agriculture, there are several major issues that appear to merit attention. The first has emerged due to the very success in increasing rice production and attaining greater self-sufficiency in foodgrains. Korea and Malaysia will remain more or less self-sufficient in rice. Even if the extremely good 1980 and 1981 harvests are discounted somewhat, the Indonesian rice deficit is also likely to shrink relatively to production and could be as low as 0.5-1.0 million tons by 1990, compared to an average of 1.6 million tons during 1977-78. The Philippines is likely to have a small exportable surplus of rice by the end of this decade, even if no new irrigation investments are undertaken. Thailand could very well expand its rice exports from the present level of 3.0 million tons to 5-6 million tons by 1990, thus increasing its present share in world trade from 25% to 30-35%.

36. By and large, major irrigation investments in these countries, with which the Bank has been heavily involved, have been justified on grounds of increasing rice production. While the technical scope for further irrigation development exists and potential economic rates of return (on the basis of presently projected international prices) appear high, the possible constraints of market demand for rice require (a) a review of future irrigation priorities; and (b) a careful look at the long-term rice outlook in the international markets.

37. The threat of worsening income distribution within rural areas and only slow progress in absolute poverty alleviation remain major problems, particularly because a substantial part of remaining poverty is related to the extremely poor natural resource base in agriculture. While the aggregate
supply of foodgrains and agricultural growth are likely to remain
comfortable for most East Asian countries, there are likely to be
substantial regional variations within countries in the rate of growth of
agricultural output, and further broad gains in agricultural output are not
likely to be translated automatically into reductions in poverty. The
rainfed agriculture in Thailand, Indonesia and the Philippines faces serious
constraints. Some of the holdings, such as upland corn and rice farmers in
Thailand and the Philippines, may not be viable in the long run. But,
onetheless, there remains an urgent need on the one hand to develop
improved technological solutions for rainfed agriculture through changed
priorities in agricultural research, and on the other hand to facilitate the
adoption of existing new technologies by strengthening delivery systems
through greater focus of extension, credit and marketing on nonirrigated
areas. It is also quite possible that demand for feedgrains has been
seriously underestimated for rapidly growing middle-income countries.

38. An important lesson of the East Asian agricultural experience is
that diversification to new crops (as in Thailand, Malaysia and the
Philippines) and adjustment to less favorable price prospects of existing
crops through improved productivity (like rubber in Malaysia) are vital for
sustaining a vigorous growth. This means that the policy framework must
permit relatively quick adjustments of the output mix to shifting compara-
tive advantage and new economic opportunities. At the same time, cost-
reducing investments, partly through agricultural research, are necessary to
make substantial segments of agriculture (such as secondary food crops in
Indonesia) more economic. Whether agricultural policies will be
sufficiently flexible remains a question.

39. Finally, in rapidly growing economies a certain degree of dualism is
unavoidable because of substantial differences in growth rates of productivity
between agriculture and manufacturing. Only Japan and Taiwan have succeeded
in limiting this problem by increasing off-farm employment opportunities.
Korea has been much less successful in this regard. The pattern of spatial
development and location of industry in all East Asian countries should give
attention to this issue. A related matter is the quality of life in rural
areas in terms of access to basic social services, electricity, telephone,
water supply and transport. Malaysia can afford, and the Philippines and
Thailand should consider to do more in this area than they have done so far.

Improving Energy Balances

40. A fundamental transformation in international energy prices has
taken place since 1973. Notwithstanding the current softness in inter-
national markets, petroleum prices have risen sixfold, in real terms, during
the past decade. Korea's annual oil import bill is currently around $6 bil-
lion, while in Thailand and the Philippines it is $2.8 billion and $2.2 bil-
lion, respectively. In 1970, oil imports in Korea accounted for 50% of
total energy consumption and constituted 6% of the value of total imports. In 1980, energy imports were about two-thirds of energy consumption and oil imports had risen to 27% of total imports. In the Philippines, oil imports in 1980 accounted for 85% of total energy consumption and 28% of total imports. In Thailand, energy imports in 1980 accounted for about 30% of total imports, compared to 9% in 1970; imported oil accounted for about 75% of total energy consumption in 1979 compared to about 70% in 1970.

41. All three energy-importing countries have been faced essentially with a growing energy dependence at a time when energy prices have risen steeply, though the rate of growth of energy imports dropped significantly after 1973. Reducing energy import dependence is now an important objective of national policy in all three countries and within this broad policy reduced dependence on imported oil is a further goal. To achieve these objectives, actions are planned to reduce the growth of demand, to increase the supply of domestic energy and to diversify the sources of energy imports.

