### Industrialization and Growth

The Experience of Large Countries



Hollis B. Chenery

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#### ABSTRACT

This paper discusses common elements of the experience of large developing countries with industrialization, drawing on the World Bank's research project on "The Sources of Industrial Growth and Structural Change." The paper, which was presented to a conference of the Chinese Academy of Science, is designed to provide a comparative framework for assessing the performance of the Chinese economy. It shows that, despite its unique features, China shares many characteristics with other large semi-industrial countries. Some implications for trade policy and future growth are noted.

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Comparative studies of countries at different levels of income have revealed a number of common features of the process of development. One of the most pervasive is the transformation of the structure of production, in which the industrial sectors typically grow more rapidly than agriculture. Associated with the rise of industry are changes in the composition of demand, international trade, and the occupation of the labor force. These changes in the use of economic resources are influenced in various ways by government policies and constitute the core of a strategy of development.

Different aspects of development strategies have been widely studied in order to learn from the experience of other countries. Although there is no single country that combines the major features of the Chinese economy, common characteristics can be found in several groups of developing countries. The purpose of this paper is to identify a set of countries that provide a basis for such comparisons and to try to draw some lessons from their experience that may be helpful to scholars and policy makers in the People's Republic of China.

The countries that seem to be most useful for this purpose share the following characteristics: a large population, intermediate income levels, and substantial progress in industrialization. On this basis, a group of sixteen large semi-

industrial countries can be identified. They contain more than half of the population of the developing countries -- two-thirds if China is included. While study of the earlier history of the most advanced industrial countries is also valuable, their present problems are quite different from those of China and other industrializing countries. I shall therefore concentrate on analogies from the large, semi-industrial countries, which range in income levels from India and China to Brazil, Yugoslavia, and Spain.

Statistical studies have shown that while there are considerable similarities among the patterns of structural change in this and other groups of developing countries, there are also systematic differences that can be associated with government policies. The similarities among the large semi-industrial countries will be brought out in the first section of the paper; variations associated with different resource endowments and trade policies are explored in the second. Some of the relations between the structural transformation and the rate of economic growth are discussed in the final section.

This paper is based on a series of comparative studies of industrialization and development carried out under the research program of the World Bank. 1/ Starting from the work of

<sup>1/</sup> Hollis B. Chenery and Moises Syrquin, Patterns of Development, 1950-1970, (1975); Hollis B. Chenery, "Transitional Growth and World Industrialization" (1977); Hollis B. Chenery and Moises Syrquin, "A Comparative Analysis of Industrial Growth" (1980); Hollis B. Chenery, "The Process of Industrialization" (1979); Hollis B. Chenery, Sherman Robinson, and Moises Syrquin (eds.), Industrialization: A Comparative Study (in preparation).

Simon Kuznets (1966), these studies describe the characteristic features of development patterns and then evaluate the experience of individual countries in a common analytical framework.

#### I. THE STRUCTURAL TRANSFORMATION

The transformation of an underdeveloped to a developed economy can be defined by the set of structural changes required to sustain a continuing increase in income and social welfare. Although these requirements vary with the natural endowments and social objectives of each country, there are a number of factors that produce a degree of uniformity in this transition. These include:

- similar changes in consumer demand with rising income, particularly the decline in the share of food;
- the necessity to accumulate physical and human capital in order to raise the level of output per capita;
- access to common sources of technology and international trade.

Following Kuznets (1966), I will measure the principal dimensions of this transformation by the change in the composition of aggregate demand, production, international trade, and the use of capital and labor as the level of income of a country rises. This procedure is illustrated in figures 1, 2, and 3, which show the average patterns of change in the composition of total demand, the rise in the share of capital accumulation (investment), and the increase in the share of industry in total output. Since in a given country these changes take place over a number of decades, they can best be estimated by a combination of

cross-country and time series analysis over the postwar period. 1/

The following discussion takes up some of the aspects of the transformation that are most important to the design of development policy. The average relations between income growth and structural change will be presented first and then followed by illustrations of large semi-industrial countries that have been studied in some detail.

The transformation of the structure of the economy is related to its aggregate growth in several ways. In the first place, the growth of output depends in large part on the accumulation of physical capital and the training of the labor force, and the growth rate responds to the proportion of the national product devoted to these activities. On the demand side, a rise in income can only be sustained if the goods and services made available correspond to the proportions in which consumers wish to spend their incomes. Finally, the ability to balance supply and demand for individual commodities is substantially affected by the magnitude and composition of international trade.

