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GROWTH AND EQUITY IN SEMI-INDUSTRIALIZED COUNTRIES

A Background Study for the World Development Report, 1979

Semi-industrialized countries are middle-income less-developed countries with important manufacturing sectors, such as Brazil, Korea, Mexico, the Philippines, Turkey, and Yugoslavia. Their experience over the last few decades is analyzed as to economic growth, income distribution and the extent of poverty. Different results are related to differences in policies (especially as regards foreign trade and agriculture, as well as manufacturing) and to initial differences in social and economic conditions. Conclusions as to policies to promote economic growth and to alleviate poverty are discussed.

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GROWTH AND INEQUALITY IN SEMI-INDUSTRIALIZED COUNTRIES

"WHATEVER THE REASON, THERE CAN BE LITTLE DOUBT THAT AN ECONOMY, TO LIFT ITSELF TO HIGHER INCOME LEVELS, MUST AND WILL FIRST DEVELOP WITHIN ITSELF ONE OR SEVERAL REGIONAL CENTERS OF ECONOMIC STRENGTH. THIS MEANS THAT INTERNATIONAL AND INTERREGIONAL INEQUALITY OF GROWTH IS AN INEVITABLE CONCOMITANT AND CONDITION OF GROWTH ITSELF...

"WITH RESPECT TO DIFFERENT SOCIAL OR INCOME GROUPS A SIMILAR PHENOMENON MAY BE NOTED..."


We begin this paper with a paraphrase of the closing paragraphs of David Morawetz's recent book, Twenty-Five Years of Economic Development: 1950-75:

Among the nations which are today regarded as the great success stories of development, in 1950 Taiwan and one-year-old Israel were recovering from occupation or war and from huge influxes of population. South Korea was newly divided and had lost in the process much of the industry that might have been the basis of economic growth. Yugoslavia was trying to recover from the break with Moscow and just beginning her experiments with worker management of enterprises, and the country whose per capita income was to grow faster than any other in the next 25 years was regarded as undevelopable. "If Libya can be brought to a stage of sustained growth," wrote Higgins after working there, "there is hope for every country in the world".

Libya did better than Professor Higgins expected because of petroleum discoveries. But in 1964, when the government and the policies that were to lead Korea to its present star status for combining growth with equitable distribution were already in place, most experts regarded the country as hopeless. In 1963, Colombia was the great hope of the U.S. "Alliance for Progress" with Latin America while U.S. aid to Brazil had been all but cut off, and inflation in the latter was reaching for the 100 percent per year
rate it was to surpass in the first quarter of 1964. In 1966, the year before Brazil's manufactured exports were to start to grow from $125 million to over $1.2 billion in seven years, and GNP to grow by 11.5 percent per year, most Brazilian economists and government officials discounted the possibility of increasing exports, and were fretting about "the exhaustion of import substitution" and wondering how or whether Brazilian economic growth would ever resume. All this not only reminds us that, as Morawetz told his readers, "Things were not always the way they are now, nor will they forever remain so". It also should instill some healthy humility about our ability to predict what will happen or even to understand fully what has already happened.

The purpose of this paper is to review what has happened in the last few decades in some of the more advanced LDCs -- a group sometimes called "semi-industrialized" and referred to here as SICs -- and to see what can be learned from their experience. The focus is on each of two goals, economic growth and the alleviation of poverty, as well as interactions between the two. Our concerns related to poverty are two: the extent of "absolute" poverty and the living conditions of the poor, and the distribution of income (especially the share of the poor). The paper is in three parts: an introductory overview, more detailed analysis of six SICs that typify, among them, four different patterns of development, and finally a summary of lessons from experience -- a goal we approach with enthusiasm but also with some of the humility that seems appropriate in light of the earlier discussion.
I. Overview

Which are the SICs?

The semi-industrialized countries are among the most advanced of the developing countries. They have higher per capita incomes, larger and more sophisticated manufacturing sectors, populations that are more urbanized, better educated, and healthier. While there is much variation among the semi-industrialized countries, and also within most of them, they resemble the industrialized countries more than any other group of developing countries. Moreover, some of them are emerging as important actors on the world-wide economic scene; Brazil, for example, ranks tenth in the world in its Gross Domestic Product.

Basic data on 16 typical SICs are shown in Table 1. The countries have been selected in a subjective way, using data on per capita income, importance of manufacturing in GDP and in exports, and qualitative judgement as to the importance and strength of manufacturing. These countries have per capita incomes in the range between US$320 and US$3,200; manufacturing produces at least 19 percent of GDP; and manufactures account for at least 24 percent of all merchandise exports. Inevitably, the selection of countries is arbitrary; among the excluded countries that might have been included are India, Pakistan, Thailand, Malaysia, Uruguay and Chile. Among included countries, Egypt and to a lesser extent the Philippines are somewhat less developed than the rest; Hong Kong and Singapore are special cases of city-states, and Israel might well have been classified as developed.
Economic Growth

The economic growth of the semi-industrialized countries has been impressive. In the 16 countries chosen to represent the group, income per capita grew 4.6 percent per year from 1960 through 1977. At this rate, per capita incomes double in 16 years -- a little less than one generation. Thus the growth achieved by the semi-industrialized countries was enough for the members of each succeeding generation to command twice the real per capita income of their parents. By comparison other middle-income countries achieved only 2.3 percent per year growth over the same period and the lower income countries only 1.5 percent.

The rapid growth of incomes in the semi-industrialized countries is all the more notable in view of their rapid population growth of over 2.3 percent per year -- their total output grew at 7.0 percent per year over the 1960-77 period. See Table 1 and Chart 1. Moreover, growth in the SICs was not based mainly on rich natural resources, massive aid inflows, or any extra-ordinarily favorable set of circumstances. External conditions were good -- capital flowed in and demand for exports was strong -- but the lion's share of the credit must go to the ways in which these countries marshalled their own resources -- mostly human and organizational.
### Table 1: Comparative Data for Semi-Industrialized Countries: Basic Economic Indicators

<table>
<thead>
<tr>
<th></th>
<th>GDP/Capita</th>
<th>GDP (Bln. US$)</th>
<th>Share of g/ Manufacturing in Merchandise in GDP</th>
<th>Share of g/ Manufacturing in Exports</th>
<th>Growth Rates, 1960-77</th>
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<td></td>
<td></td>
<td></td>
<td>Share of GDP in Merchandise In Exports</td>
<td>Value Added in Manufacturing (%)</td>
<td>Value Added in Agriculture (%)</td>
</tr>
<tr>
<td></td>
<td>GNP/Capita</td>
<td>GDP</td>
<td>Population</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>USD</td>
<td>(Bln. USD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td>320</td>
<td>12.1</td>
<td>24</td>
<td>27</td>
<td>2.1  5.9  2.3  5.1</td>
</tr>
<tr>
<td>Philippines</td>
<td>650</td>
<td>20.0</td>
<td>25</td>
<td>24</td>
<td>2.5  5.6  2.9  6.7</td>
</tr>
<tr>
<td>Colombia</td>
<td>720</td>
<td>17.7</td>
<td>19</td>
<td>22</td>
<td>2.7  5.6  2.6  6.4</td>
</tr>
<tr>
<td>Korea</td>
<td>820</td>
<td>29.5</td>
<td>25</td>
<td>88</td>
<td>7.4  9.3  2.2  18.1</td>
</tr>
<tr>
<td>Turkey</td>
<td>1,110</td>
<td>46.5</td>
<td>20</td>
<td>24</td>
<td>4.1  6.6  2.5  2.8</td>
</tr>
<tr>
<td>ROC b/</td>
<td>1,170</td>
<td>19.7</td>
<td>37</td>
<td>85</td>
<td>6.2  8.6  2.4  15.3</td>
</tr>
<tr>
<td>Mexico</td>
<td>1,120</td>
<td>70.9</td>
<td>28</td>
<td>31</td>
<td>2.8  6.3  3.3  8.0</td>
</tr>
<tr>
<td>Brazil</td>
<td>1,360</td>
<td>157.9</td>
<td>..</td>
<td>25</td>
<td>4.9  7.1  2.9  ..</td>
</tr>
<tr>
<td>Argentina</td>
<td>1,730</td>
<td>43.0</td>
<td>37</td>
<td>25</td>
<td>2.7  3.7  1.4  4.6</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>1,960</td>
<td>42.5</td>
<td>..</td>
<td>70</td>
<td>5.6  6.3  1.0  ..</td>
</tr>
<tr>
<td>Portugal</td>
<td>1,890</td>
<td>18.1</td>
<td>36</td>
<td>68</td>
<td>6.0  5.8  0.3  7.3</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>2,590</td>
<td>11.7</td>
<td>26</td>
<td>97</td>
<td>6.5  9.3  2.3  ..</td>
</tr>
<tr>
<td>Greece</td>
<td>2,810</td>
<td>25.9</td>
<td>19</td>
<td>69</td>
<td>6.2  6.1  0.6  8.9</td>
</tr>
<tr>
<td>Singapore</td>
<td>2,880</td>
<td>6.6</td>
<td>30</td>
<td>66</td>
<td>7.5  8.7  2.0  11.3</td>
</tr>
<tr>
<td>Spain</td>
<td>3,190</td>
<td>115.8</td>
<td>25</td>
<td>69</td>
<td>5.2  6.3  1.1  ..</td>
</tr>
<tr>
<td>Israel</td>
<td>2,850</td>
<td>10.3</td>
<td>30</td>
<td>78</td>
<td>4.8  7.2  3.2  ..</td>
</tr>
</tbody>
</table>


a/ Merchandise exports, 1976.
b/ Throughout this paper the Republic of China (Taiwan) will be referred to as the Republic of China, or, for brevity, the ROC.
Chart 1
GROWTH RATES, 1960–77

COUNTRY GROUP

- LOWER INCOME
- SEMI-INDUSTRIALIZED
- OTHER MIDDLE INCOME
- INDUSTRIALIZED
- CENTRALLY PLANNED

PER CENT PER YEAR

1 2 3 4 5 6 7 8

GNP/CAPITA

GNP

World Bank—20521
**Equity**

We use the word "equity" to cover two concerns: (a) the amelioration of poverty (defined as the lack of a minimal level of income and/or basic needs such as health care, education, nutrition, shelter, etc.) and (b) the more equal distribution of income (and/or access to the basic goods and services just mentioned). The first concern, "absolute" poverty, seems intuitively to be more important than the second, distribution, which is purely relative. Nevertheless, distribution is of interest both for its own sake, because relative deprivation may be a source of serious personal dissatisfaction as well as social unrest, and also because distribution is systemically related to "absolute" poverty. 1/

The data that describe poverty in LDCs are very weak. Estimates of household or personal incomes typically come from surveys designed for other purposes. Common problems include inadequate sample design (especially incomplete coverage of the very rich and/or the very poor), inappropriate income concept, and systematic mis-reporting. The weaknesses of estimates for a given country and year are compounded by lack of comparability over time and

1/ Questions about what sorts of distributions are fair or just have been much discussed recently in the literature of philosophy. (For two different views see Rawls, 1971 and Nozick, 1974). Much of the debate is about whether criteria of justice should be applied to the distributions themselves or only to the processes that determine the distributions -- e.g., is justice achieved if people have equal access to education, or must further criteria related to equality in education actually received be applied? Most people agree that at least the processes must be just, but there is no agreement as to whether the results are also legitimate subjects of concern for public policy. In this paper, we are concerned with government action that affects equality of access, but also go farther -- we implicitly assume that certain results are also proper objectives of policy: the amelioration of absolute poverty and, less strongly, the reduction of extreme inequalities in distribution.
across countries; studies differ as to sample design and/or coverage, income concept, and reporting unit (individuals or households). The total national personal income implied by the surveys is usually considerably less than the national accounts estimate of the same concept; differences of 20 to 40 percent are typical. These differences are usually thought to stem from under-reporting at both extremes of the distribution; the direction of the resulting error in summary measures of inequality is often impossible to determine. In the face of these problems, we have tried to limit our analysis to the simpler and more essential facts as estimated, for countries and years where comparability problems are not overwhelming. We are reasonably confident that our qualitative discussion, in the text of the paper, is correct. The numbers on which that discussion is based, often reported in text, tables, and charts, are not as precise as they appear, but we have tried to limit our conclusions to statements that are not sensitive to the likely errors in the numbers.

We will examine first what happened to absolute poverty in terms of private income. In most of the higher income SICs there is very little absolute poverty. (See Table 2.) Using the income level of the 40th percentile in India in 1975 as the cut-off point, Ahluwalia et al (March 1979) estimated only 5 percent in absolute poverty in Argentina and Yugoslavia; we can safely assume that, similarly, in the other higher income SICs (Portugal, Hong Kong, Greece, Singapore, Spain, and Israel) most households' incomes are sufficient to purchase the basic necessities of food, clothing, and shelter. This good situation reflects relatively high levels of national

---

1/ This is a lower income level than others have used in the middle income countries discussed in this paper. A higher cut-off would of course imply greater numbers in absolute poverty, but would not change the qualitative and relative picture described here.
income and not too unequal distributions of that income. The poorest SICs, conversely, have significant portions of their populations in poverty, reflecting lower levels of national income as well as, often, less equal distributions. The countries in the middle range of per capita income show diverse results as to poverty, associated with differences in distribution. The Republic of China (ROC) and Korea are estimated to have very little absolute poverty while Brazil, Mexico and Turkey apparently have much, even though per capita incomes are higher in Brazil and in Mexico than in the ROC and Korea.

Reliable evidence on changes over time is even more scarce than on levels at a given time. What information we do have suggests that the real income levels of the poor have increased during the last few decades in virtually every most SIC.

When we consider the distribution of income in SICs -- the share of the poorest 40 percent is presented here, but other measures show similar results -- we see a wide diversity of results. (See Table 2 and Chart 2.) The most advanced countries tend to have more egalitarian income distributions -- Yugoslavia, Argentina, Spain and Hong Kong -- as research by Kuznets and Ahluwalia have shown. But among the other SICs there is no income-related pattern. In this group of countries, differences in society and in policies have swamped any income-related pattern that might exist.

What little can be said about changes over time in these shares would not change the discussion very much. Given the weaknesses in the data already mentioned, the size of the estimated changes is usually of the same order as the likely range of error in the estimates. This is not true for cross-country comparisons, where the range of observations is greater. The changes that have been reported have not changed the relative positions of
Table 2: Measures of Equity in Semi-Industrialized Countries

<table>
<thead>
<tr>
<th>Percentage in Absolute Poverty</th>
<th>Income Share of Poorest 40%</th>
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<tbody>
<tr>
<td></td>
<td>(Year)</td>
</tr>
<tr>
<td>Egypt</td>
<td>20</td>
</tr>
<tr>
<td>Phillipines</td>
<td>33</td>
</tr>
<tr>
<td>Colombia</td>
<td>19</td>
</tr>
<tr>
<td>Korea</td>
<td>8</td>
</tr>
<tr>
<td>Turkey</td>
<td>14</td>
</tr>
<tr>
<td>ROC</td>
<td>5</td>
</tr>
<tr>
<td>Mexico</td>
<td>14</td>
</tr>
<tr>
<td>Brazil</td>
<td>15</td>
</tr>
<tr>
<td>Argentina</td>
<td>5</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>5</td>
</tr>
<tr>
<td>Portugal</td>
<td>na</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>na</td>
</tr>
<tr>
<td>Greece</td>
<td>na</td>
</tr>
<tr>
<td>Singapore</td>
<td>na</td>
</tr>
<tr>
<td>Spain</td>
<td>na</td>
</tr>
<tr>
<td>Israel</td>
<td>na</td>
</tr>
</tbody>
</table>


Chart 2
INCOME SHARE OF THE POOR AND PER CAPITA INCOME

Semi-logarithmic scale

SHARE OF THE LOWEST 40% IN NATIONAL INCOME (PER CENT)

22 20 18 16 14 12 10 8 6 4 2 0

1000 800 600 400 200

2000 3000

GNP PER CAPITA 1977 (U.S.$)

World Bank—20522
the countries very much. In the ROC the share of the poor seems to have increased while in Korea and Yugoslavia it is reported to have decreased, but for any of the estimates the share is relatively high for all three countries. In Brazil the reported share of the poor has fallen, but it was relatively low in all of the years for which there are estimates.

Neither income distribution nor the incidence of poverty in SICs seems to be much affected by taxes or public expenditures. (Estimates of these effects are plagued by poor data and also by weak theory; many arbitrary assumptions are required. For some countries, no estimates at all are available. See de Wulf, 1975, and Mc Clure, 1975.) Taxation tends to be somewhat more progressive in very low income countries, where most of the poor are taxed little or not at all; but in middle income countries tax incidence tends to be very close to income levels. However, rural incomes are usually taxed less than urban incomes. Expenditure incidence is even more difficult to measure, but according to most estimates it is progressive in most countries. However, most SICs have not targeted public spending on their poorest citizens. In countries that are large (in land area) and/or show great economic and cultural diversity among regions, the urban poor usually benefit considerably, but the rural poor (who tend to be about two-thirds of all the poor in SICs), receive perhaps even less than their income share in education, health, and other essential public services. This pattern seems to be common in Latin America and the Philippines, but not so much in Turkey (Selowsky, 1979; Simmons and Burki, 1978; Karaosmanoglu and Durdag, 1977). Smaller countries that are more homogenous culturally and economically, such as Korea and Taiwan, have a more even distribution of the benefits of public expenditures.
Incomes are not the only dimension of poverty. The satisfaction of basic material needs -- nutrition, health, shelter, education, for example -- is only in part determined by income. Social customs and market imperfections intervene for those needs that are met mostly through market purchases -- nutrition, and to a significant if lesser extent health care and shelter. State intervention is crucial in providing education, and is important for health care and for shelter, for the poor.