42. The Korean Government's objective is to reduce the elasticity of energy use to GNP to 0.9 during the 1980s, compared to 1.1 during 1974-80. The Thai Government has established a target of total energy consumption growth of 4.6% per annum under the Fifth Plan (1981-86) compared with GDP growth of 6.6% per annum. This implies an income elasticity of energy demand of 0.7 compared to 1.1 experienced during 1972-79. In the Philippines, the energy elasticity had already fallen to 0.8 during 1975-79 and can probably be kept in the range of 0.9 to 1.0 over the coming decade.

43. The three interrelated factors which normally influence the growth of energy demand are energy pricing policies, the pattern of future output and expenditures including the structure of industry and transport, and the success of direct measures aimed at energy conservation and efficiency. Of these, the pricing policies are likely to be the most powerful instrument, not only because they are most directly under the control of the government, but also because they strongly influence the other two factors. The progress toward a realistic pricing of energy has generally been encouraging. Korea moved quickly both in 1974 and 1979 to adjust domestic energy prices upwards. Between March 1979 and April 1981, the average prices (in US dollars) of petroleum products were raised by 168%. Over the same period, the electricity price was increased by 44% (also in US dollars). The price of domestic coal, which is the main heating fuel for households, has also been increased by 23% though it is still below the international price. Thailand was initially slow to respond to changed relative prices of energy. Between 1970 and 1978, domestic energy prices in Thailand increased only slightly faster than the consumer price index. But as of 1979 significant efforts were made to adjust domestic prices of power and petroleum products. By October 1981, average power tariffs were raised by 124% over the average level of March 1979 and petroleum prices by an average of 120%. Subsidies to power users were thus effectively eliminated.
and petroleum products are again being taxed. The Philippines has not only adjusted the domestic prices of petroleum products quickly to cover changing world prices, but also it has gone further and imposed selective taxes to further discourage consumption. Between October 1973 and March 1981, the weighted average of petroleum product prices showed an almost ninefold increase, and the structure of prices was broadly satisfactory. The adjustment in electricity rates was slower. Despite a sixfold increase in overall tariffs between 1974 and 1981, the power rates had not fully kept pace with the increase in cost of providing electricity in the Philippines.

44. However, the general commitment to adjusting domestic energy prices to evolving international conditions appears to be strong in Korea, Thailand and the Philippines. This augurs well for the goals of reducing energy-intensity of GNP by 1990. But it will also be necessary to be extremely selective in future investments in energy-intensive industries and transport modes. Strengthening of financial and fiscal incentives for energy plans at the macro-level should also help. All these measures will be particularly important for Korea which is a highly energy-intensive economy; according to one estimate, Korea was in 1978 using 70% more energy per unit of GDP than Japan in 1961 and 64% more than the average of middle-income countries in 1978.

45. The limited prospects for increasing domestic energy production in Korea reinforce the need for reducing energy-intensity of output. With limited hydroelectric potential, without resources of petroleum and poor quality of domestic coal, Korea is relying on a large nuclear program for providing a substantial part of the growth in electricity demand. It is also planning to increase the import of coal, LPG and LNG so as to reduce the dependence on imported oil to 41% of total energy consumption by 1990, compared to 61% in 1979. In Thailand, the prospects for increasing domestic energy production through natural gas, lignite production and hydroelectric power are good. The energy production from these sources could increase six to seven times between 1980 and 1990. If this happens and energy demand growth can be kept below 5% per annum, oil imports will fall in absolute terms by 25-30% and will account for only one-third of total energy consumption by 1990, compared to 9% in 1979. In the Philippines, the prospects for expanding coal production and electricity from hydro and geothermal sources are good. The primary energy from the sources as well as nuclear power will probably account for 25-30% of commercial energy consumption by 1990, compared to 9% in 1979. The prospects for an increase in domestic oil production are less clear. Domestic oil production in 1980 was 3.8 million barrels but fell to 1.8 million barrels in 1981. Estimates of end-of-decade domestic oil output vary as widely as 1-20 million barrels. Assuming a range of domestic output of 5-10 million barrels by 1990, the dependence on imported oil will decrease to 55-60% of total commercial energy consumption, and oil imports will not be significantly different from the 1980 level. But taking account of the large coal imports and the import content of nuclear power stations, the import dependence for total energy supply will remain around 65-70%.
46. To sum up the situation of the energy importing countries, substantial import substitution in energy is likely to take place in Thailand during the 1980s. In the Philippines and Korea, the progress will be more modest, and even if it is assumed that the real price of energy will not increase in the 1980s, the burden of energy imports on the balance of payments will decline only slowly. The programs for expanding domestic energy production are generally well conceived and should be supported. However, the investment requirements of the energy sector will be large and will put a major strain on resources. In these circumstances the plan to diversify the sources of energy imports (from oil to coal, LNG or even nuclear) should be closely scrutinized. Net import substitution in energy should be a higher order goal than reduction in dependence in imported oil, particularly if switching between imported fuels requires heavy capital outlays.