The postwar experience of the transformation will be presented initially as a set of cross-country relations to the level of income. Some of the causal factors underlying these relations in individual countries are then discussed. The major difference between large and small economies will be shown to be

<sup>1/</sup> The patterns shown here are taken from Chenery and Syrquin (1975). They are estimated from multiple regressions in which population size is held constant and only the level of income varies. The effects of size are discussed below.

the extent of their reliance on international trade, which in turn affects many other aspects of development strategy.

### Demand Effects of Rising Income

The most important effect of rising income on demand is to reduce the share of food in the total, which frees resources for investment and other forms of consumption. Figure 1 shows the average division of total demand (including investment as well as consumption) between food and all other wses and also includes historical changes in a set of developing countries that have been studied in detail. At the lowest level of income, food accounts for between 40 and 50 percent of total expenditures. By the middle of the transformation -- which is typically at a percapita income of \$400 to \$500 (dollars of 1970) 1/ -- this share falls to about 25 percent. This phenomenon is a reflection of Engel's law, which states that the demand for food rises less rapidly than total consumer demand. 2/ In relation to national income, the implied income elasticity of food demand shown in figure 1 is about .7. The illustrative countries -- to be discussed below -- all follow a similar pattern, with more rapid declines in Korea and Turkey.

The analyses in this paper are based on the conversion of local currencies into dollars at average exchange rates, as published in the World Bank's World Tables and World Development Reports, using prices of 1970.

This relationship has been verified in virtually all studies of consumer behavior, using both cross-section and time series data. See Houthakker (1957) and Lluch, Powell and Williams (1977).

The rise in non-food demand is typically divided fairly evenly between investment and consumption, as shown in figure 2. In Japan and Korea (and probably China), most of the increase went to investment, while Yugoslavia, Colombia, Turkey, and Mexico were closer to the average cross-country pattern. The rise in the share of investment typically leads to an acceleration of the rate of growth unless it is offset by an imbalance between demand and supply, which is then reflected in rising capital-output ratios.

The size of a country has little relation to the composition of domestic demand at a given level of income. This finding results from econometric tests of large samples of countries and is illustrated by the selection of countries included here.

### Sectoral Balance

The changes in the composition of demand just described must be balanced by corresponding changes in the composition of domestic supply and international trade. These relations can be specified most simply by a set of input-output or commodity balance equations of the following form for any given time period:

$$X_i = (C_i + I_i) + W_i + (E_i - M_i)$$
 (1)

where  $X_i$  is the gross output of sector i,  $C_i$  is consumption use,  $I_i$  is investment use,  $W_i$  is intermediate use by other sectors of the economy,  $E_i$  is exports and  $M_i$  is imports. These five components can be grouped for analytical purposes as shown into three

factors: domestic final demand ( $C_i + I_i$ ), domestic intermediate demand ( $W_i$ ), and net international trade ( $E_i - M_i$ ).

Total intermediate demand for a commodity,  $W_{\hat{\mathbf{I}}}$ , is related to the production levels of other sectors by a set of input-output relations of the form:

$$W_{i} = \Sigma a_{i,j} X_{,j}$$
 (2)

where the parameters  $a_{ij}$  represent the input-output coefficients measuring the use of input from sector i per unit of output of sector j. 1/ When equation (2) is substituted into equation (1), the result is the Leontief open input-output model, which determines levels of output in each sector as a function of domestic final demands and net international trade in all sectors.

To compare the structural transformation experienced by different countries, this model has been applied to historical data for a number of industrializing countries over the postwar period. 2/ While the change in the composition of domestic demand is the most important factor in explaining the rising share of industry in all the large countries studied, it accounts for only half of the total increase. As explained below, changes

The coefficients are assumed to be measured in value terms at constant prices, although they can be initially stated in physical units, such as tons of coal required per ton of steel produced.

The model and preliminary results of its application to historical analysis are given in Chenery and Syrquin (1980) and Chenery (1980). The large countries analyzed under the World Bank project include Japan, Yugoslavia, Turkey, Korea and Mexico.

in trade patterns -- export expansion and import substitution -- typically account for 25-30 percent of the rise of industry. The remainder is due to changes in technology, which are reflected in the increase in intermediate use of commodities per unit of output.