All too little is known about the degree to which minimally acceptable levels of these basic goods and services are available for the poor in the various SICs. We can risk only a few generalizations:

(i) Significant numbers of people in many SICs are malnourished. This does not seem to result from any important inadequacies of food supply. Every SIC can afford to provide all its people with acceptable diets; the only SIC in which the national average supply of calories per capita was below average daily requirements was Colombia, which was only 3 percent below the standard. (1975 or most recent year). Where significant incidence of malnutrition does occur in SICs, as for example it apparently does in Brazil, it is related to a combination of two factors: (a) very unequal distribution of income, resulting in many families too poor to buy enough food, and (b) inefficient eating habits; families who could just afford the minimum calorie standard purchase "high cost" calories (e.g. steak instead of rice) and consume fewer calories than the minimum standard by choice.
(ii) Access to health care varies enormously both among and within SICs, as do the resulting indices of disease incidence, life expectancy, infant mortality, etc. Again, most SICs could afford much better health care; the main problem is that in many countries most health care is expensive curative care limited mainly to cities; poor urban dwellers get inferior care and poor rural residents even worse. Good health depends not only on good medical care but on adequate shelter, safe water and sewerage disposal and enough education to know how to care for oneself. These "inputs" are scarce in many rural parts of SICs as well as for the poor inhabitants of the urban shanty towns to be found in virtually all of the many fast-growing cities.

(iii) Education, like health care, tends to be concentrated in the urban parts of many (but not all) SICs. Also, many countries spend major portions of their education budget to provide free university education (which is enjoyed overwhelmingly by the children of the middle and upper classes) while neglecting primary education, especially in areas where most of the residents are poor.

(iv) The problems with housing are analogous to those with health and education. In some countries, the bulk of public housing is for the urban working class, while the poor are for the most part ignored and in some cases actually harmed by shanty-town clearance.
Money is not an overwhelming constraint in solving these problems in SICs except perhaps in the one or two poorest. According to some order-of-magnitude calculations by Selowsky (June 1979), the unmet basic needs of most of the poor in countries such as Brazil, Colombia, Mexico and Turkey could be met by additional efficient and well-targeted government programs costing between 5 to 10 percent of GNP (depending mostly in the country's per capita income). Selowsky estimates that these amounts, spent efficiently, plus continuation of existing programs as they are now operated, would meet almost all of the basic needs in question in these countries. If major restructuring of existing programs were possible (much more emphasis on preventive health care, charging for university education, much more emphasis on minimal sites-and-services for housing the urban poor), the existing social expenditures of most SICs would be nearly sufficient to satisfy the basic needs in question of their citizens.

Population Growth

Demographic behavior -- or more precisely, fertility -- varies considerably among the SICs. (Mortality is fairly low in most of them and can be expected to decline only slowly in the future.) Many changes have happened in the last 25 years. In 1960 the crude birth rate \(1/\) was already low in some of the most developed SICS -- Israel, Spain, Greece, Portugal, Argentina, and Yugoslavia. Since 1960, high birth rates have come down considerably in Singapore, Hong Kong, the ROC, Korea and Colombia. They are

---

1/ The crude birth rate depends on two factors: birth rate of women of child-bearing age, and the age structure of the population. A better measure of current behavior is the "total fertility rate," which is independent of the age structure -- but up-to-date, reliable estimates of this index are not available for many countries.
still high in the remaining SICs, although they have (apparently) recently
started to fall in all of them.

These falling birth rates are consistent with the generally accepted
rule that fertility falls after mortality falls and as development increases
— especially in the middle stages of development. (Indeed the observations
are a large part of the reasons for the general acceptance of the rule.)
Demographers do not agree on the relative importance of development and of
family planning programs, but it can safely be said that both have contrib-
uted. 1/ All of the SICs that still have high birth rates do have at least
the bare beginnings of family planning programs, and it seems reasonable to
hope that further development combined with direct efforts will reduce
fertility in all of them. However, the very large cohorts of young people
(due to recent high birth rates) in the Philippines, Colombia, Turkey, Mexico
and Brazil will almost inevitably limit the speed at which birth rates (and
hence population growth) can be reduced in the future.

Some Preliminary Conclusions

Our conclusions should and will await the analysis that follows.
But we note here two lessons that stand out from the preceding discussion:
Success on most of the goals of development is possible and is being achieved
by a fair number of countries. Poor countries can get richer, and not only
by discovering oil. Moreover, the extreme inequality encountered in many
SICs is not inevitable; at least a few countries have avoided it, and have

1/ Indonesia is said to be an example of fertility decline due mostly to
family planning programs, and of course there are many examples of
fertility decline without any such program.
achieved rapid growth as well; indeed we shall see later that in certain circumstances both the fast growth and the equitable distribution can be the joint results of the same policies.

The Minister of Finance (or whatever) of a given country at a given time will, almost surely, not see his world as being so flexible. The options open to him look much more limited -- often severely so. "Mexico is not Taiwan," he may say with a certain justice. We must, in great measure, agree. Countries do differ in the opportunities they present and in the constraints they face, and economic policy alone cannot fully explain the past history of development or its absence. But let us not forget that both policies and their results have differed, both among countries and over time within countries, and let us try to see, in the rest of this paper, whether we can show some of the connections between the differences in policy and the differences in results.
II. Paths of Development

In this section the experience of several different SICs will be described in more detail. The countries have been chosen because their recent histories show clearly the differences among several common development patterns. Korea and the ROC had rapid economic growth that was accompanied by great success in alleviating poverty in a capitalistic framework; their growth was characterized by outward-looking (i.e., trade-favoring) strategies and by labor-intensive production. Hong Kong and Singapore had somewhat similar experiences, but will not be analyzed here. A second path to development is that followed by Yugoslavia, which achieved similarly good results under a decentralized socialist regime. A third path, more inward looking and based on import-substituting industrialization (ISI) policies, was followed most successfully by Mexico and Brazil. Their economies grew rapidly, but poverty was and remains a serious problem. Many other SICs followed the ISI path with somewhat less success but yet made significant progress, and of these countries we will touch briefly on the Philippines and Turkey. These last-named countries form a sort of bridge to our fourth path, that of Argentina, whose history over the last several decades is disappointing in regard to growth but shows relatively little poverty and high income shares for the poor. Some additional comparative data that will be mentioned in the discussion are shown in Tables 3, 4, and 5.

Korea and the ROC: Outward-looking, Labor Intensive Growth

The record of economic growth and poverty alleviation achieved by these two Asian societies is really remarkable. Over the 17-year period from 1960 to 1977, GDP growth in Korea averaged 9.3 percent per year while
### Table 7: Comparative Data for Semi-Industrialized Countries: Trade

<table>
<thead>
<tr>
<th>Country</th>
<th>Imports/GNP</th>
<th>Exports/GNP</th>
<th>Exports of Manufactures/GNP</th>
<th>Growth of Exports</th>
<th>Sources</th>
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<td>Colombia</td>
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<td>26.2</td>
<td>4.2</td>
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<tr>
<td>Foreign Savings</td>
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<td>Annual Data of Inflation</td>
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<td>5.8</td>
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<td>9.3</td>
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<tr>
<td>Balance of Payments (as % of GDP)</td>
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<td>5.8</td>
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<td>11.9</td>
<td>16.7</td>
<td>17.4</td>
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Table 5: Comparative Data for Semi-Industrialized Countries: Employment and Productivity

<table>
<thead>
<tr>
<th>Country</th>
<th>Labor Force Growth Rate 1960-70</th>
<th>Value Added Per Worker Growth Rate 1960-70</th>
<th>Value Added per Worker Ratio 1970</th>
<th>Incremental Capital-Output Ratio 1960-77</th>
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<tr>
<td></td>
<td>Total (percent per year)</td>
<td>Industry</td>
<td>Agriculture</td>
<td>1960-70</td>
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</tr>
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<td>Spain</td>
<td>0.2</td>
<td>2.0</td>
<td>-4.5</td>
<td>7.9</td>
</tr>
<tr>
<td>Greece</td>
<td>0.1</td>
<td>2.0</td>
<td>-1.9</td>
<td>7.0</td>
</tr>
</tbody>
</table>


a/ 1965-70
that of the ROC was 8.6 percent per year. Neither country is particularly well endowed with natural resources; Korea in particular has a very low ratio of land to population and few minerals. The growth was achieved by combinations of good human resources, good policies, favorable external environments, and hard work. Their record on equity is also outstanding. The ROC is perhaps a unique case, having not only a highly egalitarian distribution of income and having virtually abolished absolute poverty (see Table 2), but also of apparently having defied the general tendency towards greater inequality as per capita income increases towards the $1,000 per year range. Korea's income distribution has also been one of the most equal of all SICs, at least until very recently, but at her lower income levels (at least as of 1975) there was still somewhat more poverty. The data suggest that distribution in Korea is becoming less equal, especially during the last few years.

Focussing first on Korea, we see that her rapid growth dates from about 1963. Few observers at that time were optimistic about Korea's economic prospects, and for apparently good reasons. Korea's separation from Japan and the north-south partition after the Second World War left South Korea a poor agricultural half-economy. The North had about half the manufacturing sector and almost all the good mines, and more importantly almost all the electric power generation capacity. After five years of independence came the Korean war, which lasted from 1950 to 1953, and devastated the South. Sixty percent of the cultivated land was laid waste, most of the limited industrial capacity was destroyed, and over one quarter of the population were homeless refugees (Hasan, pp.26-27). Per capita income in 1953 was about $196 (1976 prices), and manufacturing was only 9 percent of GNP (Mason et. al., Chapter IV, p. 2).
Over the next ten years, from 1953 to 1963, Korean policy aimed at 
reconstruction, defense, and increased private consumption. U.S. aid was 
heavily relied upon; from 1953 through 1958 aid averaged 15 percent of GNP 
(Cole and Lyman, p. 165). Import-substituting industrialization in non-
durable consumer goods led manufacturing growth of 11 percent per year, 
while agriculture was somewhat neglected and grew at about 2.5 percent per 
year. GNP grew at 4.6 percent per year during 1954-58, but during 1959-62 
growth slowed to 3.4 percent per year (Mason et. al., Table IV-1) as the 
import substitution possibilities in consumer non-durable goods were exhausted, 
agriculture did poorly, and economic and political instability further reduced 
investment and growth. The industrial growth that did occur in the 1950s did, 
nevertheless, further increase Korea's stock of both physical and human 
capital.

Looking back we can see that there were some important bright spots 
in this mostly bleak picture of Korea in the early 1960s. Behind the shattered 
economy and the low income level was a society that had an egalitarian ethos 
and situation, and was open to advancement by merit, with a population that 
was relatively well educated and achievement-oriented. Two land reforms (in 
1947 and 1950) and the destruction wrought by the war of 1950-53 had left 
almost all Koreans equally poor by 1953. This poverty was, however, the 
result of the preceeding chaotic events; in human resources Korea was far 
richer than the abnormally low income level suggested. Widespread education 
was vigorously promoted by United States advisors after World War II, and 
continued strong in the 1953-63 decade -- the literacy rate rose from 30 to 
over 80 percent (Adelman and Robinson, p. 41), and school attendance at all
levels increased dramatically. By 1965, Korea had achieved a level of human resources above the level expected for a country with three times its GNP per capita (Harbison and Myers, pp. 31+; cited in Adelman and Robinson, p. 41).

A new military government took office in 1961. During its first year in office the strategy of Korea's growth was changed to export-oriented industrialization, a path it has followed ever since (Mason et al., Chapter IV, p. 6.) The government chose not to carry import substitution back to intermediate goods, capital goods, and consumer durables, but rather to promote continued growth of output of consumer non-durables, through export markets. While the motives of decision-makers can never be completely known, participants in the process suggest that the most important factor in this turn-around was a need to earn foreign exchange. Exports had averaged a miniscule 2 percent of GNP during the 1950s, and the foreign aid that was paying for the rest of imports (11 percent of GDP) was clearly not going to keep flowing forever. Opportunities for more import substitution were seen as unprofitable and there were no natural resources to export. So the chosen alternative was to export manufactures.

The turn-around in trade incentives was not sharp and immediate. Some measures to promote exports had already been taken in the late 1950s. In the 1961-64 period, progress was far from continuous. Devaluations were neutralized by inflation. Import liberalization was partly reversed in 1963. Special export subsidy schemes were installed, modified, and replaced by others. But in 1964 and 1965 an effective and long-lasting package was implemented by the newly-elected government of President Park Chung Hee (who has remained in power since then). A sharp devaluation was
supported by restrictive monetary and fiscal policies, and subsequently inflation was compensated for by devaluations. Quantitative restrictions on imports were eased, although tariffs rose. Producers for export could import raw materials free of duty, were exempted from all indirect taxes and paid reduced rates of income tax on profits earned by export, received low-interest loans, and were granted other subsidies as well. Korean producers had easy access to purchased inputs at world market prices and quality, and received world market prices for their export sales. At the same time, reduction in protection in the domestic market meant that profits were higher for exports than for domestic sales. This package continues in force, with some modifications, today.

Three other important sets of measures complemented the new trade policies. First, interest rates were raised dramatically. They reached about 10 to 20 percent in real terms during the first few years (Mason et. al., Chapter VIII, p. 47), and remain higher than in most other SICs. This sharp rise in interest rates was followed by increased flows of personal savings through financial intermediaries, providing an important source of non-inflationary financing for the boom that was underway 1/. Second, the President and the government were strongly committed to economic growth, perhaps in large part to compete with the Korean Democratic Republic to the North. As an illustration of this commitment, the President personally took part in the export promotion drive. He held (and continues to hold) monthly

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1/ Part of the observed increase in savings may have been only a diversion from informal (unrecorded) channels to formal ones. Even allowing for this possibility, however, private saving and government saving both rose dramatically since the early 1960's, to finance growing investment. Nevertheless, inflation averaged about 17 percent per year throughout the period.
meetings to review achievements, to revise targets (upwards; actual exports almost always exceeded targets), and to direct the government to solve problems and ease the path for exporters.

The final, and one of the crucial parts of the success story was the well educated labor force that was available to work at relatively low wages. Here we may cite Ian Little on the ROC, where conditions were essentially similar:

"We have explained the boom as largely accounted for by Taiwan's taking advantage of her one cheap resource - labour... manufacturers were not inhibited from employing more labour by any wage regulation, industrial disorder, or restriction on sacking workers; in short, labour really was cheap..."

The results were amazing. Exports rose from 3.3 percent of GNP in 1960 to 48 percent in 1977. Manufactured exports rose 51 percent per year (at current prices), from 1 percent of value added in manufacturing to 96 percent in the same period. In fact, the increase in manufactured exports accounted directly for 25 percent of the increase of manufacturing output during 1960-66, and for 46 percent during 1966-73. For all exports, the increase was 13 percent of the increase in GNP during 1960-66 and 35 percent during 1966-73 (Balassa, 1978 Tables 3.1 and 3.2). Using input-output linkages to estimate direct and indirect effects combined, Kubo and Lewis (1978) estimated that import substitution accounted for 21 percent of Korea's growth in total gross production during 1955-63, and none during subsequent periods. Export growth accounted for an estimated 10 percent in 1955-63, 22 percent in 1963-70, and 56 percent in 1970-73. In the last period export growth was even more important than growth in domestic demand, which is very unusual. Thus Korea is an extreme example of export led growth. And this growth was also amazing: GDP
grew by 9.3 percent per year from 1960 through 1977. Agricultural output grew at 4.7 percent per year, and industry at over 17 percent per year. Aided by a decline in population growth (from 3 percent per year around 1960 to about 1.7 percent in the mid seventies), per capita GDP in 1977 prices rose from US$244 in 1960 to US$820 in 1977 -- an average annual increase of 7.4 percent.

Since the early 1960s the government's stable and strong commitment to economic growth, and its pragmatic competence, have been important contributors to growth. Neither conflicting goals nor inept management have been allowed to restrain actions needed for growth. Decisions are taken quickly, and if they don't work they are changed. Private sector activities are regulated in the first instance by generalized price incentives, but particular firms that don't perform are said to find that they run into trouble with tax examiners or banks. (Financial intermediaries in Korea are controlled by the government). Policies and targets are set by the government, but private businessmen are consulted both before and after the decisions are taken and, as already noted, the decision is changed if the desired results are not following. Many public sector enterprises yield a profit (as they typically do not in other SICs) because they are supposed to and because when they don't their management is replaced. Many observers think that an important factor for private sector growth (which has, after all, been the overwhelming source of GDP growth) in Korea has been the knowledge that government is committed to help, and the fact that the government does help to achieve increased output and increased exports, at or very near to internationally competitive costs.

But while a commitment to growth by a stable and competent government was important, the crucial aspect seems to have been the combination of policies and comparative advantage, together with favorable conditions in
world markets. Korea's policies to export manufactures and to keep her labor cheap were the perfect complements to her lack of natural resources, modest internal market, but well educated and willing labor force and her talents for management and organization.

Korea's record of rapid income growth is all the more interesting because of her simultaneous near-elimination of absolute poverty. Thus Korea's income distribution is among the more equal in the developing world -- although it apparently has been getting less equal in the 1970s. The poorest 40 percent of all households received an estimated 16.9 percent of the national total in 1976, and the ratio of the top 20 percent share to the bottom 20 percent share was only 8 to 1. These were among the most egalitarian values measured for any LDC. Data from 1963 to 1970 show at most a small increase in inequality -- remarkable in view of the rapid and highly capitalistic nature of growth during that time. The latest data (1976) show sharper increases in inequality, but still place Korea among the more egalitarian SICs.