47. Considering the energy exporting countries, Indonesia is richly endowed with energy resources but could face severe energy problems in the future. At present, oil production meets over 80% of the country's commercial energy needs; net oil exports finance the bulk of non-oil imports; and oil revenues account for 70% of the Government's total revenues. The urgency of the energy situation arises from two factors. Firstly, the production of crude oil, which is currently around 600 million barrels annually, is likely to rise only slowly (1-2% per annum) during the 1980s and 1990s unless massive new reserves are discovered. Secondly, the elasticity of commercial energy use to GDP is high (1.6 during 1970-78) and may not fall significantly over the medium run because of increased substitution of traditional fuels by commercial fuels in the household sector, and because of the growing share of the industrial end of transport services in the economy. Fortunately, during the 1980s a substantial increase in domestic production of natural gas will offset the impact of rapidly growing consumption energy so that there will not be a significant deterioration in the energy export balance by 1990. For the longer run, however, these trends, if continued, will result in fast declining net energy exports from Indonesia. It is necessary, therefore, to step up exploration and development expenditure not only for oil and gas but for other energy sources, such as hydropower sites, coal and geothermal resources. Fortunately, the diversified energy base of the country provides a number of long-run options for energy development. On the demand side, energy price policies are a major issue. As in most oil developing countries, there has been a 'cheap oil' policy for domestic energy consumption. It has been implemented largely by providing heavy subsidies on oil products which are a drain on the government budget. The Government has recently increased domestic oil prices by 60% and reduced the average

\[1\] During 1972-78, domestic consumption of commercial energy increased by 14% per annum. For the 1980s, an increase of 10-12% per annum seems likely.
unit subsidy on oil products by one-third. Further progress in this direction will continue to be necessary both to moderate the growth rate of domestic oil consumption so as to strengthen the budget and to avoid a major decline in net energy exports.

48. Malaysia is, on balance, in a situation similar to that of Indonesia. Its position as a net exporter of crude oil (contributing in 1980 roughly 20% of total export earnings) with a rising share throughout the 1970s, will be trailing off, and Malaysia is expected to become a net importer in the latter half of the 1980s. This is in part due to the fact that the most productive fields passed their peak of production in 1979-81; their rapidly progressing depletion is expected to increasingly exceed the capacity of the new wells expected to come on stream in the next few years. The second major factor is the rapid rise in energy consumption (by an average rate of over 8% during the last decade, corresponding to an energy elasticity of 1.1 after 1974), with oil derivates dominating with 93% of total commercial energy use in 1980. The outlook for energy exports will, to a large extent, depend upon the utilization of Malaysia's ample natural gas resources, for which the recoverable reserves are presently estimated to exceed those of crude oil by almost three times. For obvious reasons precise estimates are difficult to make at this point, but a preliminary assessment suggests that the combined net exports of crude oil and gas will about double by 1985, but thereafter - with net crude oil exports turning negative by the end of the decade - will drop to about the same level as in 1980.

49. It seems, however, that there is considerable room for an improvement of the deteriorating situation if important policy decisions, in addition to those on natural gas infrastructure, are taken. The aforementioned outlook rests on estimated growth rates of consumption of close to 9% throughout the 1980s, i.e., they assume continued high energy intensity of growth. In particular, the prices for kerosene and diesel fuel are, for income distribution policy reasons, heavily subsidized which not only leads to significant waste and inefficiency in energy use, but has become a budgetary burden as well. The country has made some efforts to propagate the concept of energy conservation, but in the absence of financial incentives for savings and penalties for waste and inefficiency, these efforts are unlikely to reach major results. In contrast to hydrocarbons, the country is not well endowed with commercially useful alternative sources of energy. All other forms of energy accounted in 1980 for no more than 6% of total energy consumption, and their share in supply is actually expected to drop to less than 50 by 1990. The country does have considerable unutilized hydro resources, but their location in relation to the centers of demand creates formidable barriers to commercial use. The country also has some coal deposits, but their quality is too poor to support stepped-up commercial exploitation. In sum, Malaysia will - as Indonesia - have passed very soon through the phase when energy provided a boost to development and will have to rely for further growth increasingly on its other exports.
Exports of Manufactured Goods

50. Notwithstanding the progress likely to be made in reducing energy import dependence in Thailand, the Philippines and Korea, continued export development will remain crucial for reducing the current account balance of payments deficits. For the medium term of five to seven years, overall export growth of at least 10% per annum, well ahead of the likely growth in GNP, appears necessary for these three countries. In Indonesia, because of stagnation in volume of oil and gas exports, primary and manufactured exports must expand at a high rate during the 1980s in order to achieve a relatively moderate overall export growth rate of 4-4.5% per annum.