The main difference between large and small countries revealed by comparative studies of this kind lies in the role of international trade. In smaller countries, the degree of specialization is much greater, and there need not be a close correspondence between supply and demand in each sector. In large countries -- defined here as those with more than 20 million inhabitants -- imports are typically only 10-15 percent of the gross national product, as compared to 20-30 percent for smaller countries. The effects of this difference in the degree of openness of the economy are explored in section II.

#### Patterns of Production

An input-output model similar to that described above has also been used to explain the average changes that are observed in the structure of production in a representative country. Based on generalization from individual country studies, a prototype developing country has been created by estimating the relations of each of the exogenous variables in equation (1) to the level of income. Similarly, a representative set of input-output coefficients for 23 sectors of the economy is used in equation (2) to determine the changes in levels of output that are consistent with average changes in internal and external

demand. Net output (value added) by sector is then measured as a proportion of gross output.

The changes in the composition of net output that are determined from this simulation of the transformation are shown in figure 3. Although there are differences of detail, the overall results of this experiment are quite close to the pattern observed directly. 1/ This result permits us to use the cross-country simulation model as a basis for explaining differences in the structural transformation that can be associated with systematic variation in one or more of its components. In particular, this procedure will be used to explain the distinctive features of the transformation that are observed in large countries, based on the characteristic trading patterns of this set of countries. This procedure helps to identify the ways in which the Chinese economy differs from what might be expected of a typical large developing country.

### Effects of Large Size

There are a number of reasons for the structural transformation of countries with large populations (and usually more diversified natural resources) to be somewhat different from the average for all developing countries. Perhaps most important is the existence of a larger domestic market, which makes it economical to establish industries having economies of scale at lower levels of income than is normally the case. This tendency

<sup>1/</sup> This cross-country simulation model is described in Chenery and Syrquin (1980), which also gives a comparison to the observed patterns.

is reinforced by higher internal transport costs, which have the same effect as tariffs in favoring local suppliers. It is therefore logical for countries such as Brazil, India and China to develop a larger and more diversified industrial structure than smaller countries at the same level of income.

These natural tendencies are reinforced in almost all large countries by deliberate government policies of favoring domestic production over imports in both manufacturing and agriculture. Although most developing countries have followed a policy of import substitution in the early stages of industrialization, the larger countries have tended to maintain it longer and to extend it to branches of heavy industry that would not be feasible for a small economy. The corollary of this policy is to discriminate against exports through overvalued exchange rates and direct incentives, and hence to diminish the volume of trade even more than would result from economies of scale and a large domestic market. In this respect there were similarities between the autarkic Chinese policies of the fifties and sixties and those of some other large countries, such as Brazil, Turkey and India.

The result of natural forces reinforced by autarkic policies has been to limit the share of exports in the gross national product in large countries that are not substantial mineral exporters to less than half of the levels that are typical for smaller economies. This effect is particularly notable in primary exports. In several extreme cases discussed below -- including China -- exports have been limited to 5-6

percent of GNP. The major exception to this generalization is the Republic of Korea, which has emphasized manufactured exports and has a structure typical of a smaller, more specialized economy.

Before turning to individual country experience, it is useful to examine the effects of limiting trade in more general terms. This can be done by simulating alternative trading patterns in the cross-country model, with the level and composition of total demand held constant. To abstract from factors other than trade, I assume the same input-output coefficients as well as constant demand vectors in equations 1 and 2. The adjustment to lower levels of exports takes place through patterns of import substitution that are typical of large countries, with capital inflows held relatively constant.

Following this procedure, I have first simulated the production levels that are consistent with the average patterns of exports and imports of large countries and compared them to the value added by sector in the prototype model at an income level of \$400 -- near the midpoint of the structural transformation. 1/ A summary of the results is given in columns (1) and (2) of Table 1. Since domestic demand and technology are held constant, the differences betwen the two solutions are attributable entirely to the reduction in exports from 25 percent of GNP to 12 percent. The bulk of the reduction in exports in large countries typically takes place in primary products, while the bulk of the

This simulation experiment is described in Chenery (1979), pp. 90-99.

corresponding adjustment of imports takes place in manufactured goods.