The overall low degree of inequality was the result of low inequality for both rural and urban incomes separately and a relatively small difference between rural and urban incomes. These were in part the result of deliberate policy designed to achieve such a goal (land reform, maintaining agriculture's terms of trade), and in part a result of certain initial conditions combined with the type of growth that took place. For Korea there was no trade-off between growth and equity; to the contrary, the same conditions and policies that produced the growth also maintained the egalitarian distributions.
Our simplified (sic) interpretation of the mechanics of that process is shown in Chart 3. We can start from the results on the bottom of the chart and trace the mechanism back to its proximate causes. The equality within the rural sector is easy to understand. The two land reforms of 1947 and 1949 gave land to virtually every rural family and established a ceiling of approximately 3 hectares on holdings. The result was that almost every family had a very small farm. This equality was maintained by: (a) continued enforcement of the 3 hectare ceiling; (b) the slow-down of population growth; and (c) the rapid absorption of labor by industry -- 10.7 percent per year from 1963 to 1975, one of the highest rates ever recorded in any country. These factors prevented both a re-concentration of holdings and the reformation of a large group of landless agricultural workers.

The reasons for equality within the urban sector are more complex. Before the analysis, a qualification as to fact is in order: the urban surveys on which this analysis is mostly based do not cover families with incomes above about US$5,000 per year. (Mason et. al., Chapter XII, p.3). Analysis of car ownership, income tax returns, and casual observation suggest that a small but growing percentage of urban families has been receiving very high incomes. Even so, the estimates of overall inequality through the early 1970s are low compared to other countries. More recently, estimated inequality has increased.

The low degree of urban poverty -- the relatively high share of income received by the urban poor -- had their proximate cause in the very rapid absorption of labor in higher productivity sectors and occupations. Mining and manufacturing absorbed 38 percent of the total employment increase during 1963-75. (See also Chart 4.) Workers did not have to become landless
CHART 3
KOREA: EGALITARIAN DISTRIBUTION AND LITTLE POVERTY

Cheap Urban Labor; No Dual Urban Labor Market

No Bias Against Labor Intensive Products/Processes

Reduced Population Growth

Absorption of Urban Labor in High-Productivity Jobs

Egalitarian Urban Incomes

Urban Incomes not so much above Rural Incomes

Egalitarian Rural Incomes

Egalitarian Income Distribution

High Interest Rates

Education and Work Ethic

Strong Export Promotion

Government Gives High Priority to Growth, Acts Effectively

Price Subsidy for Foodgrains

Rapid Growth of Manufactured Exports

Rapid Growth of Manufacturing Output

Rapid Growth of Manufacturing Employment

Equal Distribution of Farmland; Few Landless Rural Laborers

Growth in Urban Demand for High-Value Crops

World Bank – 20523
rural laborers, or urban shoe-shine boys, car guarders, etc., in any significant number because better jobs were available. This good performance on creation of productive jobs was in turn the result of rapid growth in output, absence of bias against labor intensive products or processes, and a highly educated and achievement-oriented population, willing to work very long hours under highly disciplined conditions. Korea has no effective union pressures, and no effective minimum wage. Real wages have risen slightly faster than value added per worker for the economy as a whole -- 7 and 6.1 percent per year, respectively; in manufacturing real wages rose about 9 percent per year -- but at least until the late 1970s wages remained low compared to productivity, and the absence of market restrictions resulted in less of the urban dualism so common in many other countries (from Brazil and Mexico to the United States!), where those workers who can get jobs in oligopolistic, high productivity, and/or unionized sectors do very well while others subsist in what has come to be called the "secondary" labor market, characterized by high turnover, low earnings, and little chance for advancement (see Table 5).

The third element of Korea's egalitarian distribution was the relatively small gap between urban and rural average incomes. The ratios of average rural to urban family incomes of 0.6 to 0.8 in Korea (except in bad crop years), compare favorably to countries at the other extreme such as Mexico with a ratio around 0.4 (1975 survey) or Brazil around 0.3 (Langoni, 1973, Tables A.1.10 and A.1.12). Korea's small urban-rural income differential is also reflected in her very low ratio of value added per worker in industry to value added per worker in agriculture (see Table 5). This aspect of Korea's relative equality has three proximate causes. First and foremost, the rapid absorption of labor in modern urban activities that has prevented
the formation of a large pool of poverty-stricken landless rural laborers.
Second, government purchase of rice and barley at high prices, plus the rapid
growth in demand for vegetables and other high value cash crops in urban
markets (caused by income gains), plus the rapid shift of labor out of agri-
culture (which is the other side of the rapid labor absorption in industry),
have kept farm prices in line with farmers' costs -- whereas in many other
LDCs farm output prices have fallen relative to input prices. Third, Korea's
farmers are mostly literate and achievement-oriented, and with government help
they have enormously high productivity per hectare; comparable to Japan.
Korea has no important backward rural regions, as are found in all of the
SICs that still have a significant amount of absolute poverty.

Note that it was the same policies and social characteristics that
promoted manufactured exports and efficient growth elsewhere in the economy
that also promoted rapid labor absorption and hence helped to maintain
the egalitarian income distribution.

Like almost all other SICs, Korea has not engaged in much redis-
tribution of income through taxation. What equality there is results mainly
from equality in before-tax income. According to a study by Bahl, in 1974
the tax system was slightly regressive, although the incidence of expenditure
-- always very difficult to estimate -- was somewhat more progressive (cited
in Mason et. al., Chapter XII, pp. 34-37). A more recent study finds that
the tax system is mildly progressive, and (as in many other LDCs) that farm
households pay less tax than non-farm households (holding income levels
constant). But neither study shows any significant redistribution of income
by size class through taxes or expenditure.
The growth experience of the ROC is similar in most important respects. The period of most rapid growth started in 1963, from whence GNP per capita rose 7.3 percent per year through 1973 (Little, p.1). From about US$420 in 1960, GNP per capita rose to US$1,170 in 1977 (1977 prices). As in Korea, this growth was led by exports of manufactures. Between 1962 and 1972 exports of all goods and services rose from 13 to 43 percent of GDP; manufactured exports went from 6.5 to 36 percent of GDP. The export growth period was preceded by a phase of import substitution, mainly in non-durable consumer goods. Manufacturing grew at 10.7 percent per year during this ISI phase (1953-63), and at over 21 percent per year during 1963-72. (Ranis, Table 5, p. 22.) Considering both direct and indirect effects, Kubo and Lewis (op. cit.) estimate that import substitution explains 15 percent of growth in total gross production during 1956-61 and none thereafter, while export growth explains 24 percent in 1956-61, 38 percent in 1961-66, and 50 percent in 1966-71.

The island of Taiwan was Chinese territory for centuries, before it was occupied by Japan from 1895 to 1945. The Japanese used Taiwan to produce food for Japan, and together with the native population they created a highly productive agricultural sector through substantial investments in infrastructure (irrigation, water control, railroads, ports, electricity and roads), seed improvements, use of fertilizers, and other improvements. (Lee and Liang, p.1) Some industry was also developed: food processing was most important, but others included cement, pulp (based on sugar cane), fertilizers, aluminum and copper refining, and petroleum refining. (Lee and Liang, p.2).
Under the government of the ROC, Taiwan's experience was similar to Korea's in its favorable treatment of agriculture, its richness in human resources, and its labor force that accepted long hours of hard work for rising but low wages. Also, both countries had enjoyed massive foreign aid inflows during their "pre-takeoff" periods, but foreign aid dried up as growth took off. This sequence was almost certainly not accidental; at least in Korea the imminent loss of aid was the lever that led to export-oriented policies. Two differences between the two countries' experiences are: (a) the ROC is more of a "free trader" than Korea. Protection of manufacturing in the domestic market is lower, and less varied among products; this difference is not surprising given the ROC's smaller population and more advanced initial conditions; (b) Public finance was more conservative in the ROC, and inflation was less -- although during the 1970s the ROC too experienced over 10 percent annual increases in prices.

The ROC's story about poverty and income distribution is even better than Korea's. The share of the poorest 40 percent in the ROC is even higher than in Korea; in the ROC distribution has been getting more egalitarian (since 1968). All of the key elements described earlier in the Korea case are present: egalitarian land distribution; dramatic absorption of labor by industry, without a dual urban labor market; government action to prevent agriculture's terms of trade from deteriorating; a skilled, educated, and achievement-oriented labor force, etc.

An interesting and perhaps unique aspect of employment and income distribution in the ROC is the geographic decentralization of manufacturing. Because of the small size of the populated area of the island, the good road
system, the labor-intensive and hence small scale of manufacturing establishments, and a deliberate decentralization program, most rural residents live within commuting distance of at least some manufacturing employment. By 1970, 70 percent of all farm households got some income from non-farm employment, and 29 percent earned more income from non-farm jobs than from farming. Access to such other sources of income has greatly contributed to the incomes of the rural poor and hence to reducing both absolute poverty and inequality. (Ho, 1976. See also Ranis, 1978.)

Korea and the ROC have achieved their great successes by adopting policies that exploited their natural advantages, their small size, and favorable conditions in export markets. Their future growth will depend in part on their ability to continue that flexibility, to adapt to their own changing comparative advantage as labor becomes more scarce relative to capital and technology. The other major unknown in their future relates to their markets -- increased protectionism on the part of developed countries could inhibit their growth considerably.

**Yugoslavia: Worker-Management Socialism**

Yugoslavia has been quite successful in terms of both economic growth and poverty alleviation. During the 1960-1977 period, GDP growth averaged 6.3 percent per year. Per capita product rose at 5.6 percent per year, from roughly $775 in 1960 to $1,960 in 1977 (in 1977 prices). The poorest 40 percent of all households are estimated to receive 18.4 percent of national household income as of 1973 -- a relatively high percentage (see Table 2) -- although that share represents a slight decline from the estimate for 1963.
According to the estimates of Ahluwalia et al., there is very little absolute poverty.

This performance and the policies that helped to bring it about must be seen in the light of three essential characteristics of Yugoslavian development efforts: (a) a commitment to socialism, implying inter alia a commitment to an egalitarian size distribution of income; (b) a commitment to reducing regional income differentials; and, (c) a commitment to create an efficient system characterized by worker management of enterprises and other elements of decentralized authority.

Yugoslavia was formed, after the First World War, out of seven different regions: Two formerly independent nations, two former provinces of the Austrian part of the Austro-Hungarian Empire, two former provinces of the Hungarian part, and one former province that had come under central Empire control. Within and among these regions was "... an extraordinary diversity and lack of cohesion among ethnic, linguistic, religious, cultural and historical factors, together with wide disparities in social and economic development." (Shrank, Ardalan and El Tatawy, 1979). The new country included regions with a Catholic culture from Central Europe and others with the Islamic traditions of the Ottoman Empire. Sixty years later, the cake that was to have been baked from these ingredients is still in an experimental stage in some respects.

Regional differences remained unresolved by successive governments between the two world wars. Prior to World War II, income was roughly US$265 per capita (1977 prices) (Amacher, 1972, p. 13) and the economy was based for the most part on agriculture (47 percent of national income) and primary exports. The war brought tremendous devastation to the country and
the people. After the war, control by the Communist Party of Yugoslavia under Marshall Tito brought the nation far closer than it had ever been to a truly national government that, while very authoritarian in many ways, strove for equal treatment of its citizens regardless of their ethnic or regional background, and tried to create a national spirit throughout the country. In 1948, after two years of impressive post-war economic progress under a highly centralized and authoritarian government, Yugoslavia broke with the Soviet Union and the other Cominform countries. Virtually 100 percent of its foreign trade had to be redirected to new partners. (Trade with the Eastern European countries resumed in 1954; since then Yugoslavia has traded with both East and West.) Two years later, in 1950, the attempt to establish a system of worker self-management was begun. A number of major changes have been made in the system since then, but Yugoslavia today is still committed to decentralization of decision-making authority in both the economic and the political spheres, in an attempt to allow the diverse interests of Yugoslavia's peoples to be expressed and harmonized in an open, participatory way.

Growth was erratic from 1948 through 1956, with good years alternating with bad, as the economy adjusted first to the break with the Cominform and then to the experiments with new policies begun in 1950. Rapid and somewhat more steady growth started in 1957, with GNP growing 6.9 percent per year through 1971. 1/ (Dubey, 1975) The good performance on both growth and

1/ Base year to terminal year growth at annual average rate. 1951, 53, and 55 were also years of high growth; the base year 1956 was deliberately selected because it marks the last of a set of alternating years of bad performance.
equity during the mid-1950's and early 1960's occurred under high and increasing rates of saving and investment (private consumption declined from 56 percent of GNP in 1957 to 51 percent in 1964), and considerable central government intervention in the economy via price controls, subsidies, and investment allocation both among sectors and among regions. This intervention was marked in foreign trade as well as in domestic policy; complex systems of de facto differential exchange rates existed for both imports and exports; export premia varied among products and also depended on the currency in which the transaction took place and the region of the country in which the export originated. On balance, manufactured imports were severely restricted. Domestic production in manufacturing and mining (the sectors where social ownership was pervasive) grew from about one fourth to about one-third of GDP. Export incentives were, on balance, apparently fairly strong (no estimates are available) because exports grew from the depressed levels of about 10 percent of GDP to about 24 percent, as the share of manufactures in total exports rose from 38 to 50 percent (Dubey 1975, p. 273, 389-390); manufactures came to account for over 80 percent of merchandise exports. Output in agriculture, which was largely in the private sector, grew at 4.1 percent per year from 1957 to 1971, while in manufacturing and mining the growth rate was 9.7 percent per year.

Growth in output was good during the late 1950s and early 1960s, but there were increased perceptions of inefficiency and lack of provincial autonomy. The emphasis on investment as opposed to consumption was also a source of dissatisfaction. Another set of reforms was therefore adopted in the early and mid-1960s, which greatly reduced government intervention in the economy. Most price controls were abandoned, as was central allocation of
investment and multiple exchange rates. Enterprises in all sections of the economy became much more autonomous and subject to market forces. Unfortunately the 1960s reforms did not work as well as desired. Liberalization of prices and increased autonomy led to price and wage increases and these to inflation; central government fiscal policy was too much weakened to deal with the process, as most public spending other than defense was managed independently by each province. Investment funds were no longer allocated by the central government, but flowed through financial intermediaries and large industrial enterprises. These were interested in investments in their own region only. To compensate for the disadvantages of the poor regions, a Federal Fund was established to channel tax revenues to poor regions. Output continued to grow, but a stop-go pattern appeared, due to lack of a centrally coordinated macro-economic policy to regulate prices and wages, foreign trade, taxes and spending. Therefore, in 1971-74 yet another set of reforms was designed, and are now being put into effect. These latest changes are an attempt to provide a more consistent and effective system for setting macro-economic policies, while maintaining workers' management and, indeed, extending it upwards to the macro level. How well this latest experiment will work remains to be seen.

Thus some of the most important characteristics of economic growth in Yugoslavia have been:

(i) a determined willingness to experiment with different systems, to find a way in which workers' management could be combined with micro-economic efficiency, effective macro policy making, and regional equity.
(ii) high to moderate growth in output, in spite of the difficulties that came with these experiments, and based more on very high savings and investment rates than on efficiency.

(iii) both import substitution and export promotion for manufacturing, resulting in rapid industrialization. Again, however, success was not based primarily on efficiency. The balance of payments was managed by quotas and state marketing before 1956; when enterprises gained more autonomy after 1965 the deficit on goods and non-factor services increased but workers' remittances rose to over 25 percent of total export earnings to take up most of the slack.

Yugoslavia's relatively egalitarian distribution of income, compared to most of the more capitalistic societies, is of course no accident. Limitations on private ownership of land, social ownership of the entire formal industrial sector, and restrictions on salaries of top executives have restricted inequality at the top of the distribution; while subsidies to depressed regions have helped to reduce geographic concentrations of poverty (although there are still problems). Nevertheless, Yugoslavia's performance on poverty alleviation can in part be explained by factors that have little or nothing to do with its commitment to socialism or the way that commitment is expressed.
While Yugoslavia's extremely low Gini of around .24 to .22 is unmatched by capitalist SICs, even by countries such as Korea and the ROC, factors unrelated to differences between socialism and capitalism would lead us to expect a relatively low degree of inequality. First, Yugoslavia's position near the very top of all LDCs in terms of per capita income, education and human capital, and other indices of development all point to a more egalitarian distribution than is found in countries nearer the middle of the SIC range. Related to this generally high level of development, but also to Yugoslavia's regional policies, is the relatively small difference between value added per worker in industry and that in agriculture (see Table 5). From 1955 to 1973, the internal terms of trade have moved strongly and steadily in favor of agriculture. This change in relative prices proceeded at 7 percent per year from 1955 to 1964, rose sharply to 24 percent in the single year 1965 when major price reforms were implemented, and continued at 4 percent per year through 1974. Finally, related to both points previously made but perhaps most important, Yugoslavia's labor force has been growing very slowly, and has found employment in both the (modern) social sector and as migrant workers in higher-wage European countries. Labor force growth from 1961 to 1975 was only 0.66 percent per year. (It was also low prior to 1965.) Social sector employment grew 2.8 percent per year (in spite of a drop of over 3 percent after the 1965 reforms) increasing from 38 to 51 percent of the

1/ Measured income usually misses many non-monetary perquisites of high positions, which may be relatively more significant in socialist countries than in capitalist ones.