51. Is this stress on exports justified on economic grounds? Will the international markets expand sufficiently to accommodate the desired expansion of developing countries’ exports? Will the domestic policy changes required for stimulating or maintaining high rates of export growth be made? The circumstances facing each country will vary but there are a number of general points which seem to suggest that the efforts aimed at continued high export growth will be both necessary and worthwhile.

52. The outlook for the international economy is obviously very relevant for expansion of trade flows from developing countries. World trade grew by an average of 5.7% a year in the 1970s after almost 8% a year in the 1960s./1 Despite this slowdown of the growth of total trade, the developing countries’ nonfuel exports grew faster, by over 7% a year in 1970, compared with 5% in the 1960s. Over 70% of this growth was due to the expansion of manufactured exports which grew by 12.9% per year during 1970-80. The prospects for growth of the world economy and trade for the 1980s are uncertain. The World Development Report /2 projects growth rates in the range of 2.8-3.6% a year for the GDP in the industrial market economies for 1980-90, compared with the actual increase of 3.3% a year during 1970-80. Corresponding to this, the growth in world exports is projected at 3.7-5.7% a year, and the growth of nonfuel merchandise exports from developing countries is expected to be in the rather wide range of 3.8-8.8% per year. In both the high and the low growth scenarios, manufactured exports will account for the bulk (70-80%) of the increment of development countries’ exports, but the rate of increase of exports of manufactures will differ dramatically - 12.21% a year in the high case and 5.1% a year in the low case. The low case assumes not only a slow OECD growth but also increased protectionism in the developed countries. If the world economic growth slows down markedly and the developed countries turn sharply inwards, there

---


/2 World Development Report 1981, World Bank, derived from Tables 2.1, 2.2 and 2.3.
will be, no doubt, a need for a serious review of the export-oriented strategies of East Asian countries. However, there are a number of factors which may continue to support the strong expansion of exports, especially manufactured exports from developing countries. Firstly, although the developing countries have increased their share of industrial countries' markets in manufactured goods, it still remains small, only 2.9% in 1978, up from 1.7% in 1970.1 Secondly, the possibility of increased trade among middle-income developing countries and oil exporters is growing. Thirdly, the concentration of developing countries' manufactured goods exports among a relatively small number of countries,2 which are also very large importers, provides a countervailing force to protectionist pressure. Finally, as pointed out in the World Development Report 1981,3 "the diverse trade record of developing countries suggests that the success that some of them have enjoyed is as much the result of their own efforts and their own well-conceived policies as the openness of the trading system...." To the extent that these policies can be maintained by well-established exporters and developed by relative newcomers, further substantial penetration of the industrial countries' markets may well be feasible even against the background of slow growth in world trade.

53. All in all, a 10% per year growth in manufactured exports from developing countries as a group during the 1980s appears to be a reasonable planning assumption. Within this global total, it may well be possible for manufactured exports of countries like Thailand, Malaysia, the Philippines and Indonesia to expand faster, because they have a much smaller share of the market than, say Korea, Taiwan, Singapore and Hong Kong, and they may meet less international market resistance, provided they can be both competitive and flexible. Thus, the market limitations need not prevent Malaysia, the Philippines, Thailand, Indonesia and Korea from continuing to follow an export-led growth strategy, unless there is a major deterioration in the international economic climate.

54. The economic rationale of the emphasis on manufactured goods exports lies in their potential for providing employment opportunities and foreign exchange earnings at low capital cost. Exports of labor-intensive manufactured goods provide an important avenue for East Asian countries to specialize in line with their comparative advantage. Real wage costs are low in Indonesia, Thailand and the Philippines and are likely to remain so given the large prospective additions to labor force in the next decade. Even in Korea, where real wages have quadrupled over the last two decades,

2 In 1978, only 10 developing countries supplied more than 75 of the total manufactured exports from developing countries.
there are major segments of the labor force still in low productivity agriculture, and a further decline in the share of agricultural employment will continue to release labor force for manufacturing. Still, Korea is the only country among the five where the past and prospective growth in real wages is quickly shifting the comparative advantage in manufacturing from labor-intensive to skill-intensive activities. In Malaysia, there is evidence of a tightening of the labor market and some recent pressure on real wages. Large additions to jobs in the manufactured export sector have been a very significant element in this. As mentioned earlier, Malaysia is the only country other than Korea where the share of manufactured goods exports in total manufacturing output has become significant. The challenge in Malaysia is to sustain this momentum by avoiding a premature sharp rise in real wages which, relative to her neighbors, are already high. Like Korea, Malaysia needs policies which will assist in the orderly transformation of the structure of employment through elimination of very low productivity jobs in agriculture but without erosion of the important agricultural base. These policies should aim at increasing labor productivity and the land/labor ratio in agriculture, increasing labor mobility, and reducing fragmentation on labor markets.