The main effects of this difference in trade patterns on production levels are to reduce agriculture by about 25 percent (or 5 percent of GNP) and to increase heavy industry by 50 percent (4 percent of GNP) in large countries. Light industry is affected much less, since the scope for further import substitution at this stage of the transformation is relatively limited. The remaining nontraded sectors of construction, utilities and services are little affected in aggregate terms.

The second experiment of simulating a relatively closed economy was based on the experience in the 1950s and 1960s of the more autarkic of the large countries discussed below -- India, Brazil, Turkey, Mexico and Argentina. In the simulation of Table 1 the level of exports was cut further from 12 percent to 6 percent of GNP. However, this additional reduction in trade has considerably less effect on the structure of production than did the shift from the average pattern to the typical large-country pattern because the scope for further import substitution is much less. The further shift of resources from primary production to heavy industry in this case is only 1 percent of GNP, as shown in column (4) of Table 1. At this point the structure of production corresponds closely to the structure of demand. Even the elimination of all trade -- assuming it were possible -- would have little effect on the aggregate composition of value added.

Although the substitution of industrial production for primary exports has considerable appeal to a large country with

limited agricultural resources, these simulations show that this type of substitution is already fairly well exhausted in the typical trading patterns of large countries. A further shift to the semi-closed structure of case 2 -- which bears a considerable resemblance to India and China -- requires an increase in capital per unit of output, both because of the higher capital coefficients of individual sectors of heavy industry and because of the greater difficulty of maintaining balance among sectors in a closed economy.

#### II. THE LARGE SEMI-INDUSTRIAL COUNTRIES

The great diversity of developing countries makes it difficult to generalize from their experience. One approach to this problem has been illustrated in the previous section — to identify uniform features of growth processes that are reflected to some extent in the experience of all countries. This approach needs to be supplemented, however, by studying individual countries whose problems are similar, so that the alternative policies relevant to particular situations can be evaluated. These two approaches lead to the identification of more homogeneous groups of developing countries whose experience can be compared in more detail.

In the case of China, industrialization has proceeded much further than is typical for countries of its income level. The explanation of this phenomenon is largely provided by the autarkic policies followed over the past 30 years, whose typical effects were illustrated in the preceding section. In the

present section China will be compared to other large semiindustrial countries, which share some of its problems.

Semi-industrial (or "newly industrializing") countries are usually defined by the share of manufacturing in the gross national product, which is supplemented by the share of manufactured goods in commodity exports. Although the relatively high prices of manufactured goods in China exaggerate its share of industry in relation to other countries, China clearly qualifies as a semi-industrial country on any of the structural tests that have been suggested, as shown in Tables 2 and 3 below. As compared to smaller countries, the large semi-industrial countries are a relatively homogeneous group because they are less affected by variations in resources and trade policies.

#### The Transformation of Production

The transformation of production in the large semiindustrial countries over the past 20 years is shown in
Table 2. In this table countries are ordered by per capita
income in the terminal year (1977). The group includes 14 large
countries that had a share of industry and utilities of at least
25 percent of GNP by this time but had not completed the transformation prior to 1970. 1/

The general trends in production described in section I are evident in virtually all but the richest countries in

<sup>1/</sup> India is included for comparison to China although it is somewhat below those limits. Japan will be included in some comparisons even though it completed the structural transformation in the 1950s. Romania and Poland are omitted since comparative data are not readily available.

Table 2. At the upper income level, Spain and Yugoslavia had already reached a high degree of industrialization in 1960 and showed little further increase thereafter. This is consistent with the trend in the advanced industrial countries, where the share of industry in GNP has declined over the past 20 years, partly as a result of a relative rise in the price of services.

The speed of the transformation from primary production to industry is related to three factors: (1) the initial deviation in the structure from the average pattern, (2) the rate of GNP growth, and (3) the trade policy followed. All three combined to produce the very rapid transformation of the South Korean economy, which is the most drastic observed. As is illustrated by the graphical presentation of the transformation in figure 4, the Republic of Korea followed the normal crosscountry pattern quite closely with an additional shift toward manufacturing due to the rapid rise of manufactured exports.

More typical examples of the structural transformation that accompanies growth at rates more comparable to China's are Mexico, Turkey and Thailand. In these countries the rise in industry is largely dependent on domestic demand rather than exports, as discussed below.