2/ The observed share of the lowest 20 percent, 6.6 percent of national income, compares to 4.1 percent predicted by Ahluwalia's (1976) regression disregarding Yugoslavia's socialist policies, or 8.8 percent taking those policies into account.
labor force, while migrant workers abroad grew from perhaps 1 to 10 percent of the labor force over the same period. In absolute numbers, both the social sector and the "migrant sector," each by itself, absorbed a greater number of additional workers than the total increase in the labor force, with private agriculture employment decreasing by more than twice the amount that the total labor force increased. This performance would appear even more marked if the period analyzed were ended a few years earlier when the number of migrant workers abroad was considerably higher. With such ample sources of employment at relatively high wages, we would not expect to see much poverty in any country, socialist or not!

The poverty that does exist in Yugoslavia is concentrated in private agriculture in poor regions. In spite of substantial transfers of funds to these regions, backward traditional agriculture remains recalcitrant in Yugoslavia as in most other countries where it exists. Since 1973, new programs to raise the incomes of these poor farmers have been adopted. But in her poverty even more than in her egalitarian income distribution, Yugoslavia's situation is not unlike those of many of the more capitalist SICs -- to two of which we now turn.

Brazil and Mexico: Import Substituting Industrialization

Brazil and Mexico are the outstanding success stories of growth through import substitution policies -- although these "successes" have had their problems and Brazil's latest "miracle" growth represents a partial shift from the ISI strategy.

Brazil's GDP grew at 6 percent per year from 1947 to 1962, and again at 11 percent from 1967 to 1974. Manufacturing output grew at 10 and 13
percent per year during the two periods, raising its share of GDP from about 21 percent in 1947 to about 30 percent in 1974. Agricultural production also grew steadily, averaging 4.3 percent per year from 1947 to 1974. By 1962 import substitution of manufactured goods already was virtually complete; imports accounted for only about 4 percent of total supply of manufactures (even for capital goods the share was only 10 percent). But exports of manufactures were a miniscule 3 percent of domestic production. (Bergsman, 1970, pp. 92+) The early 1960s were marked by runaway inflation and political instability. The military government that took power in 1964 imposed a stabilization program. Thus growth was interrupted during 1963-67. The 1968-74 growth, however, saw manufactured exports grow from 5 to over 10 percent of domestic production of manufacturing, as Brazil successfully shifted towards a more neutral policy as between exports and domestic sales. (Von Doellinger, 1975, p. 69)

Mexico's growth was similar in many (but not all) respects. Protection to domestic manufacturing was lower than in Brazil, but trade policies had both of the biases of ISI -- manufacturing was favored over agriculture, and domestic sales were favored over export sales. GDP grew at over 6 percent per year from the end of the Second World War to the early 1970's, with scarcely a break. Manufacturing grew at 7.3 percent per year, and its share of GDP rose from 18 percent to 23 percent. Agriculture also performed well, growing at 3.6 percent over the same period, but more slowly in the later years. Import substitution did not go quite as far as in Brazil -- Mexico still imports about 22 percent of its consumption of capital goods, for example, (Nacional Financiera, 1977, pp. 212, 236) and about 13 percent of manufactured goods as a whole. Exports of manufactures have been growing
rapidly (from a tiny base) during the 1970s, but at their peak in 1974 they amounted to only 4 percent of domestic production (excluding sugar and assembly products).

Per capita incomes grew rapidly in both countries, 4.9 percent per year in Brazil and 2.8 percent in Mexico over the 1960-77 period, in spite of very high population growth; in 1977 their annual products were $1,360 and $1,120 per capita, putting them around the middle of the semi-industrialized countries.

The reported distribution of these incomes, however, are among the most unequal of all the countries for which there are estimates, and the estimated shares of the poor in total income are extremely low (See Table 2 and Chart 2) -- even lower than would be expected on the basis of the two countries' positions in the most unequal part of the cross-country patterns described by Kuznets and Ahluwalia.

With the overall picture in mind, we may examine what happened in each country with more care. The Brazilians have always seen a great destiny for their country. Large, rich in so many natural resources, and populated with a society that rightly prides itself on its ability to find ways to solve any problem, Brazil seems a country in which economic growth should, somehow, be the normal condition.

Brazil was a colony of Portugal until 1808, and the colonial economy was based on primary products and trade -- manufacturing activities were forbidden. After independence, manufacturing and infrastructure developed rapidly, to serve the still primary-based economy. In 1888-89 slavery was abolished and the King abdicated, leaving Brazil a republic with strong states dominated by local oligarchies and a weak central government. This change
reinforced shifting economic conditions, from concentration on labor-intensive crops in the North-East, to coffee and cattle located in the Southern part of the country. The south continues to be the most advanced part of the country today, although industry has joined with a modern agricultural sector as the economic base of the region. Growing prosperity, protectionism imposed by state governments, and then the disruption of trade during World War I all fueled the growth of industry in Southern Brazil during the 1890-1930 period. In 1930 a feud between state oligarchies ended with the military-backed installation of Getulio Vargas as president; Vargas' 17-year rule saw a sharp decrease in the powers of the individual states and more nationalistic, development-oriented policies -- e.g., states' powers to levy tariffs on inter-state trade were abolished, and a publicly-owned integrated steel mill was constructed. The Second World War provided further strong impetus to import substitution, as trade was severely disrupted.

Thus Brazil approached the 1950s with a manufacturing sector producing close to $2 billion of value added (at current prices) and already accounting for about 20 percent of GDP. Non-durable consumer goods predominated, but value added in the metals and machinery sector was a significant $250 million. (Bergsman, 1970, Chap. 2)

The policies that protected import substitution and discouraged exports so strongly began to take shape in 1947, in response to a foreign exchange crisis. In the absence of a much-needed devaluation, imports were restricted by licensing, then by a de facto multiple exchange rate system (1953-57), and then by tariffs (1957 to present); licensing restrictions continued to be important to protect some domestic production throughout the period. Net protection for all tradeable goods oscillated between 50 and 100
percent during the 1950's and early 1960's; for manufacturing the figure was at least double that level. Exports were discouraged by the seriously overvalued exchanged rate; implicit net export taxes were around 30 to 40 percent overall, while for manufactures the level was much higher. The dramatic results in terms of rapid import substitution in all sectors, and stagnation of exports, have already been mentioned. Brazil's economic growth may have been running out of steam in the early 1960s. Most observers felt that continuing Brazil's extreme ISI strategy would not induce continued growth in the future, but there was no consensus on what new strategy would be better.

Agricultural production had grown well, 4.2 percent per year from 1947 to 1964 and at 5.2 percent per year from 1967 to 1976. Brazil's ample endowment of good land is probably the main reason for the good supply response of agriculture; especially during the earlier period, virtually all the increase in output is accounted for by increases in acreage, while output per hectare and per worker stagnated. (Bergsman, 1970, p. 157) The overvalued currency and very high protection to manufacturing reduced agriculture's profitability, but other government policies helped counteract the negative effects of trade policy -- low interest loans to farmers and subsidized input prices (notably tractors and fertilizer) were the most important. The more favorable exchange rate after 1967, as well as favorable trends in world prices, helped to induce the faster growth during the last ten years. However, these policies and events benefitted the modern commercial farmers much more than poor landowning peasants.

Growth from the end of World War II to 1962 was not very labor-using. Manufacturing absorbed a relatively small amount of labor -- employment grew only 0.27 times as fast as output. Output per worker in
manufacturing relative to output per worker in the rest of the economy is extremely high in Brazil, and there are wide variations of productivity within manufacturing and within agriculture as well. These factors have their causes in a situation that is the opposite of that in Korea and Taiwan: no effective land reform, many landless rural laborers, rapid migration to cities and (even though the migrants and Brazil as a whole are better off due to migration) a dual structure of urban employment induced by artificially high wages in the formal urban sector (especially pre-1964). Even though there were no very effective unions in Brazil, political pressures plus the permissive attitude possible in ISI led to this. In a context of very unequal distributions of assets, both physical-financial and human resources (e.g. landless agricultural laborers were 9 percent of the labor force, even in 1973), the very unequal income distribution comes as no surprise.

Brazil's more recent growth, in 1968-74, was somewhat different. Total and per capita output grew even faster than before: 11.2 and 8.2 percent per year, respectively. Significant devaluations of the currency between 1964 and 1968, and the "crawling peg" adjustments thereafter, maintained the exchange rate much closer to equilibrium levels and much more constant over time in real terms. Reduction in protection plus fiscal incentives for exports virtually eliminated the bias in favor of domestic sales (relative to exports) for manufactures. (Bergsman, 1972; Tyler, 1976, Chap. 7). Led by massive public investment in manufacturing and infrastructure, good profit opportunities and the resulting high private investment, and buoyant internal as well as external demand, manufacturing output grew over 13 percent per year. Manufactured exports grew at about 42 percent per year from about $163 million in 1967 to about $1.9 billion in 1974 (in current prices).
The ratio of manufactured exports to domestic production of manufactures increased from .050 to .099. (von Doellinger, 1975, Table 16). Agriculture improved on its earlier good growth as production expanded at 5.2 percent per year. Even though some part of this growth represents a catching up after the near-stagnation of 1964-67, its common characterization as the "Brazilian miracle" is arguably apt.

The pattern of labor absorption also changed. Employment in manufacturing grew at 6.5 percent per year, about half the rate of increase in output, during 1968-73 (author's estimates from PNAD surveys; many problems of comparability and incomplete coverage.) In comparison, during 1949-60 manufacturing employment grew at only 2.6 percent a year, which as already noted was about .27 times the output growth rate. (Baer and Herve, 1966, Table 1) The secondary sector as a whole absorbed about 29 percent of the increase in total employment from 1968 to 1973 -- still not a very large amount, in view of the importance of the sector in output (cf. Korea, 38%) but a far better performance than previously. (See Chart 4 for comparisons.)

Public sector investment was a very important source of the Brazilian "miracle," and by the mid-1970's public enterprises were dominating Brazil's industrial sector. In 1974 the top 20 industrial enterprises in Brazil (in terms of net worth) were all publicly controlled. In manufacturing, government firms accounted for 20 percent of the net worth of the 5,113 firms covered by the Brazilian analogue of the annual Fortune survey; public participation was 55 percent in chemicals and 33 percent in metals. The public sector accounted for over 60 percent of total capital formation in Brazil in 1969, a typical year in the "miracle" period. (Mendonca de Barros and Graham, 1978; Baer, 1973.) The large public sector investments had strong positive
linkage effects on private sector growth in Brazil, as government firms are generally not permitted to import machinery and equipment (much less current inputs) that are available domestically.

Also of interest are the tax reforms started in the mid-1960s. Turnover taxes were abandoned in favor of value added taxes, income taxes were modernized, an important revenue sharing system was created, and administration and enforcement of tax collections were greatly strengthened. Income tax receipts rose from 2.2 to 3.2 percent of GDP, from 1969 to 1974, an increase of 70 percent in five years. (unpublished World Bank study) These reforms, effected just before and during the start of the "miracle" growth, of course helped to finance the increased government spending that helped spark that growth. But more interesting is their lack of negative effects such as reduced private sector investment, capital flight, etc. Of course, the overall policy stance and the rhetoric of the government was perceived to be favorable to private sector activity. In such a context at least, the Brazilian experience shows that important and far-reaching tax reforms can be implemented at little or no cost in terms of private sector growth.

What of income distribution during this period? Nobody knows. Comprehensive data for 1974-75 and for 1976 will become available shortly, but data even approximately describing 1967 do not exist. Fragmentary and impressionistic evidence suggests that most of the poor gained in absolute terms, but in what direction (or whether) their relative position changed is unclear. (unpublished World Bank study; Morley, 1978). The most important parts of this evidence are:
(i) the acute labor shortage seen throughout the country, urban and rural, in the last years of the boom.

(ii) dramatic increases in real wage rates starting in the early 1970s.

(iii) the shift of workers out of lower-income occupations and sectors into higher-income positions.

In any case, partial results from the 1974-75 survey suggest that Brazil’s income distribution remains highly unequal. The Gini for the partial data (three regions) is about 0.55. Over one third of the poor are in rural areas in the Northeast, which has always been the geographic center of Brazilian poverty. Another third of the poor live in urban areas, but of these about two-thirds live in smaller cities and towns—only nine percent of all poor families live in the nine large metropolitan areas, where 24 percent of the total population lives. (1970 data)

Mexico’s poverty may be even more intractable than Brazil’s. Although the share of the poor in Mexico is estimated to be somewhat higher than that in Brazil, in Mexico there is not much good unused land available, and Mexico’s population and labor force are growing even faster than Brazil’s.

We have already noted that the Mexican story of growth and equity is similar to Brazil’s in many important respects. Concentrating on post-World War II events, there are perhaps four important differences. First, Mexico’s import substitution was less drastic and less thorough than Brazil’s. Protection was implemented mostly through licensing; while this caused high variance of realized protection among products, the average realized net
protection to manufacturing has been in the neighborhood of 20 percent (as compared to over 100 percent in pre-1964 Brazil). (World Bank, 1979; Bergsman 1972) Mexico is now contemplating a major effort to produce capital goods; in this sector they are about where Brazil was 20 years ago. Until the early 1970s, Mexico's exchange rate was very reasonable, and hence exports did not bear the implicit tax of overvaluation. These differences are probably due in large part to Mexico's long border with the United States -- opportunities for smuggling, as well as legal trade, have been too easy to permit as much deviation from current comparative advantage as Brazil imposed on its economy.

Second, Mexico had most of its good non-irrigated land already in use several decades ago. Irrigation has opened up additional land, but possibilities for continued expansion of cultivated area through new irrigation schemes seem to have neared their economic limit during the last 10 years or so. Increasing yields on presently-farmed land is still potentially important for output increases, but this is (a) more difficult and (b) not as useful for absorbing landless laborers. Mexico lives with the ideology of land reform -- her present government, going back some 60 years to the 1917 revolution, was founded on the cry of "land and liberty," in reaction to expropriation of peasant holdings by large haciendas -- but in recent years land distribution has fallen behind Mexico's explosive population growth. Over one million of Mexico's 10 million families are headed by landless rural workers, and perhaps as many more are poverty-stricken minifundistas.

Third, Mexico financed its development, from World War II to the early 1970's, in a non-inflationary way. Both taxes and public spending were low, prices rose not much more than in the USA; exchange rates were stable
over long periods (most recently from 1954 to 1976) and a system of banks and other financial intermediaries developed and channeled private savings to investors. This difference between the two countries disappeared, for all practical purposes, in the 1970's as Mexico experienced inflation and devaluation caused mainly by increased public sector deficit spending, while Brazil instituted a tax reform and indexing and her financial system started to develop a bit more than it had in the high-risk past. Indeed, were it not for Mexico's petroleum, Brazil today would have more flexibility in managing its domestic and international monetary policies than Mexico; Brazil has learned to live with inflation and shifting exchange rates while Mexico still dreads such a system and is trying to return to at least an approximation of fixed exchange rates, interest rates, etc. Mexico's tax system remains both weak and inequitable, constraining government spending that could be used to ameliorate Mexico's severe poverty problems.

Fourth, Mexico has not had its "miracle" — at least not yet. While her economic growth was impressive indeed, Mexico today is in many ways where Brazil was in the 1960's or even the 1950's — the industrial sector is sophisticated and extensive, but still not export-minded (except for the assembly industries that are mostly U.S. owned or controlled). As to employment, labor productivity and income distribution, duality both between and within agriculture and industry is extreme (see Table 5). Neither country has accomplished much, as yet, in rural development for poor small farmers (although Mexico has several promising programs in place), but Brazil has at least caught a glimpse of a type of urban-industrial growth that absorbs labor much faster than the total labor force is growing and that taps world markets in a serious way.
1978 finds Brazil and Mexico facing similar but yet different challenges. Mexico, used to seeing itself as a country of limited natural resources, has discovered rich petroleum and gas deposits that will provide rapid increases in foreign exchange earnings in the early 1980s and perhaps for many decades thereafter. But even with this newly discovered resource, widespread poverty will be difficult to erase, as the labor force grows at unprecedented rates, further land reform is apparently ruled out by the government, 1/ and price signals still inhibit rapid employment growth in the modern sector. Brazil, considered rich in natural resources until the price of petroleum (which she imports) rose so much in the 1970s, faces a continued balance of payments constraint as well as widespread poverty. The outward-looking policies that were partly responsible for her "miracle" growth have been gradually weakened since 1974, as the cruzeiro became progressively overvalued again and protection against imports increases. Rising protectionism in industrialized countries does not help. Achieving equity and growth will each be serious challenges for Brazil in the 1980s.

Turkey and the Philippines

Several other SICs have also promoted growth through ISI with some success. They have encountered the same problems as did Mexico and Brazil. These problems have come earlier in the ISI process and have been more difficult to deal with, mostly because these countries had smaller markets.

1/ Further land reform in Mexico would present serious economic and social problems, as well as political turmoil. While we cannot be at all sure that a useful and practical land reform could be designed, we can conclude that in its absence rural poverty will remain a serious problem for decades to come.
Turkey, the Philippines, and Colombia are cases in point. Their economic growth, although considerable, has been less steady than that of Mexico, or even of Brazil. Their manufactured exports have grown, but are not as significant (in per capita terms, for example) as those of Mexico or Brazil (let alone the far higher levels of Korea and the ROC). The Philippines and Colombia have recently reduced their anti-trade bias, but the prospects for all three countries are difficult to assess, as their potential either to continue growing under the inward-oriented ISI strategy or to make the transition to more competitive, outward-oriented growth has not yet been tested.

As to poverty, Turkey and perhaps the Philippines face problems almost as serious as those of Brazil and Mexico, although in Colombia the situation is less grave. We shall briefly describe the cases of Turkey and the Philippines.