55. It is sometimes argued that development of manufactured exports, typically garments and electronics, does not help to deepen the industrial structure and that the domestic value added in these activities is often low. While it is true that the gross exports of manufacturing goods may give an exaggerated impression of their net contribution to the balance of payments, the value added per se is not the only relevant criterion for measuring the benefits of export growth. The economic tests must be the contribution to net foreign exchange earnings and/or job creation per unit of investment. Similarly, while backward linkages are an important part of the industrial growth process, these linkages must not be promoted without reference to economic costs and the available alternatives. Furthermore, the development of the export base does not preclude an eventual deepening of industrial structure. Korea's case clearly shows backward linkages that developed from garments exports to domestic textiles production and finally to petrochemicals which provide the raw materials for synthetic yarns.

56. The focus of the above discussion has been on manufactured exports. But the possibilities of expanding agricultural exports remain considerable. These include rubber (Malaysia, Thailand, and Indonesia), palm oil (Malaysia and Indonesia), cassava (Thailand), coconut, sugar and forest products (the Philippines). In many cases, the promotion of these exports will help incomes and employment in the less developed regions of the countries concerned. In any case, without an agricultural export growth rate of around 5% per annum during the 1980s, it would be difficult for Indonesia, Thailand, the Philippines, and possibly Malaysia to attain their balance of payments goals. This implies that, as in the 1970s, agricultural exports will have to continue to expand at a pace faster than total agricultural production.
57. The maintenance of realistic exchange rates should remain a central pillar of policies for expanding both industrial and agricultural exports. The record of the East Asian countries in this regard is generally a good one. The adjustments to the erosion of the purchasing power of the currencies through exchange rate adjustment have generally been adequate and timely. However, as mentioned earlier, the avoidance of discrimination against exports has also been a key element of the success in the export drive of countries like Korea. Such discrimination is inherent in situations such as that of the Philippines, where the domestic industry is heavily protected and where this bias cannot easily be compensated by export incentives. Recognizing this, the Philippines has initiated a fairly comprehensive reform of its industrial policy framework and has also liberalized and broadened a number of export incentives. More recently, Indonesia has moved to bring exporters closer to a free trade regime and has also streamlined export procedures.

58. If the thrust and direction of present policies can be maintained and strengthened, manufactured goods exports growth rates of 12-15% for the Philippines, Malaysia and Thailand, and 20% for Indonesia during the 1980s should be feasible. If export plans are frustrated, the likely results will be lower GNP growth and larger external debt burden. This is because a substantial relative shift towards import substitution is likely to be quite costly in terms of foreign exchange and investment resources except, possibly, in Korea. In Korea, the size of the industrial sector is large enough and so diversified that moves towards import substitution could be made at the margin, without necessarily involving a major loss of efficiency and economies of scale.

Investment

59. In all East Asian countries under discussion, investment growth will be substantially slower in the 1980s than in the previous decade. The ratio of investment to GNP will show, at best, a modest increase in Korea, Thailand, and Malaysia, and probably no increase in the Philippines. Indonesia is the only country where investment during 1980-90 is likely to grow faster than GNP. The prospect of stagnation in the investment rate in countries other than Indonesia is related to the need, as discussed earlier, to reduce the current account balance of payments deficits from their present high levels. As these deficits are reduced, the relative contribution of foreign capital inflows to the development program will decline, and the burden of sustaining investment will increasingly fall on domestic resource mobilization efforts. Even assuming, as we have, that very high marginal savings rates (ranging from 33% to 40% in individual cases) can be achieved through increasing effectiveness of financial and fiscal policies and institutions, the investment resources will remain severely constrained. Against this, the pressures for investment will be
very strong. First and foremost, the energy investment, essential for reducing import dependence, will be growing and will claim a much higher proportion of total investment. Secondly, in a number of countries, notably Korea, the deepening of the industrial structure will inevitably require a shift towards greater capital intensity. Thirdly, if the distributional concerns are to be addressed more adequately in the future, investments targeted on the absolute poor should increase. This will require an extension of basic social services, such as education and health, and greater attention to rural infrastructure, especially in backward regions. The reconciling of these various claims will be extremely difficult and, therefore, an increase in efficiency of the use of investment resources will become a major issue of development policy; certainly more so than in the last two decades when dramatic increases in the volume of investment were taking place.