Comparison of the transformation of production in China to that in other countries is complicated by several factors:

(1) difference in accounting conventions (particularly the omission of non-productive services); (2) the relatively high prices of manufactured goods and low prices of agricultural products compared to other countries; (3) the vertical integra-

tion of the economy, which leads to reporting services under other sectors. The differences in accounting conventions are allowed for in Table 2, and the effect of more typical price relations are shown in parentheses (as estimated in the World Bank Report on China). With these adjustments, the share of industry in GNP in China in 1960 appears to have been some 30 percent higher than India and comparable to Egypt, the Philippines and other higher income countries.

Table 2 shows that the postwar transformation of production in China was one of the most rapid among large countries. The measures of change are less affected by differences in prices and accounting conventions than are comparisons of absolute levels. Combining the reduction in primary share (8 percent) and the increase in Industry (12 percent), the total shift of resources in China (20 percent) was second only to the Republic of Korea (33 percent) and comparable to Thailand and Turkey (18 percent).

When the transformation of production is measured by employment rather than by value added, China is much closer to the typical pattern for its income level. Agriculture still accounts for 71 percent of employment, which is approximately the average for all low-income countries. The share of industry, at 17 percent, compares to 11 percent in India, 17 percent in the Philippines, and 20 percent in Pakistan. The differences from the production shares in Table 2 are primarily due to the large differences in relative prices.

### Effects of Trade Policies

A number of statistical studies have shown that higher export growth is one of the factors contributing to GNP growth, both as a source of demand and as a means of avoiding bottlenecks. This relationship is quite pronounced for the group of semi-industrial countries, both large and small. (See Feder, Exports and Growth, World Bank, 1982.) The composition and growth of exports in the large semi-industrial countries is shown in Table 3.

In most semi-industrial countries, export growth has been concentrated in manufactured goods and has often led to a very rapid transformation of the composition of exports. Even some of the more closed economies -- Argentina, Turkey, Colombia, the Philippines and India -- have made a substantial move in this direction with high growth rates of manufactured exports starting from a very low base.

There is also a notable difference in the composition of exports between the large and small SICs. While the successful small countries have continued to specialize in light manufactures, the larger countries have tended to diversify their exports into products having significant economies of scale. The latter pattern also appears to be promising for India and China as they increase their efforts to expand exports.

The experience of the past several decades demonstrates that virtually all semi-industrial countries have been able to expand the growth of exports more rapidly than the growth of GNP when they have adopted policies favorable to exporters. (The

policy implications of these comparisons are taken up in other sessions of this conference.)

#### III. GROWTH AND TRANSFORMATION

Over the past 25 years there has been a tendency for middle income countries to grow more rapidly than either the richer industrial countries or the poorer -- largely agricultural -countries. The tendency for growth to accelerate in the transitional group of industrializing countries can be attributed to several factors:

- a rise in the rate of accumulation of physical capital and skills;
- a shift of labor and capital into sectors where they can be used more efficiently, and in which demand is increasing more rapidly; and
- diversification of the economic structure of the semiindustrial countries, which makes them less vulnerable to changes in terms of trade or shifts in demand.

China has been quite successful in raising its rate of accumulation to high levels but less so in allocating resources to the most productive sectors. Efficient resource allocation has been hampered by the lack of market signals to identify the more productive uses, by limited access to modern technology, and by a trade policy that has discriminated against exports. The result has been relatively inefficient use of resources, which is reflected in a very high incremental ratio of capital to increased output.

In comparison to other poor countries, China's high rate of investment offsets its inefficient use of resources. Its

growth of per capita GNP of 2.7 percent since 1957 (corrected for relative price differences) compares favorably to 1.4 percent for India and 1.6 percent for all low-income countries. However, much of this improvement is due to the lower rate of population growth that China has experienced in recent years. Since China has achieved both the industrial structure and the investment rate of a middle-income country, it should now be able to attain higher levels of growth as well.

Among the large semi-industrial countries, the ability to expand exports and avoid bottlenecks has been particularly important to sustained growth. This is indicated by the distinction in Table 3 between countries with outward-oriented and inward-oriented trade policies. The five countries that have adopted relatively outward looking policies and achieved rapid export growth -- Spain, Yugoslavia, Brazil, Korea and Thailand -- have also had high growth of per capita GNP of 4.5 - 5.0 percent. The remaining large countries -- of which China is fairly typical -- have had lower growth rates of 2.5 to 3.0 percent. More open trade policies have also proved to be more effective in the past decade in facilitating the adjustments to balance of payments shocks and worsening terms of trade.