Turkey: The strong modernization drive since the founding of the Republic, in 1923, has concentrated on industrialization for the domestic market. State action has been very important, both in direct investment and in controls on private activity. Agriculture, exports, employment, and income distribution have all received lower priorities.

Around 1950, Turkey could claim considerable modernization and income growth in the major cities, but little progress elsewhere. GNP per capita was about US$423 (1977 prices). Since 1950 policies have changed and rapid growth has been achieved -- GDP has grown at over 6 percent per year -- but there have been three stop-go cycles that are in large part traceable to Turkey's ISI policies (see especially Dervis and Robinson, November 1978). 1/

The first two crises, certainly, in 1958 and in 1970, are almost classic

1/ The cycles are very apparent in industrial growth, and less so in GNP as a whole because of the importance of agriculture, whose performance depends more on variations in weather.
cases. An overvalued currency and reliance on import controls led to very little export growth, while growth in domestic demand caused increasing demand for imports. Unwillingness to adjust only led to increased pressures which finally became irresistible, causing severe devaluation, debt re-scheduling and/or a new package of special financial assistance, a stabilization program and the resulting "stop" phase of the cycle. Finally, in each case military intervention resulted in a change in government. The third crisis, in 1977-78, was somewhat different. Since 1970 the exchange rate was adjusted more frequently, overall export disincentives were smaller and exports grew more rapidly, at least through 1973. Moreover, growing workers' remittances became a very important source of foreign exchange, through 1974. Since 1974, however, a combination of increased oil prices, stagnating exports (both merchandise and workers' remittances) which in turn was due to a combination of OECD recession and increasing overvaluation of the Turkish lira, and other factors generated another balance of payments crisis. Heavy borrowing permitted growth to continue for a few years, but exports failed to increase sufficiently and the crisis could not be postponed indefinitely (see Dervis and Robinson, November 1978).

As in the Philippines and Argentina, Turkey's manufacturing sector is not very efficient by international standards. Krueger (1966) has estimated that, in a sample of firms, twice as much output (valued at world prices) could be obtained from the same resources if they were used efficiently. 1/ These high costs are in large part typical results of ISI in

1/ This includes both the cost due to misallocation (i.e., deviations from static comparative advantage) and those due to "X-inefficiency" (i.e. not producing at minimum obtainable costs because of lack of motivation) as well as, possibly, some monopoly returns made possible by protection. Estimates were for 1965.
smaller countries. An additional factor in the case of Turkey has been the large public sector involvement in industry, in a context where efficiency was at best only a second priority. Public enterprises accounted for about 40 percent of value added in manufacturing and 80 percent in mining as of the early 1970s (unpublished World Bank report).

Turkey's income distribution is highly unequal, as shown in Chart 1. Dervis and Robinson (July 1977, draft) have shown that inequality is very high between urban and rural sectors (they use agriculture - non-agriculture as a proxy) and also within agriculture. The proximate causes of these inequalities are conditions and policies that are almost precisely the opposite of those that are the causes of Korea's and the ROC's better performance (see Chart 3): land distribution in Turkey is highly unequal and getting even more so, 1/ policies neglected agricultural productivity and turned the internal terms of trade against agriculture (see Chart 5), and absorption of urban labor in high-productivity jobs was limited because of slower manufacturing growth and low labor intensity of that growth (See Chart 4). All these policies except the unequal distribution of land are the usual concommittants of ISI.

It is difficult even to speculate on Turkey's future because at the time of writing the country is still trying to resolve serious short-term problems. However, before this latest crisis came, one major issue for Turkey was when and how a transition from her inward-looking, anti-trade bias could be accomplished -- in the early 1970s, Turkey looked like a country that had

1/ Average per capita income on the smallest 69 percent of Turkish farms in the late 1960s was US$54 (current prices). In 1973, an estimated 22 percent of agricultural households had no land while another 20 percent held one hectare or less. (Karaosmanoglu and Durdag, 1977).
achieved considerable growth and modernization through ISI, but that had carried it a bit too far, for a bit too long a time, with a bit too much tolerance of inefficiency. The transition that had been accomplished much earlier by Korea and the ROC, and later and more partially by Brazil, the Philippines and Colombia, had not yet come to Turkey. Low public savings and considerable poverty are two other major problems that Turkish economic policy faces.

The Philippines: The Philippines achieved independence in 1946, with an economy devastated by World War II. They have achieved considerable growth in GNP, following ISI policies, but have been faced with recurrent problems of faltering exports and balance-of-payments management, unemployment and underemployment, poverty and unequal distribution of income, and inability to institutionalize and assure sustained growth. Some improvements in trade policy have been made since 1970, with good results on exports. Income distribution is reported to have improved since 1970, but remains very unequal. But how or to what extent the Philippines will achieve either continued economic growth or better alleviation of poverty are still unresolved questions.

GNP grew at 20 percent per year during 1946-50 and at 8.1 percent per year in 1951-55, as the economy was reconstructed after the war and exploited easy import substitution in consumer non-durables. Manufacturing grew 30 percent per year and agriculture 10 percent per year over the 10-year period (Baldwin, 1975, p. 3). Since 1955 growth has slowed to more usual, but still quite respectable rates; from 1960 to 1977 industry grew at 7.1 percent per year, agriculture at 4.5 percent per year, GDP at 5.6 percent per year, and GNP per capita at 2.5 percent per year. GNP per capita stood at US$450 in 1977, more than double its level of US$212 after five years of reconstruction in 1950 (at 1977 prices).
ISI policies were first triggered in the Philippines by a foreign exchange crisis. The end of massive American aid, a fall of export earnings due largely to the U.S. recession of 1949, and heavy government spending prior to the Philippine elections of 1949 caused the crisis, and in 1950 strict import controls were imposed in response. Imports of consumer goods were seriously restricted while producer goods could be imported fairly easily, and ISI was underway. The overvalued exchange rate plus low interest rates on loans increased the capital intensity of the process. The exchange rate combined with high duties on imported inputs inhibited the growth of exports, except for the primary products in which the country enjoyed a very large competitive advantage.

From the mid-1950s to the present, Philippine policymakers have realized that the system was not working as well as it should. Chronic shortages of foreign exchange (brought on by slow export growth coupled with growing demand for imports), stagnation in employment growth and resulting underemployment, and inefficiencies in protected industries were the main problems. There were various partial liberalization attempts in the early 1960s which boosted exports for a while but were then overtaken by other events. The political cycle of heavy public spending prior to elections was one destabilizing factor, and the policy reforms did not go far enough to give strong and lasting incentives to efficient production and to exports. Policies improved considerably since 1970, and exports of manufactures responded well.

Protection has been high since 1950. Price policies alone shifted the relative prices of consumer goods imports 50 to 200 percent above those of exports (Baldwin, 1975, p. 95) and quantitative restrictions on imports increased the relative-price difference beyond that, during most of the 1955-70
period. Effective protective to manufacturing for the domestic market was estimated at 49 percent for 1965 (Power, 1971, p. 282), which was a year of relatively open trade policies. For exports (excluding sugar) net effective incentives were estimated at -29 percent. As a result, until policies changed in the 1970s exports barely kept up with GNP, the ratio fluctuating between 11 and 18 percent during 1950-69 and, in 1969, falling to near the lowest value for the period at 12.8 percent. Growth of output in manufacturing also fluctuated in the barely satisfactory range of 4 to 8 percent per year, and employment in manufacturing grew very slowly; indeed at a slower rate than the labor force as a whole during the 1960s (ILO, 1974, p. 7). Thus unemployment and low-productivity employment remained serious problems.

In evaluating the effects of trade policies in the Philippines, Baldwin's findings are typical of ISI in small- or medium-sized countries: (a) ISI may not have increased the overall growth of manufacturing but did cause a far wider range of products to be produced; in turn (b) "the narrowing of import substitution opportunities for simple consumer goods appears to have been the most important factor in accounting for the slowdown in manufacturing growth after the mid-1950s" (p. 140). In short, the strategy produced its own constraining factor.

The investment rate rose during this period of slowing growth in output, mirroring the higher capital intensity shown in sectoral data and the widespread inefficiencies observed on the micro level. The combination of high protection and a small market was (and probably still is) the major source of the problem; allocative inefficiency caused by protection in the Philippines was very high by international standards, for example considerably
higher than in Brazil or Mexico (Bergeman, 1974, p. 419), and "X-inefficiency" was high as well.

Agriculture's terms of trade (relative to manufacturing) fell about 30 percent from the late 1940s to the mid 1960s. ISI policies fell most heavily on food crops grown for domestic consumption which suffered a decline of about 40 percent, while for export crops the decline was only about 15 percent (ILO, 1974, p. 62). Agricultural output was able to grow reasonably well, even so, based on both increasing areas and increasing yields per hectare in the 1950s and on more intensive cultivation (the Green Revolution) in the 1960s. Effects of changes in U.S. sugar import quotas also weighed heavily on the overall picture. Nevertheless, from the mid-1960s onward the growth of agricultural output for domestic consumption slowed and prices started to rise (ILO, 1974, pp. 60-62).

At least through 1970, income distribution in the Philippines was reported to be very unequal. The Gini coefficient fluctuated around 0.48 to 0.51, and the share of the lowest 20 percent fell from 4.5 percent in 1956 to 3.8 in 1971. Inequality in rural areas was high and increasing; in urban areas it was even higher. Rural-urban differences were also high; the ratio of average rural to average urban income was about 0.41 in 1956 and 1961 and rose somewhat to about 0.48 in 1971 (ILO, 1974, p. 10). These data again reflect a situation that was virtually the opposite of that shown for Korea in Chart 3. In rural areas land was unequally distributed; there were many primitive smallholders and many landless laborers earning very low incomes. Rapid growth of the labor force and very slow labor absorption in manufacturing caused many workers to be left with low-productivity jobs in both urban and rural areas (See Chart 5).
Recent years have seen some improvements. Following a devaluation in 1970, followed by significant freeing of trade controls, the internal terms of trade have turned less against agriculture, and exports of manufactures have grown rapidly. Income distribution data show considerable improvement between 1970 and 1975, but a part of the reported improvement may be illusory because the 1975 survey may have erred more than such surveys usually do in underestimating very high incomes. In any case it was a poor kind of improvement; due in part to a decline in the external terms of trade, urban incomes stagnated while rural incomes grew moderately. The population growth rate has also started to fall. Unfortunately, the oil price increase since 1973 and the collapse of sugar prices in late 1975 have hurt the Philippines a lot. It remains to be seen whether or when the economy can make the transition to more efficient and labor-using manufacturing, increase the growth of non-traditional exports, and increase the productivity of small farmers — which seem to be the three crucial ingredients for sustained and equitable growth in the future.

Argentina: Instability and Slow Growth

To understand Argentina's economic history, the approach of a psychiatric social worker might be more useful than that of an economist. For better or for worse, however, economists are the psychiatric social workers for countries these days, and so here we go.

The essential characteristic of Argentina's record of economic growth for the last 100 years is progressive deterioration — deterioration in the rate of growth, deterioration in Argentina's position relative to other countries, and deterioration in stability. The major periods of
Argentine economic history may be described as follows: (draws heavily on Diaz Alejandro, 1970, Chapter 1).

1810 Independence from Spain

1810-1860 Political turmoil and civil wars

1860-1914 Sustained and rapid growth (6.3 percent per year GDP growth from 1900-04 (when the data start) to 1910-14); about 2.9 percent per capita.

1914-1929 Less rapid growth (3.5 percent per year of GDP; about 0.7 percent per capita.)

1930-1960 Still less rapid growth, with more fluctuations (2.7 percent per year in GDP, and about 0.8 percent per capita.)

1960-present More rapid growth (3.7 percent in GDP; 2.7 percent per capita) but plagued by political and economic instability.

Argentina today ranks high among the SICs on many indices of development: GNP per capita is over $1,700, industry accounts for 45 percent of GDP (comparable to Japan, France and Belgium), 1/ population growth is only 1.3 percent (comparable to Australia and Canada), life expectancy is high (but so is infant mortality), the nation has more physicians per inhabitant than the USA, Sweden, or Switzerland, 93 percent of adults are literate, etc. But in 1929 Argentina's GNP per capita, already at about US$1,365 (1977 prices; author’s estimate from Diaz Alejandro, p. 55), was 40 percent that of the USA (compared to 20 percent in 1977). Moreover, in 1929 Argentina was the eleventh nation of the world in value of exports, had more automobiles per capita than the U.K., and was already 75 percent literate. According to Diaz Alejandro, "the real wages of most Argentine urban and rural workers

1/ High protection in Argentina exaggerates the share of manufacturing in value added. The 45 percent is thus an over-estimate, at world prices.
before 1930 were not very different from those of many western European workers" (p. 62). Argentina was "one of the great cultural centers of the Spanish-speaking world" (all this from Diaz Alejandro, pp. 55-62) and its capital Buenos Aires was "the Paris of Latin America". The country was not only economically and culturally advanced, but also stable. Argentine inflation from 1914 to 1929 was less than half that in the USA (Diaz Alejandro, p. 362). Cecil Jane, an English author, described the nation in 1929 as "... one of the more stable and better ordered states, not only in America but also in the world; it is one of the few states where a revolution is as unlikely as it is in England" (cited in Diaz Alejandro, p. 58). O tempora, o mores!

With her rich endowments of both natural and human resources (the former including not only good land but also ample petroleum, gas, and hydroelectric potential), Argentina in 1930 was a relatively developed nation and seemed to be headed for continued growth, prosperity and cultural progress. During the 1930s, the Great Depression dealt Argentina severe shocks through the fall in world prices (Argentina was a debtor nation) and the fall in demand for exports; Argentina responded, as did many then-independent LDCs, with rapid import substitution facilitated by expansionary monetary and fiscal policies as well as by her educated labor force and productive agriculture. The Second World War brought its own buoyant demand coupled with supply restrictions on imports, and the ISI process continued. Nevertheless, production grew at only 1.4 percent per year from 1929-39 (less than population), and at only 2.6 percent per year from 1939-46 (Diaz, Alejandro, p. 111). The syndrome that was to characterize the post-war period had already appeared (although under very different conditions): (a) chronic export stagnation and foreign exchange scarcity, and (b) inefficient import substitution behind high
protection (whether de jure or simply de facto). Economic policies promoted inefficiency in allocation between agriculture and industry, between exports and domestic markets, between tradeable goods and non-tradeable services, and on the micro level within business establishments. The policies were adopted in pursuit of politically expedient goals of pacifying or benefitting certain socio-economic classes, but instead of striking a stable political balance that would permit the institutionalization of economic growth, policies oscillated between extremes. In one phase of the cycle, rural entrepreneurs and rentiers were favored; in another the urban workers gained rapidly.

After the Second World War Argentina perfected her classic model of how not to promote economic development. The ISI model was intensified, with all the bad results but not much of the good ones -- export stagnation, inefficient import substitution and chronic balance of payments problems resulted in slow and very irregular growth. But the "purely economic" aspects of policy were only a partial reflection of a broader problem. The postwar Argentine experience is difficult to understand, and to try to summarize it in one or two sentences may be folly -- but: In spite of (?) Argentina's relatively egalitarian income distribution, inability to resolve distributional questions and political instability fed each other. The results were frequent changes in governments and in policies; cycles of inflation, balance of payments crisis, and stabilization; and stop-go economic growth. We focus on the ISI aspects of policies here, but it must be remembered that they were only a part of a larger problem of lack of the minimal level of political, social and economic consensus necessary for progress.
Berlinski and Schydlowsky (1978) give a good summary of the purely economic aspects of the growth pattern:

"The most powerful impact of the incentive system of Argentina on its economic development has been through the vicious circle of growth and stagnation which it has created... incentives have systematically favored production for the domestic market and discouraged industrial production for export... The result of this tilt in the incentives has been the rapid growth of an industrial sector which generates far less foreign exchange in export revenue or import substitution savings than it requires for its own imported inputs; it thus is a net demander on the foreign exchange markets of the country. Since the foreign exchange supplying sectors, namely agriculture and livestock, grew much more slowly than the Industrial Sector, in part because of the incentive scheme, an imbalance in the rates of change over time of the supply and demand schedules for foreign exchange resulted. At the same time, the import substitution process reduced the price elasticity of demand for imports to the point where econometric studies do not find values different from zero. The consequence has been a series of recurrent balance of payments crises, which in the absence of high price elasticity had to be solved through adjusting the domestic level of activity, whatever exchange rate adjustment was part of the package. Moreover the various packages adopted usually also generated unsustainable changes in the terms of trade between agriculture and industry. The sectoral profitability of economic activity was thus subject to even more violent fluctuations than the economy as a whole: the effect of the stop-go cycle interacted with the effect of fluctuating terms of trade.

"The dilemma lies in the self-perpetuating nature of the problem. As long as the incentives are biased in favor of industrial production for the domestic market, and thus towards the generation of net industrial demand for foreign exchange, their success brings with it the seed of cyclical fluctuations in domestic activity levels through balance of payments crisis. Unquestionably, import substitution can bring with it savings of foreign exchange as existing imports are substituted. Unfortunately, however, foreign exchange savings through import substitution virtually ground to a halt in Argentina fairly early. Indeed, comparison of the import intensity of the same bundle of final goods with the 1953 and 1960 structures of production shows practically no change in the component of imports."