The concern with greater efficiency of the use of investment resources gives further weight to the development strategy considerations favoring export-led growth. There are, however, two other implications. Firstly, productivity improvements which do not involve substantial, additional investment capital assume greater importance. These could include yield improvements in agriculture through quicker dissemination of known technologies by strengthening of the credit systems, market opportunities and extension networks. Higher productivity growth in the industrial sector could come from greater utilization of existing capacity through improvements in trade and industrial policy. Secondly, the economic analysis of large capital-intensive projects, which are also foreign exchange and/or energy-intensive, becomes much more important. Surprisingly enough, the public sector capacity to appraise these large lumpy projects is often weak. Thus, the decisions on public sector support for these projects do not always take into account the opportunity cost of these investments. Admittedly, many large industrial projects (such as fertilizers, cement and steel plants, copper and aluminum smelters, shipyards, heavy machinery complexes) have a key role to play in the evolving pattern of industrial development. However, the economic justification, priority and timing of these major investments can only be judged in the context of the stage of industrial development of a country and its overall economic and financial position. By and large, East Asian countries have avoided large uneconomic industrial investments in the recent past. However, the pressures for deepening the industrial structure are strong and have led to excesses even in Korea where the broad shift towards heavy industry and machinery sectors has been, generally, well conceived. It will be especially important to avoid costly mistakes during the 1980s when the real cost of foreign borrowing is very high. The need for closer scrutiny applies to all sectors including agriculture. For instance, in the current resource-constrained situation, large irrigation investments with long gestation periods may have to be foregone, especially if more economic alternatives of achieving increases in agricultural output are available.
III. CONCLUSION

61. As for most other developing countries, the 1980s will be a difficult period for the East Asian countries. The international economic climate will be clearly less favorable than in the past two decades. The cost of international capital will be high and its availability is likely to be constrained, as surplus oil exporting countries also begin to incur current account balance of payments deficits. If economic growth in the OECD countries does not recover quickly from the present recession, the protectionist sentiments in these countries will gather further force. Even with more normal recovery the growth in the world trade during the first half of the 1980s is likely to be slower than in the past decade.

62. However, the developing market economies of East Asia are, in many ways, in a strong position to face these difficulties. They have entered the 1980s with a considerable economic momentum gained from economic and social progress during the last two decades. Generally speaking, their political and social stability is not threatened. Substantial structural change has taken place in these economies, and manufactured exports have already emerged in all countries except Indonesia as the cutting edge of industrial expansion. While the world trade in manufactures may be slowing down compared to the 1970s, it will still remain the most dynamic element in the world economy. While progress has been made especially in manufactured exports, agriculture has not been neglected. Agricultural growth has been strong and sizeable agricultural investments of the past decade will help to sustain the trend. Notwithstanding the large current account deficits during the 1970s, the burden of external debt is not unduly large even in the Philippines which has the highest debt service ratio of the five countries. But on the other hand, the present current account balance of payments deficits is too large, except in Indonesia, and must be steadily brought down as a percentage of GNP over the next few years. Also, the net energy dependence of Korea, Thailand and the Philippines is currently extremely high and higher than in 1970 notwithstanding a substantial decline in the rate of growth of energy demand since 1974. Indonesia and Malaysia are energy exporters but face the prospect of little growth in net energy exports between 1980 and 1990. Finally, while there has been progress in alleviation of absolute poverty in all countries, the incidence of poverty is still quite high in Indonesia and the Philippines and moderately high in Thailand and Malaysia. What is more, if past experience is any guide, even high growth rates of GNP do not guarantee that all segments of the population share in the benefits of growth. Special attention to the rural poor, especially those in regions with less favorable factor endowment and those with little or limited access to land, will continue to be required on grounds of equity and social stability.

63. The challenge for East Asian countries during the next decade, thus, is to reduce their current account balance of payments deficits without any significant downward adjustment in growth, while ensuring continued
progress in reduction of absolute poverty. The burden of achieving these goals will fall mainly on economic management and policies. Increased efficiency in the use of economic resources, especially of investment and energy resources, will be central to the effort. Investment will be growing more slowly in all countries and thus difficult investment choices will have to be made. The continued emphasis on labor-intensive manufactured exports, through a set of appropriate policies, can help to maintain or reduce investment costs per unit of output while contributing significantly to the strengthening of balance of payments and the creation of employment opportunities. Import substitution in energy is of high priority, and the size and share of energy investments will have to grow. However, energy demand management will be equally important and it should be possible to significantly economize on total energy investments through full pricing of energy at its opportunity cost, and through shifts in the pattern of investment and consumption towards less energy-intensive uses. In deciding upon large capital- and foreign exchange-intensive projects which could help to deepen the industrial structure, consideration will have to be given to the squeeze they might put on necessary investments in social sectors, rainfed agriculture and backward areas.