The lack of detailed data on the structural transformation in China makes it difficult to pursue this type of analysis much further. However, the relations between growth and structural change should provide promising topics for future research.

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<u>Table 1</u>

<u>Simulated Effects of Alternative Trade Patterns on Industrial Structure</u>

Constant Income Level of \$400 (1964 Prices) a/

			Case 1 Average Country	Case 2 Average Large Country		Case 3 Semi-Closed Economy	
			Value (1)	Value (2)	Ratio to Case 1 (3)	Value (4)	Ratio to Case 1 (5)
TRA	DE						
1.	a.	Primary Exports	51.2	14.8	.29	3.1	.06
	ъ.	Manufactured Exports	21.4	18.2	.85	14.4	.67
	c.	Total Exports	96.5	46.0	.48	21.7	.22
2.	a.	Primary Imports	19.2	11.8	.61	7.8	.41
	ъ.	Manufactured Imports	65.0	31.8	.49	15.5	.24
	c.	Total Imports	101.4	52.5	.52	28.1	.28
PRO	DUCT	TION (Value Added)		•			
1.	Pri	mary	82.6	65.6	.79	62.2	.75
2.	a.	Light Manufacture	63.2	66.6	1.05	67.4	1.07
	ъ.	Heavy Manufacturing	34.5	51.8	1.50	58.1	1.68
	c.	Construction & Utilities	60.2	62.8	1.04	61.6	1.02
	d.	Total Industry	157.9	181.2	1.15	187.1	1.18
3.	Ser	rvices	159.6	153.2	.96	150.8	.94
4.	Tot	al Value Added	400.0	400.0		400.0	

Source: Hollis B. Chenery, "The Process of Industrialization," Table 3-7. In Structural Change and Development Policy. New York: Oxford Press. 1979.

Table 2

Transformation of Production (1960-1977)

Country	Per Capita (US\$ 1977)	Growth Rate (1960-79)	Population 1977	Primary Sh 1960	nare a/ 1977	Change in Share	Share of In	dustry <u>b</u> / 1977	Change in Share 1960-77	
*Spain	3,190	4.7	36	23.3	11.0	-12,3	36.2	38.7	2.5	
*Yugoslavia	1,960	5,4	<b>22</b> .	24.0	15.2	8.8	45.1	44.6	<del>-</del> 0.5	
Argentina	1,730	2.4	26	17.7	14.6	-3.1	36.3	43.2	6.9	•
*Brazil	1,360	4.8	116	17.3	13.2	-4.1	33.9	35.7	1.8	•
S. Africa	1,340	2.3	27	25.9	19.6	-6.3	26.2	31.6	5.4	N
Mexico	1,1.20	2.7	63	17.4	11.1	-6.3	27.7	35.0	7.3	2
Turkey	1,110	3.8	42	42.7	30.0	-12.7	18.7	24.2	5.5	1
*Korea	820	7.1	36	41.9	25.7	-16.2	16.5	33.0	16.5	
Colombia	720	3.0	25	38.0	33.2	-4.8	21.8	25.6	3.8	
Philippines	450	2.6	45	26.9	29.3	2.4	26.8	32.9	6.1	
*Thailand	420	4.5	44	40.9	30.2	-10.7	17.6	25.4	7.8	
Egypt ,	320	3.4	38	29.9	30.2	0.3	24.3	28.9	4.6	
China c/	200	(2.7)	930	40.0 (45)	34.0 (37)	-6.0	30.0 (25)	44.0 (37)	14.0	
India	150	1.4	632	50.8	41.8	-9.0	19.3	23.7	4.4	

a/ Primary includes agriculture and mining.

b/ Industry includes construction and utilities.

c/ Data for China are for 1957 and 1977-79. The figures in parentheses are based on relative prices that are more representative of other countries.

<sup>\*</sup> Countries with outward-oriented trade policies.