The tremendous variation in growth is shown in the following table (after Diaz Alejandro) which shows the numbers of years in which a given growth rate of real GDP was registered between 1945 and 1976:
From the later 1940s until 1962, policies favored ISI virtually completely. The currency was overvalued throughout most if not all of the period, especially so before Peron's overthrow in 1955. Protection was based on both quantitative restrictions and tariffs, along with multiple exchange rates until 1959. Consumer goods were highly protected, while raw materials and non-competitive intermediates entered at very low costs; machinery and equipment got mixed treatment depending on whether the product was produced locally and also changing over time with the relative scarcity of foreign exchange. Import substitution in consumer goods, which was already well advanced by the end of the Second World War, was virtually completed during this period and many intermediate and capital goods products were substituted as well. Manufacturing as a whole grew at less than 4 percent per year from the late 1940s through the early 1960s, but metals, metal products, machinery and equipment, chemicals and petroleum products grew rapidly (Diaz Alejandro, pp. 222-223). As in Brazil and Mexico, the highest protection was enjoyed by already-established consumer goods industries, while the true "infants" received lower but still significant protection. Exports of manufactures were strongly discriminated against, and in 1960 amounted to a miniscule US$44 million -- less than 4 percent of total exports and less than 2 percent of value added in manufacturing.
Starting in 1962, measures were taken to reduce the anti-export bias. These became significant in 1967, and manufactured exports did grow. They reached a level equal to 23 percent of total exports, or 14 percent of value added in manufacturing in 1974. No quantitative estimates are available until 1969 but it appears that the bias against manufactured exports (compared to sales in the domestic market) was only partly reduced, and remained strong throughout. In 1969 this bias was on the order of 100 percent; in the early 1970s the bias was reduced somewhat. Changes since 1976 have reduced the bias greatly; in 1977 nominal protection for manufactures in the domestic market was estimated at 37 percent while export incentives were 33 percent (unpublished World Bank, report). However, exchange rate overvaluation as well as higher input prices due to protection reduce the net export incentives.

The output of agriculture (including livestock) was essentially stagnant in the first ten or fifteen years after World War II, growing at less than 1 percent per year (Díaz Alejandro, pp. 415-417). Since 1960 it has grown at 2.5 percent per year, considerably better but still far less than its potential. This is the result of (a) the extreme biases in favor of manufacturing and in favor of domestic markets, just mentioned, as well as (b) additional purely domestic policies aimed at keeping down the price of food; and (c) the very bad effects of unpredictable oscillations of relative prices on livestock raising.

Moving a bit more to the political aspects, we recall Berlinski and Schydowsky’s statement that to make the devaluations effective, real wages had to be cut. The cyclical variation in real industrial wages was incredible. In the 29 years since 1946, the annual change in real wages was negative in
seven different periods, which alternated with seven periods of increases. Annual changes ranged from a 29 percent increase in 1958 to a 39 percent decrease in 1995. If we take a range of from 2 to 4 percent per year as a reasonable amount for an annual increase in a slow-growing economy, we find that the actual change fell outside this range in 25 of the 29 years! These wild swings reflect another dimension of the problem: rural-urban conflict over real incomes. As Diaz-Alejandro notes, in Argentina even more than in most SICs, pro-trade policies favored the rural sector (avoiding overvaluation of the exchange rate made agricultural exports profitable; liberalized imports reduced prices of goods purchased) while anti-trade (ISI) policies favored the urban sector (an over-valued exchange rate reduced the price of food, and protected manufacturing more highly so that urban wages could rise). This polarization of impacts has made trade policy issues in Argentina even more sensitive politically than in many other countries.

Thus, chronic foreign exchange shortages and urban-rural distributive conflict form the economic heart of the Argentine problem over the last 30 years. The overall context has been protection for manufacturing and taxes (implicit and explicit) on agriculture. Within this general framework, policies have oscillated between extremes, creating cycles rather than resolving the problems. The phases of the cycle are:

1. **GO**: Export stagnation and growing import demands (caused in part by ISI policies) cause a balance of payments crisis. Simultaneously, rapid increases in urban money wages fuel inflation, and inflation combined with a fixed exchange rate adds more fuel to the balance of payments crisis. So urban wages are up but the economy is overheated. Foreign debt grows very large.
2. **STOP:** A new Minister of Finance takes office (usually appointed by a new President). The currency is devalued and wage increases are severely limited. This causes pressures for price increases because: (a) export price increases mean food price increases; and (b) import price increases mean input price increases. So the balance of payments and the rate of inflation move toward equilibrium, but at a price of tremendous cuts in real urban incomes.

3. **RESUME:** A new Minister of Finance (usually appointed by a new President) takes office and overcompensates. Real urban wages go up again, and the export incentives of the devaluation are eaten up by inflation. Return to step (1). Argentina has fared worse than many other countries engaging in ISI because:

   (i) The ISI was too much overdone. Protection was much too high for most manufactured goods, and it was extended too far back up the chain of production for the size of the market. The presence of many inefficient producers of intermediate goods is a major stumbling-block to growth of manufactured exports. The bias against industrial and even agricultural exports was too high.

   (ii) Therefore, the policy conflict between currency overvaluation, protection, growth and wage increases on the one hand, and freer trade policies and stabilization of prices on the other, remained starkly a conflict about
the division of the national income between urban workers and rural landowners.

(iii) The political process could not withstand the pressures of the urban workers, and the policies adopted to vindicate their claims were too extreme (in terms of wages) and too unbalanced and contrary to economic competitiveness (in terms of export disincentives and ISI) to be sustainable.

(iv) To make all this worse, governments changed frequently and further destabilized policies.

The political instability certainly contributed to the economic difficulties. The economic difficulties certainly contributed to the political instability. Whether the chicken or the egg came first is probably unanswerable.

Argentina's economic and political problems have not, however, included widespread poverty or a highly unequal income distribution. Rich in natural resources per capita, with a highly educated population, a slow rate of natural increase of the population, and with very high output per worker in agriculture, Argentina's size distribution of income as estimated in 1961 was similar in terms of equality to the more recent estimates for Korea and Yugoslavia. Especially striking is the small difference in productivity between agriculture and industry -- the ratio of 1.2 in Argentina is among the lowest of all the SICs. 1/ Even though land distribution in agriculture is

1/ Valuing output at world prices would make the difference in Argentina even less. But it is the ratio of actual prices that affects income differences.
highly unequal, rural poverty is less serious in Argentina than in most SICs because of high productivity, low population density, and low population growth. These factors led to poor subsistence farmers being few and landless laborers being relatively well paid.

The last comprehensive estimates for nationwide family income distribution refer to 1961. In the tumultuous years since then, many socio-economic groups have experienced many drastic changes in income. Urban workers probably made significant gains, on balance, from 1962 to 1974, but in the last two or three years they have suffered sharp losses. Urban unemployment has remained low in spite of violent fluctuations in output. Rural incomes have also had sharp ups and downs. But there is no strong reason to believe that the size distribution of income is either a lot more or less egalitarian than it was in 1961.

The present situation in Argentina gives some basis for hope for the future of the economy. The present government, a military one, took power in March 1976 as the country faced what was probably the most desperate crisis in its history -- uncontrolled inflation, sharp recession, political violence and terrorism. Considerable progress has been made in stabilizing both the economy and society in the short run, although at a cost in terms of yet another sharp drop in real urban wages and some loss of political freedom. The government is also rationalizing exchange rate, import tariff, and interest rate policies to meet longer-run growth objectives. But only in the future will we know whether current progress marks the end of Argentina's political and economic instability or whether it is just one more difficult recovery phase in a continuing cycle between extremes.
Uruguay and Chile, two of Argentina's less industrialized neighbors, have had somewhat similar experiences. They share the rich natural resources, highly educated population, disappointing economic growth, and organized urban labor with relatively high wages. They also have re-oriented their policies in the last few years, towards a more realistic exchange rate and on balance less bias against exports.
III. Conclusions

In this section we will try to synthesize what can be learned from the histories we have just recounted, as well as from the experience of other SICs. Aspects relevant to growth will be considered first, and then our attention will turn to equity. We will try to draw useful lessons for the SICs and for other countries as well. But because one of the main lessons is the need to adapt policies to circumstances, and because circumstances differ quite a bit both among countries and over time, we cannot discuss all the implications for all policy issues in all countries. We hope that readers concerned with particular countries will find their own ways to useful lessons in our analysis, even though the messages are not all explicit.

Growth

Rapid economic growth in SICs has resulted from a variety of circumstances and policies. It has been achieved by import substitution and by export promotion, under highly distorted price systems and under relatively undistorted ones, by Asians alleged to be beneficially conditioned by Confucianism and by Latins alleged to lack any version of growth-producing ethos, in countries rich in natural resources and in countries almost totally lacking them, in highly literate and trained societies and in others where half the population couldn't read and had never dreamed of rational planning or advancement by merit, under conditions of high and unpredictable inflation and also with great price stability, in countries where population was growing rapidly and in others where it wasn't, under socialist regimes and under capitalist ones, in large countries and in small. This diverse experience
thus reveals no single economic or political key to development. What seem
have been more important were the matching of policies to conditions, the
effectiveness with which the different strategies were implemented, and as
Chenery (May 1978) notes, the country's ability to shift its strategy in
response to changing comparative advantage and external opportunities and
constraints.

Among the countries we have chosen to study, the semi-industrial
countries, differences in trade policies have been the most important proximate
causes of differences in growth -- differences not so much in the overall rate
of growth during a given period, as in its nature and sustainability. Other
factors have also been important, and we shall look at the treatment of agri-
culture (not unrelated to, but different from trade policies), and investment
and savings performance in some detail.

**Trade Policies and Growth:** Some of the outstanding successes of
growth in SICs in the last few decades have been, at least in part, the result
of "outward-looking" or "pro-trade" policies: Korea and the ROC, Singapore
and Hong Kong. More recently many other SICs have changed their policies in
the same direction, albeit less strongly. By 1979 only a handful of the SICs
maintained the strong anti-trade biases that were almost universal among them
in the 1950s and 1960s.

The experience of the "Gang of Four" -- Korea, the ROC, Singapore,
and Hong Kong -- is often referred to as "export-led" or "export substitution"
growth, and (as we have seen) for good reason. But when the experience of
these countries is compared to that of others, it is the combination of a
group of circumstances and policies that seem to have been at work. The trade
aspects have been well analyzed by Balassa, Little, and Ranis, among others.
Every country in question except the city-state of Hong Kong began with an ISI phase, ranging from low and temporary protection for relatively few goods in Singapore, through moderate protection for consumer non-durables in the ROC, to higher protection for consumer non-durables in Korea. In Singapore, the ROC, and Korea, the governments perceived limitations of continuing ISI past consumer goods and took conscious decisions to promote manufactured exports. Balassa (1978) summarizes the trade part of the policy package used in both Korea and the ROC:

"... a free-trade regime was applied to exports. Exporters had the freedom to choose between domestic and imported inputs; they were exempted from indirect taxes on their output and inputs; and they paid no duty on imported inputs. The same privileges were extended to the producers of domestic inputs used in export production.... While some additional export subsidies were granted, these did not introduce much differentiation among export products. Finally, the stability of the system of incentives, the automatic application of the regulations, and the favorable attitude taken by the two governments towards exports enhanced the effectiveness of the measures applied."

Another crucial part of the success story was the relatively well-educated labor force that was available to work at relatively low wages. Labor was kept really cheap (as Little put it) because union activities were strongly suppressed, wages were kept low, employers could fire workers at will, and the workers submitted to this regime and worked hard and well.

Government commitment to economic growth, efficient administration, and the influence of Confucianism have also been noted as important ingredients of the Korea-ROC package. But was this package no more than the sum of its parts? It seems to us that the essence of the combination was that these four nations took advantage of their comparative advantage. Their labor forces were well educated, industrious, and willing to work hard at "... wage rates
that are not so high as to nullify the country's comparative advantage in labor-intensive industries." (Chenery, May 1978, p. 40). They had plenty of talented entrepreneurs. These human and organizational resources were in part "created" during the immediately previous ISI phase (except in Hong Kong), but in a larger sense they are the product of centuries of history. In any case, these countries complemented their natural advantages with appropriate policies. Their economies were fairly small, and they needed to export; their governments were wise enough to recognize this fact (other small countries, as Balassa points out, pursued inward-looking ISI policies too far, to their cost). They adopted policies that kept the labor cheap and that gave their manufacturers sufficient incentives to export, so that (given their small size in relation to world markets) they had almost an unlimited market. The result was incredibly rapid growth.

What about the countries that stuck longer with import substitution? ISI worked up to a point, depending on conditions. Korea, the ROC, and some other SICs carried ISI through the earliest phase -- non-durable consumer goods -- with fair success; in the process they increased their skills in industry, labor, and entrepreneurship, and Korea and the ROC, at least were able to switch to exports with great success. Brazil and Mexico, with much larger domestic markets (see Table 1), carried ISI much further back -- virtually completely in Brazil. Brazil also was able to start exporting manufactures successfully when she changed policies, although her policy changes did not go as far as those in Korea and the ROC, and her manufactured exports are still proportionately much less than those of the Gang of Four. The case of Mexico is less clear-cut. Her policies never discriminated against exports as much as Brazil nor has her incentive structure switched
Manufactured exports started to become significant in the early 1970s but are far behind Brazil (and even further behind the ROC and Korea) in terms of variety and importance relative to domestic sales.

The limitations of ISI begin to be suggested even by these relatively successful instances; they are clearer in other SICs such as Turkey, the Philippines, and Argentina. Stop and go growth, as periodic foreign exchange crises curtailed imports and/or required domestic demand deflation, was the common experience of all these countries (and to some extent in Brazil as well) -- although ISI was only one among several factors causing this behavior. Higher inefficiencies in domestic manufacturing were common in these countries, due in part to their smaller markets. Unlike export promotion, ISI can be promoted by quantitative controls, ad-hoc licensing, and highly inefficient enterprises in both the public and private sectors. Of course no one sets out to do it badly, but ... The worst cases of inefficient government controls are not to be found among the SICs, but have been well documented in some other countries (see e.g., Bhagwati and Desai, 1970; Choksi, 1979).

Agriculture and Growth: The stop-go growth pattern, with its periodic balance of payments crises, is intimately related to the effects of trade and other policies in ISI regimes on agriculture. Even in the SICs agriculture is a very important activity. Compared to manufacturing it employs more people and its exports earn more foreign exchange in most of these countries.

There are two common patterns of agricultural structure and performance among the SICs. One, most often found in Asia, is characterized by high population density, small average size of holdings and high or
moderate productivity per hectare. The ROC and Korea are the archetypes of this pattern; at a higher level of development, Israel also shares some of these characteristics. The rural population tends to be better educated, has more equal access to public services in general and agricultural inputs in particular, than in the other type of country. Often many rural workers have full or part-time jobs in manufacturing activities as well as in agriculture. These countries tend to be small or moderate in size. Income distribution tends to be relatively egalitarian. The other pattern is common in Latin America but also appears elsewhere; it exhibits extreme inequality in the size of landholdings, extreme duality in productivity per hectare, and social and political problems revolving around large numbers of rural poor, land tenure issues, and unequal access to credit, irrigation, technical assistance and other important inputs. Mexico, Brazil, Colombia, the Philippines and Turkey are examples.

Some SICs do not fit either of these two patterns. Argentina has very low rural population density, latifundia without many minifundia, and not much rural poverty except in a few scattered places. In Hong Kong and Singapore the agricultural sector is not important; these two countries will not be considered further in regard to agriculture.

Widening our view, for a moment, from SICs to developing countries in general, we see that agriculture has often been neglected. The "neglect" consists of unfavorable prices (overvalued effective exchange rate for exports of primary products; protection of manufacturing, etc.), inadequate or unequally distributed inputs (water, fertilizer, irrigation, technical assistance, research, etc.), and sometimes high taxes. Such neglect has usually been costly, because even if industrialization is to be an inherent part of
development for most countries, agriculture has crucial roles to perform (see Singh). Its neglect has caused it to fail in three important ways.

(i) Providing food and other products for domestic consumption.

As incomes (and especially urban incomes) rise, demands for food rise rapidly; if the demands are not met by domestic production, food imports may shoot up drastically and create a drain on scarce foreign exchange.

(ii) Providing productive and remunerative employment to the rural labor force; to the extent this is not forthcoming, both urban and rural poverty will increase.

(iii) Earning foreign exchange through exports.

Most of the SICs have neglected agriculture to some degree at least, but only a few have gone far enough to cause serious problems in agricultural production -- the first and third problems mentioned above. During 1960-76, value added in agriculture has grown at least 2.5 percent per year in every SIC except Argentina and Portugal; it has grown at least as fast as population in every one except Mexico. Of these three countries, Portugal has avoided the bad effects of slow growth in agriculture through a combination of even slower growth in population and high rates of worker migration to other countries; the latter has in effect substituted for agriculture in all three of the roles mentioned one paragraph above. The other two countries have indeed suffered from the unsatisfactory performance of agriculture. Argentina experienced chronic foreign exchange shortages that have been among the major causes of its generally poor growth. In Mexico the major result was rising food imports rather than stagnating exports, but the impact was swamped by other problems that combined with the rising food imports to produce a balance of payments crisis in 1976.
To summarize agricultural policies in SICs, and the results, two main patterns appear:

(i) Favorable price policies plus heavy public investment plus good access to inputs helped to avoid problems. Production and exports grew sufficiently (Korea, the ROC and Yugoslavia).

(ii) Unfavorable price policies for agricultural products were at least partially counteracted by good access to inputs at subsidized prices (at least for the modern part of agriculture) and acreage expansion (Brazil, Mexico, and the Philippines).

In the extreme case of Argentina, unfavorable price policies plus great instability crippled the goose that should have laid the golden eggs.