64. These choices will not be easy. But, if the past record and the direction of economic policy reform in the last year or so are any indication, most East Asian countries should be able to make further progress towards greater economic efficiency in the public sector, and continued heavy reliance on the private sector should enable them to reap the full benefits of correct policy signals. The prospects, therefore, appear good for maintaining annual growth rates of 6-7% per annum in Korea, Thailand and the Philippines, and 7-8% per annum in Indonesia and Malaysia, while reducing or keeping external account deficits to manageable proportions.
World Bank Publications of Related Interest

Adjustment Experience and Growth Prospects of the Semi-Industrial Countries
Frederick Jaspersen
This background study for World Development Report 1981, examines the successful process of adjustment to external "shocks" of the 1970's (rising prices of oil imports, reduced demand for exports, slower economic growth in the OECD countries) in the semi-industrial developing countries. Presents an analytical framework for quantifying the effects of demand management and structural adjustment in forty-two countries, with particular reference to Uruguay, Brazil, Republic of Korea, and Turkey.

Stock No. WP-0477. $5.00.

Aggregate Demand and Macroeconomic Imbalances in Thailand: Simulations with the SIAM 1 Model
Wafik Grais
Focuses on the demand-side adjustments of the Thai economy to lower agricultural growth and to higher energy prices. Discusses policy measures and structural changes that might enable the economy to overcome these problems and continue to maintain high GDP rates of growth.

Stock No. WP-0448. $5.00.

An Analysis of Developing Country Adjustment Experiences in the 1970s: Low-Income Asia
Christine Wallich
This background study for World Development Report 1981, examines low-income South Asia's adjustment to the external shocks of the 1970s, especially those factors that helped make the effects of these external developments less severe in the region than in other parts of the developing world.

Stock No. WP-0487. $5.00.

Aspects of Development Bank Management
William Diamond and V. S. Raghavan
Deals exclusively with the management of development banks. The book is divided into eight sections, each dealing with one aspect of management of its problems, and of the various ways of dealing with them.


Energy Prices, Substitution, and Optimal Borrowing in the Short Run: An Analysis of Adjustment in Oil-Importing Developing Countries
Ricardo Martin and Marcelo Selowsky
Develops a short-term model for evaluating the adjustment (particularly, external borrowing) of oil-importing developing countries to the increase in oil prices during the 1970s. Discusses the borrowing strategies that can be expected in the future and the demands that will be made on multilateral institutions.

Stock No. WP-0466. $5.00.
Food Policy Issues in Low-Income Countries
Edward Clay and others
A background study for World Development Report 1981. Discusses food distribution—especially its insecurity in the face of external economic pressures and potential conflicts with internal production concerns—in general and with reference to Bangladesh, Zambia, and India.
Stock No. WP-0473. $5.00.

A General Equilibrium Analysis of Foreign Exchange Shortages in a Developing Economy
Kemal Dervis, Jaime de Melo, and Sherman Robinson
Examines the consequences of alternative adjustment mechanisms to foreign exchange shortages in semi-industrial economies. Compares devaluation to two forms of import rationing and finds that adjusting by rationing is much more costly in terms of lost gross domestic product.
Stock No. WP-0443. $5.00.

International Adjustment in the 1980s
Vijay Joshi
Stock No. WP-0485. $5.00.

Notes on the Analysis of Capital Flows to Developing Nations and the "Recycling" Problem
Ralph C. Bryant
Stock No. WP-0476. $5.00.

The Policy Experience of Twelve Less Developed Countries, 1973–1978
Bela Balassa
Uses the methodology applied in the author's "The Newly-Industrializing Developing Countries After the Oil Crisis" (World Bank Staff Working Paper No. 437, October 1980) to examine the policy experience of twelve less developed countries in the period following the quadrupling of oil prices in 1973–74 and the world recession of 1974–75.
Stock No. WP-0449. $3.00.

The Political Structure of the New Protectionism
Douglas R. Nelson
This background study for World Development Report 1981 presents a political-economic analysis of what has been called the "new protectionism."
Stock No. WP-0471. $5.00.