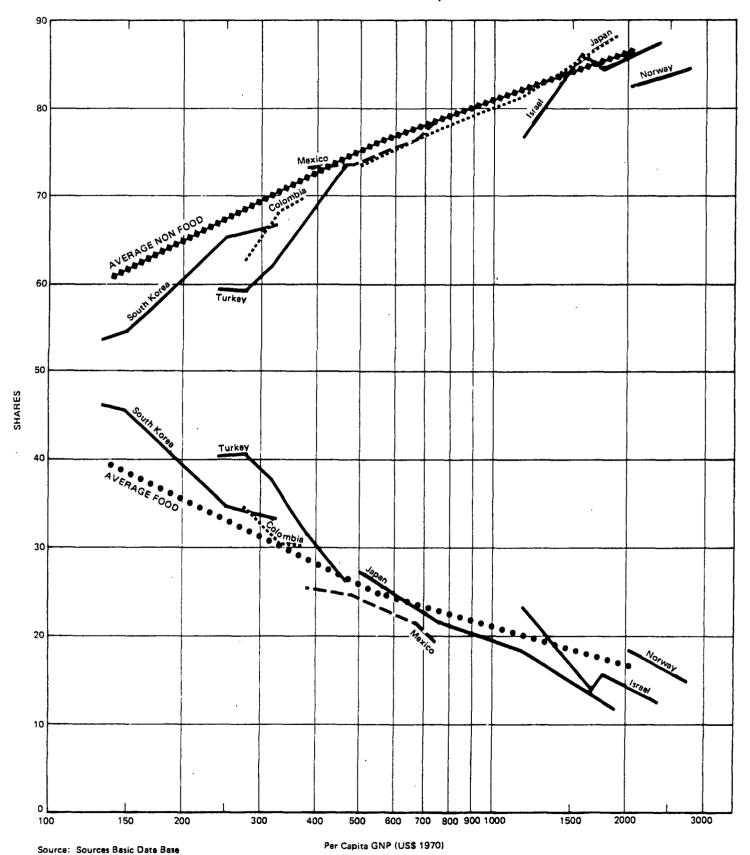
Table 3 Transformation of Exports 1960-1977

	Merchandise Exports 1977	Exports as Share of	Share of M	anufacture	Annual Growth of Exports	Growth of Manufactured Exports	
Country	(Billion \$)	GDP	1960	<u>1977</u>	1960-77	1960-77	
*Spain	10.2	10	22%	71%	11.1%	19.0%	
*Yugoslavia	5.3	11	37	69	6.8	10.8	
Argentina	5.7	8	4	24	4.2	15.8	
*Brazil	12.1	7	3	26	5.6	19.9	
S. Africa	6.2	35	29	42	6.0	8.3	
Mexico	4.1	7	12	29	2.7	8.2	1
Turkey	1.8	4	<b>~</b> 3	25	1.3	14.8	2
*Korea	10.0	25	14	85	33.3	48.2	ω
Colombia	2.3	25	2	19	0.7	15.0	1
Philippines	3.2	16	4	25	3.3	15.1	
*Thailand	3.9	19	2	19	8.0	23.3	
Egypt	1.7	11	12	25	0.1	4.5	
China	12.0	6	. <del>-</del>	. 49	_	-	
India	6.2	6	45	56	4.4	5.8	

Source: World Bank, World Development Reports.

<sup>\*</sup> Outward oriented policies.

Figure 1 Shares of Food and Non-Food Consumption in Final Demand



GDP by Expenditure Product of World Bank research project (RPO)No. 671-32.