Thus the experience of SICs in regard to agricultural growth can be summarized as follows. Successful growth via industrialization has not occurred in most SICs unless agriculture was also able to perform its roles of providing at least most of the food needed for growing domestic consumption and earning foreign exchange through exports. These quasi-necessities can be by-passed under certain conditions, which did occur in a few SICs: (a) in almost totally urban city-states (as in cities embedded in larger countries) manufacturing and service exports can pay for food imports (Hong Kong and Singapore); (b) a few other SICs have been able to earn enough foreign exchange through combinations of tourism, worker's remittances, and manufactured exports to compensate, at least in part, for some lags in agricultural exports (Portugal; in a lesser extent Yugoslavia and Turkey). The other SICs needed to keep agriculture growing, and most of them did. Korea and the ROC, and to
a great extent Yugoslavia, kept agriculture's terms of trade from deteriorating and also provided good access to the diverse inputs necessary (irrigation, fertilizer, seeds, technical assistance, transport, etc.). At the other extreme Argentina caused agriculture's terms of trade to fluctuate violently around a fairly low level, and experienced the resulting problems caused by lagging output. More mixed policies were followed in Mexico, Brazil, Turkey, and the Philippines; their results were also mixed; expanding acreage helped a lot in Brazil and in the Philippines. The experiences of the SICs have been consistent with the broader range of outcomes seen in other LDCs: even at fairly advanced stages of industrialization, agriculture (or some substitute) must provide growing supplies of food and must continue to provide ample foreign exchange through exports if overall growth is to proceed rapidly and steadily.

**Investment, Savings, and Growth:** The SICs showed, again, considerable diversity in regard to financial management and the results in terms of inflation. Two SICs that had similar experiences in most other respects, Mexico and Brazil, illustrate this diversity. Inflation in Mexico averaged less than 5 percent per year from the late 1950s until the early 1970's, while Brazil is one of the world's more famous cases of chronic and sometimes runaway inflation (averaging 46 percent per year from 1960 to 1970, for example). In many SICs, inflation ran below 5 to 6 percent per year during the 1960s, but only 3 of the 17 had less than 10 percent per year inflation in the tumultuous 1970-76 period, when world prices were rising rapidly.

Cross country comparisons do not show that GDP growth is strongly associated with investment rates, domestic or foreign savings rates, or
inflation. Nevertheless, SICs as a group show quite high investment rates. All of the successful SICs also show dramatic increases in their investment rates between 1960 and 1976, except for Yugoslavia and Israel, where investment was already very high in 1960. Thus the SICs differ among themselves as to sources of financing of investments, rates of inflation, and overall efficiency of investment as measured by ICORs. But they are similar in that every single one that grew rapidly had moderate to high levels of investment.

In some SICs, a large share of investment was public investment. Even some of the apparently most "capitalist" regimes appear rather "socialistic" from this perspective. Most notable is Brazil, where the public sector accounted for more than half of total gross fixed capital formation during the "miracle" years 1968-74 (Graham, 1978). High levels of public investment are also observed in Turkey (55 percent during the late 1960s and early 1970s). However, in other SICs such as Hong Kong, the Philippines and Korea the public sector did not contribute very much to fixed investment. In Yugoslavia, only 17 percent of gross fixed investment was under central government control during 1970-75 -- although a much higher portion was "public", most was under control of worker-managed enterprises (Tyson, 1977, p. 945).

Why is there no stronger correlation between investment (which of course equals saving, by definition) and GDP growth, across countries? Part of the answer is of course that the efficiency of investment varies -- not only in the narrow sense, but also in the time lag between investment and output change (a steel mill vs. a better school system, for example) and even in the failure of measured GDP to capture some of the results of certain investment spending. But another part of the answer may have to do with
inter-country differences in investment financing -- in how savings are raised. In most of the SICs where deliberate savings were not sufficient to finance intended investment, a large part of the adjustment took the form of involuntary savings enforced by inflation. Where this process got out of control, or where the exchange rate was not adjusted and therefore exports lagged, after a few years a crisis occurred and growth slowed or even stopped. In such cases high investment levels were associated with slow growth, over certain time periods at least. Thus the macro data, when viewed across countries for fixed or arbitrary time periods, may not show how important it is to avoid high inflation and to adjust exchange rates (as well as interest rates) to the inflation that may have occurred. These lessons are seen much more clearly in the cases examined here, such as Brazil in the early 1960s, Argentina and Turkey through the last fifteen or twenty years, and the Philippines at least until 1970.

Similarly, foreign capital flows do not seem all that important for the SICs, when viewed in overall levels for periods of many years (see Table 4). The interesting stories are in the individual experiences. We have already alluded to the heavy aid flows to Korea and the ROC in their "pre-takeoff" periods. The aid helped pay for infrastructure and education, among other things, and the perceived immanence of its drastic reduction helped to induce the policy changes that were to turn out so successfully. More recently we have the experience of the international financial crisis of the mid-1970s, when good access to international capital markets helped some SICs to moderate and postpone the effects of rapidly rising import bills.

The SICs account for most of the much-discussed rapid increases in foreign debt in 1974 and 1975. Many SICs were hard hit by the spectacular
rise in petroleum prices, and then again by the weakness in demand for their exports caused by the ensuing world-wide recession. Most of the SICs found that they could borrow large amounts fairly easily in the mid-1970s, and most of them did so, using the additional resources to maintain economic growth even as their balance of trade deteriorated. Argentina, Portugal and Turkey have had serious debt problems, and while other countries including Mexico, Brazil, and Korea have avoided debt crises, they have had to deal with debt burdens that would have scared many bankers out of their wits a few years earlier (and may indeed have done so in fact). However, continuing inflation in the prices of their exports has helped to reduce their debt service ratios in the last few years.

The recent experiences of SICs in regard to debt fall for the most part into three patterns. A few have had no serious problems -- e.g. Colombia and the ROC. Low debt in the early '70s, access to borrowing on favorable terms, good management, and in Colombia's case rising coffee prices helped these countries weather the storm -- although growth in the ROC slowed dramatically in 1974 and 1975, largely due to the adjustments required. A more common pattern was to meet rising import bills with aggressive borrowing, trying to avoid or (as it turned out) postpone any faltering in growth of incomes. Brazil, Turkey, Korea and the Philippines followed this pattern, and all now have extremely high debt burdens. (The Philippines' problem was more the fall in sugar prices -- a principal export -- than the rise in oil prices.) The third pattern, that of Mexico and Argentina, also shows very heavy borrowing -- but the cause was more bad management of domestic policies than events in international markets. Policy reforms in both countries, as well as the
prospect of major petroleum exports from Mexico, have enabled Argentina to survive her crisis and Mexico to avoid one, but debt burdens are high in both countries.

Conclusions about Growth: Winston Churchill said something about democracy being the worst form of government yet devised, except for all the others. ISI has turned out to be neither the best nor the worst strategy for growth, but like democracy its outcome has varied a lot depending on who did it and how. The size of the country makes a big difference -- Brazil went a lot farther with a lot more success than most others; so did Spain and Mexico. Having an agricultural sector that can grow even under not too favorable incentives also helps, as does making sure that the incentives aren't overwhelmingly unfavorable (compare Brazil to Argentina). Avoiding the worst excesses of ad hoc licensing and controls has been important too. Finally, even smaller countries have used ISI to some good effect (or at worst have suffered no apparent damage) if they didn't carry it too far backward, to industries where scale and technological requirements were totally unsuited to the domestic economy. Where ISI has been carried too far back, as in Argentina and Turkey, the presence of high-cost domestic producers of important producer goods can be a serious barrier to exports of manufactures. This has not been so serious a problem in Brazil or Mexico, where scale economies, natural advantages, and less protection for producer goods combined to hold inefficiencies to more tolerable levels. ISI can be a learning by doing experience for an infant economy, but experience shows that, as with live infants, excessive coddling, arbitrary and changeable rules, and failure to reduce the degree of sheltering as the infant gets older can lead to serious problems.
Export-led industrial growth has worked well in every one of the few cases where it has been tried. The mechanics of the export-led, pro-trade success stories are now fairly clear, thanks in part to the many studies done about them in the last few years. (See, e.g., Wolf, 1978, for a good summary.) What is not clear is (a) how well would similar policies work in different circumstances, in particular in larger countries and/or in countries with larger parts of the labor force illiterate, rural, primitive, and backward in almost every way, and (b) what would happen to export markets if LDCs representing an aggregate of five or ten times the industrial sectors of the "Gang of Four" started to achieve similar export growth? We cannot give a definitive answer to either of these questions. Two tentative but fairly obvious responses are: (a) countries in different situations will need to adopt policies more suited to their own conditions. In Mexico and Brazil, for example, larger domestic markets and the large, backward-integrated industrial sectors that already exist suggest that even under trade-neutral policies, their economies would not and probably should not be as export oriented as Korea and the ROC's; the more heterogenous labor forces in Brazil and Mexico as well as their relatively high urban wages (which would be politically very difficult to change) suggest that their development cannot be quite so labor-intensive, at least not without significant progress in education (which probably would require much rural development). (b) Nevertheless, even the giants such as Brazil and Mexico, and certainly the moderate-size and smaller countries such as Turkey, the Philippines, and Colombia have something to learn from Korea and the ROC. With their labor forces still growing rapidly, and with the progress already made in ISI, continuation of an extremely inward-oriented strategy would seem unpromising for goals of growth (and for equity as well).
How much can these countries hope to accomplish by policy reforms? Brazil's miracle growth suggests that policy changes can be very effective -- even though Brazil's reforms were not so thorough as those of Korea and the ROC. Protection remained high, and exports do not entitle producers to free access to imported inputs. Wages in the organized manufacturing sector are considerably higher. Brazil's export promotion package features a relatively stable exchange rate (in real terms), duty drawbacks on imported inputs, exemption from indirect taxes plus a premium equal to the amount of the tax, reduced income taxes, and preferential financing. The result was to make export sales about as profitable as domestic sales, on the average for manufacturing as a whole, but with very high variability among products. Brazil's manufacturing sector, created with very high protection during what must be the most nearly complete ISI phase of any SIC, was able to compete in export markets under the new conditions. But for the overwhelming majority of firms, domestic sales are still much more important than exports. Brazil could probably do even better if the inter-sectoral structure of incentives (within manufacturing) were rationalized -- at present it varies greatly from product to product, with no apparent reason. Education efforts there should also permit a better use of the labor force. But even without "perfect" policies, Brazil's performance has been impressive.

Other less advanced SICs may well feel that they cannot emulate Brazil's successes any more than they can follow those of Korea and the ROC. To be sure, each will need a somewhat different set of policies. But we cannot resist citing here what we wrote about Brazil in 1967, the year before the birth of the miracle:
"It is not easy to estimate how rapidly Brazil could expand exports of manufactures. There is evidence that much more is possible than has been achieved; many industries have a few firms which are regular exporters. On the other hand, many of the problems are complex, and cannot be erased simply by changes in Brazil's commercial policy. In any case, Brazil must expand exports of manufactures. Imports as a share of GDP cannot be continuously reduced, and therefore the export growth rate is a long-run constraint on the GDP growth rate ... A shift in the export mix to products with higher income elasticities of demand is needed, and this has got to include manufactures. This will not happen unless both manufacturers and government policymakers reverse their inward orientation. The bias against export of manufactures, recently reduced, is still enormous; the incentives and the possibilities to reduce costs, recently increased, are still weak ... Policies to reduce the bias against exporting would be quite easy to design. The first step would be a devaluation in real terms, to move the export exchange rate perhaps half-way from its 1967 level to the free trade rate. Drawbacks and other existing incentives to exports of manufactures should be continued, and new measures such as income tax write-offs, a bank to finance exports of manufactures, etc., should be considered. Selling manufactured products for export should be made at least as profitable as selling them domestically." (Bergsman, 1970, p. 184).

Many Brazilian economists were extremely skeptical about the potential of manufactured exports in 1967, and indeed the passage cited above recognized a necessity more than an opportunity. But the measures were adopted and they worked. For better or for worse, other SICs will never know unless they try. At present, a number of SICs are at least "testing the water" of a more outward orientation, including Argentina, the Philippines, and Colombia. Their results to date have been encouraging. On the other hand, Brazil has unfortunately been slowly slipping back towards anti-trade policies since 1974.
What of the growth of protectionism in developed countries, and the problems of competition if many more SICs mount aggressive and effective export promotion programs? The appropriate policy response depends on the country's present situation. Most SICs' policies are still discriminating too much against exports -- i.e., their incentive structures give more incentives to domestic sales and less incentives to export sales than optimal policies would do. Even if export markets weaken, these countries should still increase export incentives over their present levels, so as to benefit from more trade, not only with developed countries but with other LDCs as well. However, a few SICs may be at or near the optimum incentive level already - Korea, the ROC, and Brazil come to mind. (Although the product-by-product structure of export incentives in Brazil is haphazard, its average level is reasonable.) For all SICs, weakening of export markets would induce a shift toward their domestic markets in terms of results. But a shift away from pro-trade or trade-neutral policies is not necessary to induce such a shift, nor, as experience has shown would it be a good idea.

For lower-income, less-industrialized countries, some lessons are fairly clear. (a) Import substituting industrialization can be a useful strategy if inefficiencies are limited (in amount and in duration), especially for producer goods. However, industrialization can be promoted through incentives that favor production for exports as well as for the domestic market, by designing policies that favor manufacturing over other sectors but do not discriminate between exports and domestic sales for given products. Such a strategy can help to reduce misallocation and inefficiency, and can speed the transition to exports of manufactures. (b) Agriculture can be exploited -- indeed at early stages it must be exploited unless lucrative
in countries where pro-industry and anti-export incentives became too strong. (c) Systems of detailed government control by licensing seldom have the desired good effects, but rather permit tremendous inefficiencies; in practice generalized signals that work through markets almost always have promoted faster as well as more efficient growth.

To conclude our summary of economic growth in SICs, we return to the importance of flexible and pragmatic policies. This aspect of policy would appear even more important if a larger set of LDCs had been considered. Most of the SICs have been flexible and pragmatic, so we have few examples of the negative effects of inflexible and dogmatic approaches.

Flexibility and pragmatism seem to have been important in respect to two different aspects of development policy. One is the ability to match policies to opportunities and constraints, and to review decisions and change them when they don’t work -- on all levels from operations up through tactics to overall strategy. Here we can contrast Korea and the ROC, at one extreme, with Turkey and (at least until 1970) the Philippines on the other. Many other LDCs could also be cited here, for example India’s sticking with both an extreme ISI strategy and detailed control systems long after the serious shortcomings of that approach were obvious to everyone. At a different extreme, Argentina’s unfortunate oscillations can teach us the obvious lesson that "flexibility" too can be overdone -- some stability around a fairly clearly-defined set of policies is necessary, both for confidence and to permit rational planning by enterprises and individuals.

The second aspect where flexibility and pragmatism seem to have been important is in business-government relations, centralized vs. market controls, etc. Most of the SICs have performed at least moderately well here, but the
differences between, say, Korea's success and Turkey's problems show the important of **supporting** the agents of growth rather than inhibiting them. The experience of some of the more etatist African or South Asian countries would highlight this point even more.

**Equity**

Three essential generalizations are clear from the SICs' experiences with income distribution and poverty alleviation:

(i) Rapid GDP growth can be very good at alleviating absolute poverty. Even if income distribution does not improve, or even if it gets a little worse, a rapidly growing pie usually reduces the percentage of the population in absolute poverty. Middle income countries have less absolute poverty than poor countries, even if they have highly unequal distributions of income (such as those estimated for Mexico and Brazil).

(ii) However, many middle income countries are falling far short of what they could afford in providing for the basic needs of their poor.

(iii) The distribution of income varies widely among the SICs. Instances of relatively egalitarian distributions are not common, and seem to result from combinations of special circumstances and policies.