Pricing Policy for Development Management
Gerald M. Meier
Presupposing no formal training in economics, it explains the essential elements of a price system, the functions of prices, the various policies that a government might pursue in cases of market failure, and the principles of public pricing of goods and services provided by government enterprises. It also provides the would-be practitioner with an appreciation of the underlying logical structure of cost-benefit project appraisal. To give substance to the applied and policy dimensions, many of the readings are drawn from the experience of development practitioners and relate to such important sectors as agriculture, industry, power, urban services, foreign trade, and employment. The principles outlined are therefore relevant to a host of development problems.

Private Bank Lending to Developing Countries
Richard O'Brien
A background study for World Development Report 1981. Describes the evolution of relationships between private banks and developing countries.
Stock No. WP-0482. $5.00.

Private Capital Flows to Developing Countries and Their Determination: Historical Perspective, Recent Experience, and Future Prospects
Alex Fleming
A background study for World Development Report 1981. Discusses the nature and determination of recent private capital flows to developing countries. Focuses on those flows passing through the international banks and examines the prospects for and constraints on developing countries’ continuing access to the international capital markets.
Stock No. WP-0484. $5.00.

Structural Adjustment Policies in Developing Economies
Bela Balassa
Examines structural adjustment policies (policy responses to external shocks, such as the quadrupling of oil prices and the world recession of the 1970s) of developing countries. Considers reforms in production incentives, incentives to save and to invest, public investments, sectoral policies, and monetary policies, and comments on the interdependence of the various policy measures and on the international environment in which they operate.
Stock No. WP-0464. $3.00.
World Debt Tables
A compilation of data on the external public and publicly-guaranteed debt of 101 developing countries plus seventeen additional tables of private and non-guaranteed debt from the World Bank Debtor Reporting System. Describes the nature, content, and coverage of the data; reviews the external debt of 101 countries through 1980; contains tables on external public debt outstanding, commitments, disbursements, service payments, and net borrowings of 101 developing countries, by country, 1971–1980.
Stock No. DT-8101. $75.00.
Computer tapes containing the data bases for the World Debt Tables will be available early in 1982 from the Publications Distribution Unit, World Bank. The tapes are available to international agencies and official nonprofit agencies of member governments at a nominal fee. For information concerning fees for other organizations, please write to the addressee listed above.
Supplements to World Debt Tables are issued periodically as information becomes available; the current updates are included with orders for World Debt Tables.

Borrowing in International Capital Markets
Provides a review of activities during the quarter in publicized borrowing in international capital markets in the form of foreign and international bonds and Eurocurrency credits.
Stock No. BC-8101. $30.00 paperback.

Capital Flows and Developing Country Debt
Jeffrey A. Katz
Stock No. WP-0352. $3.00.

Capital Market Imperfections and Economic Development
Vinayak V. Bhatt and Alan R. Roe
Stock No. WP-0338. $5.00.

The Changing Nature of Export Finance and Its Implications for Developing Countries
Albert C. Cizauskas
Stock No. WP-0409. $3.00.

Commercial Bank Lending to Developing Countries: Supply Constraints
Chandra S. Hardy

Compounding and Discounting Tables for Project Evaluation
J. Price Gittinger, editor
Easily comprehensible, convenient tables for project preparation and analysis.
LC 75-186503. ISBN 0-8018-1604-1, $6.00 paperback.

Economic Growth, Foreign Loans and Debt Servicing Capacity of Developing Countries
Gershon Feder
Exchange Rate Adjustment under Generalized Currency Floating: Comparative Analysis among Developing Countries
Romeo M. Bautista
Examines the experiences of twenty-two developing countries in adapting to the generalized floating of the world's major currencies since 1973 and discusses the implications that currency floating has on policymaking in these countries and indicates directions for further research.
Stock No. WP-0436. $5.00

Growth Policies and the Exchange Rate in Turkey
Bela Balassa

International Debt Renegotiation: Lessons from the Past
Albert C. Cizauskas

A Model for Analyzing Lenders' Perceived Risk
Gershon Feder and Richard Just

Optimal International Borrowing, Capital Allocation, and Credit Worthiness Control
Gershon Feder and Richard Just

The Newly-Industrializing Developing Countries after the Oil Crisis
Bela Balassa
Stock No. WP-0437. $3.00.

Notes on the Mechanics of Growth and Debt
Benjamin B. King
A practical model to explore the way in which capital inflow from abroad affects economic growth.
LC 68-8701. ISBN 0-8018-0338-1, $5.00 (£3.00) paperback.

Private Direct Foreign Investment in Developing Countries
K. Billerbeck and Y. Yasugi
Stock No. WP-0348. $5.00.

Recent Theoretical Development in Public Finance
Nizar Jetha

Taxation and Economic Behavior
Nizar Jetha

Optimal International Borrowing, Capital Allocation, and Credit Worthiness Control
Gershon Feder and Richard Just