World Bank-23970

Figure 2
Major Components of Demand

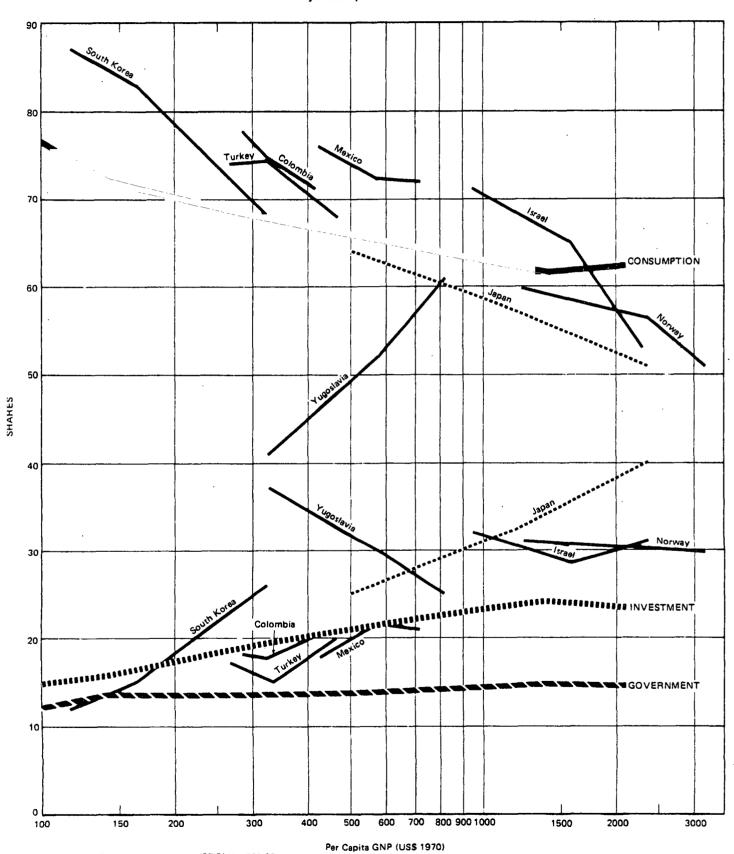


Figure 3
Simulation of Value Added, Employment and Capital (Shares)

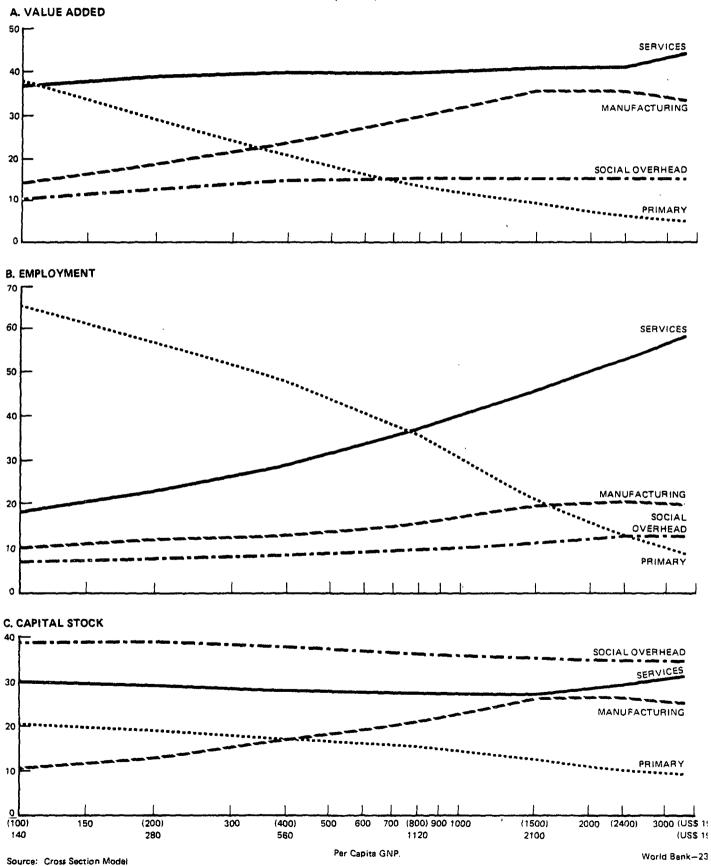
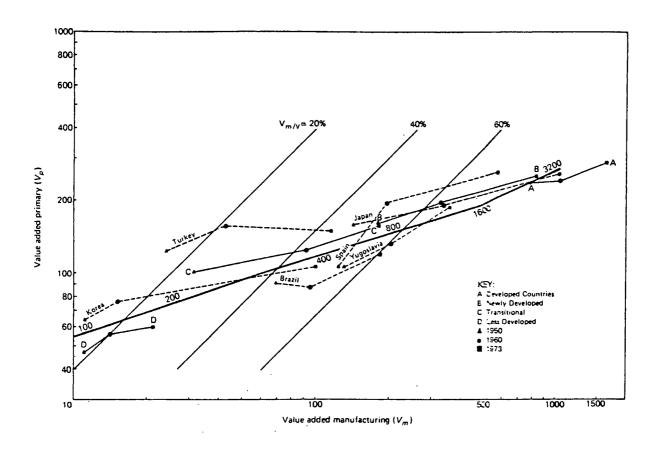


Figure 4

Transformation of Production: Large Countries (L)

US\$ 1973 per capita



Source: Chenery, H.B. "Transitional Growth and World Development."

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