The first point is obvious and requires little elaboration, explanation or justification. It does deserve emphasis and attention.
On the facts about basic needs satisfaction, far too little is known. The middle income countries, of which the SICs are of course a subset, have been especially neglected in studies in this area, even though they are in a way the most interesting because of the gaps between financial possibilities and performance in many of them. The picture was summarized on pp 13-15; we present here data on three key indicators. Life expectancy at birth (Table 6) is the best single indicator, since it summarizes elements of health, nutrition, and even education and housing (as well as income distribution). Calorie supply (Table 7) and students completing primary education (Table 8) are indices of performance in two other important areas. Unfortunately, two of these three indices (life expectancy and calorie supply) as well as most other data on basic needs satisfaction are national averages which tell us nothing about distribution among the population. Fragmentary evidence from scattered studies suggests that these distributions follow the distributions of income and income development, but with some exceptions. Smaller countries with culturally homogenous populations tend to have relative egalitarian distributions of basic needs satisfactions, and vice versa. Policy can overcome this "natural" tendency, as it apparently has in the People's Republic of China and, to a lesser extent, in Turkey.
Table 6: LIFE EXPECTANCY IN SEMI-INDUSTRIALIZED COUNTRIES

<table>
<thead>
<tr>
<th>Country</th>
<th>1960</th>
<th>1975 or Latest</th>
<th>% Change Per Annum</th>
<th>Rank by % Change</th>
<th>Absolute Rank 1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>44.9</td>
<td>52.4</td>
<td>1.04</td>
<td>3</td>
<td>16</td>
</tr>
<tr>
<td>Philippines</td>
<td>49.4</td>
<td>58.5</td>
<td>1.13</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Colombia</td>
<td>54.7</td>
<td>60.9</td>
<td>0.83</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>Korea (South)</td>
<td>56.0</td>
<td>68.0</td>
<td>1.40</td>
<td>1</td>
<td>9/10</td>
</tr>
<tr>
<td>Turkey</td>
<td>49.3</td>
<td>56.9</td>
<td>0.96</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>ROC</td>
<td>63.5</td>
<td>68.6</td>
<td>0.55</td>
<td>9/10</td>
<td>7</td>
</tr>
<tr>
<td>Mexico</td>
<td>56.3</td>
<td>64.7</td>
<td>0.93</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Brazil</td>
<td>56.0</td>
<td>61.4</td>
<td>0.71</td>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>Argentina</td>
<td>66.0</td>
<td>68.2</td>
<td>0.22</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>63.7</td>
<td>68.0</td>
<td>0.55</td>
<td>9/10</td>
<td>9/10</td>
</tr>
<tr>
<td>Portugal</td>
<td>62.3</td>
<td>68.7</td>
<td>0.65</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>67.1</td>
<td>71.2</td>
<td>0.50</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Greece</td>
<td>68.0</td>
<td>71.8</td>
<td>0.36</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Singapore</td>
<td>n.a.</td>
<td>70.0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>5</td>
</tr>
<tr>
<td>Spain</td>
<td>67.5</td>
<td>72.1</td>
<td>0.44</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Israel</td>
<td>70.0</td>
<td>71.7</td>
<td>0.18</td>
<td>15</td>
<td>3</td>
</tr>
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</table>
Table 7: PER CAPITA SUPPLY OF CALORIES AS PERCENTAGE OF AVERAGE DAILY REQUIREMENTS IN SEMI-INDUSTRIALIZED COUNTRIES

<table>
<thead>
<tr>
<th>Country</th>
<th>1960</th>
<th>Latest</th>
<th>% Change</th>
<th>Rank by % Change</th>
<th>Absolute Rank 1975</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egypt</td>
<td>95.0</td>
<td>113.0</td>
<td>1.25</td>
<td>4</td>
<td>8/9</td>
</tr>
<tr>
<td>Philippines</td>
<td>83.0</td>
<td>105.7</td>
<td>1.74</td>
<td>2</td>
<td>13</td>
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<tr>
<td>Colombia</td>
<td>94.0</td>
<td>97.0</td>
<td>0.22</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Korea (South)</td>
<td>85.0</td>
<td>107.0</td>
<td>1.79</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Turkey</td>
<td>110.0</td>
<td>113.0</td>
<td>0.19</td>
<td>13</td>
<td>8/9</td>
</tr>
<tr>
<td>ROC</td>
<td>100.0</td>
<td>111.0</td>
<td>1.05</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Mexico</td>
<td>107.0</td>
<td>117.0</td>
<td>0.64</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Brazil</td>
<td>102.0</td>
<td>115.0</td>
<td>0.86</td>
<td>6</td>
<td>6/7</td>
</tr>
<tr>
<td>Argentina</td>
<td>115.0</td>
<td>129.0</td>
<td>0.82</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Yugoslavia</td>
<td>115.0</td>
<td>137.0</td>
<td>1.26</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Portugal</td>
<td>107.0</td>
<td>118.0</td>
<td>0.76</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>n.a.</td>
<td>110.0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>11</td>
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<tr>
<td>Greece</td>
<td>120.0</td>
<td>128.0</td>
<td>0.59</td>
<td>10</td>
<td>3</td>
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<tr>
<td>Singapore</td>
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<td>103.0</td>
<td>n.a.</td>
<td>n.a.</td>
<td>15</td>
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<tr>
<td>Spain</td>
<td>107.0</td>
<td>106.0</td>
<td>-0.09</td>
<td>14</td>
<td>14</td>
</tr>
<tr>
<td>Israel</td>
<td>109.0</td>
<td>115.0</td>
<td>0.49</td>
<td>11</td>
<td>6/7</td>
</tr>
</tbody>
</table>
Table 8: STUDENTS COMPLETING PRIMARY CYCLE

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<th>Country</th>
<th>1975 Or Latest</th>
<th>Absolute Rank 1975 or Latest</th>
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<td>80</td>
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<td>Philippines</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Colombia</td>
<td>20</td>
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<td>Korea (South)</td>
<td>98</td>
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<td>n.a.</td>
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<td>ROC</td>
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</tr>
<tr>
<td>Mexico</td>
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<tr>
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<td>n.a.</td>
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<td>Portugal</td>
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<tr>
<td>Greece</td>
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<tr>
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<td>n.a.</td>
</tr>
<tr>
<td>Israel</td>
<td>n.a.</td>
<td>n.a.</td>
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* Latest figures are given from among the 7 years 1970 through 1976.

Sources: UNESCO Statistical Yearbook and World Bank estimates.
Income distribution is the more complex part of the equation that relates poverty to average income and its distribution. As reported earlier (see Table 2 and Chart 2), the SICs show varied performance on distribution. Among those for which even minimally comparable data are available, the share of the poor is highest in the ROC, Korea, Yugoslavia, and perhaps Argentina.

Argentina may be a special case in which a high ratio of natural resources per capita, widespread education, low population growth, and egalitarian distribution at the start of the slow-growth period were apparently sufficient to prevent serious deterioration. (We use the qualifiers "may be", "apparently" and "serious" because we have firm data for only one year, 1961, and rely on indirect evidence for time trends.)

In the other three countries, total income grew rapidly. Yugoslavia set out to be egalitarian by limiting private ownership of assets, by limiting wage differentials, and by subsidizing poor regions: a low rate of population growth and widespread education, combined with rapid absorption of labor in both domestic manufacturing and foreign countries, helped considerably.

The ROC and Korea established egalitarian conditions within agriculture, and were so successful with labor-intensive manufacturing growth that, as in Yugoslavia, almost all workers could find relatively high productivity jobs. Low rates of natural increase of the population made this easier to accomplish. Finally (as in Yugoslavia) agriculture's terms of trade were not allowed to fall, and this kept urban-rural income differentials small. The small size of the countries, their relatively widespread education, and the cultural homogeneity of the population also helped.
The SICs where income distribution is estimated to be most unequal are Mexico, Brazil, and Turkey (and at least until 1970, the Philippines). They also grew rapidly, but their histories are in most other ways the opposites of the ROC and Korea. They have highly unequal land distributions, backward rural areas whose populations are not well educated, and who are culturally and economically isolated from the modern parts of the nation, rapidly growing labor forces, many landless rural laborers, urban employment growth that did not absorb the labor force into productive occupations (except perhaps in Brazil since 1968), and wide variations in wages and productivity between the "organized" and the "informal" urban sectors. The results were great inequalities within rural areas, within urban areas, and between rural and urban areas.

Referring back to Chart 3, and considering it in light of the country experiences we have examined, the four major "first-order" bases of relatively high incomes shares for the poor that are subject to policy seem to be:

(i) in rural areas, equal distribution of farmland and few landless laborers;
(ii) in cities, rapid absorption of labor in high-productivity activities;
(iii) between rural and urban areas, avoidance of too much discrimination against agriculture; and
(iv) nationally, a slow growth of the labor force.

There are some important details to add to these four points; the ROC's geographic distribution of manufacturing was a complement to the equal
distribution of farmland; again in the ROC, rapid growth of the labor force through immigration of educated people is not a liability. But these four points will account for most of the inter-country variation in distribution, as is suggested in Charts 4, 5 and 6.

That these four conditions are strongly associated with relatively high income shares of the poor is not surprising; indeed conditions (i) and (ii) are related to distribution almost by definition. The more interesting question is how these conditions came to be (or not to be). In the "good" performers on shares of the poor (Korea, the ROC, Yugoslavia) egalitarian conditions were established by basic and far-reaching events: devastating war, the coming to power of a government that owed nothing to the landowning class, thorough land reform that left virtually no peasants landless, widespread education, social ownership of all assets in modern manufacturing. A period of rapid economic growth followed -- not caused mainly by these events but clearly not precluded by them. During this growth the egalitarian conditions were more or less maintained; the overall income distribution got a bit more equal in the ROC and a bit less equal in Korea and Yugoslavia, but relative to other SICs all three still look very egalitarian.

In the countries with the lowest reported income shares for the poor (Mexico, Brazil, Turkey, the Philippines) egalitarian conditions were not established. Both human capital and land remain unevenly distributed, and there are many landless peasants and owners of tiny unproductive farms with no capital to speak of and little or no access to inputs needed to raise their productivity. During the rapid economic growth that these countries also experienced, inequality typically increased to some extent, but again on a cross-country comparative basis the changes have been small.
Chart 4
INCOME SHARE OF THE POOR
AND CONCENTRATION OF FARMLAND OWNERSHIP

GINI COEFFICIENT OF FARM LAND CONCENTRATION

SHARE OF THE LOWEST 40% IN NATIONAL INCOME (Percent)

World Bank—20524
Chart 5
INCOME SHARE OF THE POOR
AND LABOR ABSORPTION IN INDUSTRY

Labour absorption in industry (Change in Industrial Employment as a Percentage of Change in Labor Force)

Share of the lowest 40% in national income (Percent)

World Bank—20525
Chart 6
INCOME SHARE OF THE POOR AND
INDUSTRY–AGRICULTURE PRODUCTIVITY RATIO

World Bank – 20526
In this cross-country view, the debates and concerns about the changes in distributional patterns as growth proceeds seem almost beside the point. The difference between the ROC-Korea and Mexico-Brazil-Turkey has little to do with whether or not the Kuznets-Ahluwalia curve "exists" either in cross-section among countries or over time for a particular country. In the long run, the forces that link high per capita incomes to more equal distribution can be expected to have their effects, as population growth slows and the agricultural labor force starts to decline. But the differences between the two groups of countries that we observe today have nothing to do with differences in GDP per capita and only a little to do with the nature of their growth in GDP per capita. Brazil-Mexico-Turkey cannot transform themselves into the ROC-Korea "just" by promoting labor-intensive development and/or exports of manufactures for 10 or 20 years -- their initial (i.e. present) conditions are too unequal (too many landless peasants and others with very small amounts of low-productivity land; too many culturally isolated and/or uneducated people), and the rapid growth of their labor forces does not help either. To achieve the greater equality of the ROC-Korea would require at least a thorough land reform and rural development package (i.e. one which left virtually every rural family with an adequate and roughly equal set of assets), and a lot of education, as well as a shift towards more labor-intensive production in industry to absorb the rapidly growing labor force (at most it might require a re-definition of the countries into smaller, more homogenous units!). It would probably not require such dramatic exports of manufactures as a percentage of GDP, because internal demand would be more important in these large countries.
In this view, the "grow first, redistribute later" strategy seems rather hard to justify (at best, it may work in the very long run; i.e. for our descendants but not for ourselves) and the question of trade-offs between faster growth and more equal distribution appears beside the point. These issues arose in a context where the main strategy under consideration was a redistribution of income and/or wealth through fiscal measures. Such a strategy can be important on the margin, but in practice apparently has seldom been more than marginal. (The literature is full of studies showing that in fact fiscal redistribution has almost never been a major progressive force (see de Wulf, 1975, and McClure, 1975); for simulation results leading to similar conclusions see Chenery et. al., 1974; Ahluwalia et. al., 1979, and Adelman and Robinson, 1978.) The larger inter-country differences in equality among SICs, on the other hand, have come about through radical redistributions of assets (mainly land and human capital) followed by a type of growth that permits widespread increases in productivity and in the income produced by those assets (other factors were cultural homogeneity and smaller size, which are not subject to policy). In a recent analysis, Irma Adelman (1977) puts the idea very clearly: growth without increasing inequality has occurred where egalitarian distributions of the crucial factors of production were created before rapid growth. We would not suggest that growth be deliberately postponed until assets have been redistributed. But as Adelman points out, political obstacles to redistribution are, if anything, greater after vested interests have been created by unequal growth. Therefore, to achieve greater equality, it is advisable to redistribute as soon as possible.

Rapid population growth can be an important barrier to achieving greater equity in SICs (See King, February 8, 1978; Cassen, 1976). Rapid
population growth probably reduces savings and "directly productive" investment per capita to some extent, and hence per capita income growth also. But the more direct effects on the living standards of the poor are probably more important. Rapid population growth makes it all the more difficult to fill the already large deficiencies in housing, health care, education, and other services. Food problems have not been seriously exacerbated in SICs, although of course in many poorer countries they are crucial. A rapidly growing labor force means that more people will end up in marginally productive work; the history of employment creation in most SICs has been good by historical standards but in many of the countries it has not been able to match the unprecedented growth in the numbers of job-seekers.

To examine further the contention that there need be no serious trade-off between growth and more egalitarian income distribution, let us look at the main elements subject to policy that seem to produce the latter:

(i) More equal distribution of land. Far from slowing growth, most studies find that land redistribution and the resultant creation of small owner-occupied farms can lead to increased growth in production 1/ (see e.g. Cline, 1977; Berry and Cline, 1979).

(ii) More widespread education -- has never been seen to slow growth.

(iii) Rapid labor absorption in manufacturing -- ditto.

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1/ This conclusion is not universally applicable. Some farm and ranch activities do exhibit economies of scale that render smaller units less productive. But these activities are only small portions of agriculture in the SICs that have the most unequal income distributions.
(iv) Not letting agriculture's terms of trade deteriorate too much -- helps growth by helping to avoid balance of payments problems.

(v) Reducing population growth -- will increase growth of income per capita.

Of course bad policies may inhibit growth in a country that is successfully striving for a more equal income distribution. Of course taxation, basic needs programs, or other redistributive programs can be overdone and/or otherwise mis-managed. But such conflicts are not necessary, or at least are not necessarily of major importance -- at least in middle-income countries.

The problem with this rosy view is that for many countries at least some of the policy changes would be revolutionary. Korea, the ROC, and Yugoslavia established their egalitarian conditions after bloody wars and drastic changes of power, at considerable cost to many people. Land reform may not hinder growth after it is accomplished, but what is its cost if it is accomplished by a bloody revolution? Stable policies may promote economic growth, but what is their cost if they are achieved by a repressive dictatorship?

Nevertheless, we may ask whether Mexico, Brazil, and Turkey could have done better. Transforming uneducated peasants into literate, achievement-oriented, high productivity farmers would seem to present rather serious difficulties. However, there seems to be no inherent economic or technical reason why these countries could not have much better than they did on the other bases for more equitable growth. In Mexico, whose government was founded on and for land reform, 10 percent of all families are headed by
landless peasants and a significant additional percentage do not have enough land to support themselves. The President has recently declared that there is no more land to distribute, but the country has 6 hectares of cropland per family in agriculture 1/. In Brazil, governments from populist to military have talked about land reform, but with about 4 hectares of cropland per agricultural family Brazil still has 9 percent of its families headed by landless agricultural laborers. In Turkey, possibilities also exist. Compare Korea and the ROC which each have less than 1 hectare of cropland per agricultural family (admittedly much more productive land, on average), but have distributed that land more or less equally and with great success for both growth and equity.

On high productivity urban employment growth, Brazil, Mexico, and Turkey again faced no technical obstacle to greater success. In fact, Brazil during 1968–74 probably did do very well on employment growth and, as a result, on poverty alleviation. But earlier, as in the other two countries throughout, and as in the Philippines, Colombia, and elsewhere, labor absorption was limited by ISI policies, rapid growth of wage costs in the organized urban sector, and very low prices for machinery.

And wouldn't the modernization of those uneducated peasants proceed more rapidly if they had access to a little more decent land and more productive urban jobs?

The SICs could also afford to do better on many basic needs. (This section draws heavily on Selowsky, 1979.) In countries such as Brazil, Mexico

1/ As of the present, a thorough land reform in Mexico would involve wholesale relocation of families, as well as economic and political disruptions. As such it may not be practical. But Mexico could have avoided much of today's extreme poverty if land reform had been completed and maintained in the past.
Colombia, and the Philippines, the percentage of the population in absolute poverty is in the 15–35 percent range. At least that percentage of the population are estimated to consume fewer calories than their minimum requirements; many of these are children whose mental and physical development is being impaired. Health care, education, and other important services are also far below the (not so high) country averages for many citizens. However, the financial resources that would be needed to solve these problems are not large, especially for countries at Brazil’s and Mexico’s income level. Transfers amounting to only some 2 percent of GDP, if they were targeted perfectly, would be sufficient to raise everyone’s income to the poverty line in those two countries. Of course, targeting is never perfect and other inefficiencies always occur, but the 2 percent figure is useful to see how small the problem is in financial terms. The cost of filling the calorie deficit is estimated as, at most, 2 percent of GNP for countries like Colombia and 1 percent for Mexico and Brazil. A health care system that would emphasize preventive care, and cover the entire population, is estimated to cost 2.5 percent of GDP in Brazil. This is about the amount Brazil now spends, but the emphasis is now on curative care and many people do not have access. In education, the additional cost of providing six years of schooling to all the population in Latin American countries is estimated at 0.2 to 0.7 percent of GNP. Housing equal to that affordable at the poverty line, for all those consuming less adequate housing, is estimated to cost an additional 1 percent of GNP (per year) in a country where per capita income is $800 — midway between Brazil/Mexico and Colombia. This list could be continued, but the point is clear. Even if the costs estimated are doubled, to account for imperfect targeting and less than perfect efficiency, the fiscal cost of
doing a lot better on basic needs is within the reach of most of the semi-
industrialized countries. Unfortunately, much programs take more than just
money -- they require political will and a lot of organization and imple-
mentational skill. But considerable progress can be made, over time, if the
will is present.

We conclude that there is no iron law of economics that says that
Mexico, Brazil, Turkey or any similar LDC has to have as much poverty or such
unequal distribution of income as they do. That outcome reflects the ways
that social and political forces have caused development to proceed in those
countries, rather than any way it must proceed.
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