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## A UNIFORM ANALYSIS OF DEVELOPMENT PATTERNS

by

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Economic Development Report No. 148 Revised July 1970

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June 1970

A UNIFORM ANALYSIS OF DEVELOPMENT PATTERNS\*

Hollis Chenery Hazel Elkington Christopher Sims

There is currently great interest in economics and other social sciences in identifying and describing the uniform features of the processes of modernization and development. Characteristics of the social and economic system that vary systematically with the level of per capita income may be described as development patterns. The scientific value of analyzing such patterns is shown by the findings of Kuznets (1966) and Chenery and Taylor (1968) that historical patterns of industrial development have strong similarities to the present-day patterns that are measured by cross-country comparisons.

The present paper extends the methods of intercountry regression analysis to a wide variety of structural features in order to present a systematic picture of development patterns.

\*The studies summarized here have been supported by AID Contract CSD 1547 and NSF Grant GS 1914 to the Project for Quantitative Research, Center for International Affairs, Harvard University. Mrs. Yiyi Evans and Mr. Clarke Cooke have provided research assistance. Within the past decade the national statistics of the poorer countries have been greatly improved, making possible a much wider coverage of developing countries than was feasible in earlier studies. They also permit a combination of time series and cross-section analysis to be used to test a number of hypotheses about the basic processes of development.

The compilation by the World Bank<sup>1</sup> of a comprehensive set of economic and social statistics for the period 1950-1967 provides an opportunity to recalculate on a more uniform basis many of the intercountry development patterns that have been found and to test their stability. The IBRD data are better suited to this purpose than the United nations and AID sources that have previously been used because they provide a more complete coverage of countries, uniform values of per capita GNP in constant dollars, and some revisions of original country sources.<sup>2</sup>

Our main purpose is to provide a consistent description of development patterns that can be used as a basis for inductive theory. We have drawn largely on other studies of the

IBRD, Department of Economics, Comparative Data
Division. We are indebted to the Bank for making this material available to us prior to its publication. Hagen and Hawrylyshyn (1969) have also used this set of data as their primary source.
2. The U.N. abstains from making such revisions and from publishing per capita income figures currently; the AID estimates are more comparable to the IBRD but less complete in coverage.

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Harvard Project for Quantitative Research in Economic Development for our theoretical framework and statistical formulation.<sup>1</sup>

## I. CONCEPTUAL FRAMEWORK

Statistical analyses of structural change can be used in several ways to formulate and test theories of development. They show first how a given feature normally varies with the level of income and how uniform this relationship is among countries and over time. Analysis of the residual variation usually suggests additional explanatory variables and alternative forms of regression equations. This inductive process leads ultimately to specific tests of alternative hypotheses and the extension or rejection of a priori theory.

The present results cover the early phases of this sequence. We will describe the relation of various structural features to the level of development, test for shifts in the relationship over time, try to identify other significant influences (such as size, urbanization, capital inflow, or trade pattern) and present the country residuals as a source of additional hypotheses.

1. Chenery and Taylor (1968) have studied production patterns, Landau (1969) savings relations, R. Weisskoff (1969), price and income elasticities of demand, S. Robinson (1969), sources of growth, and T. Weisskopf (1970) the effects of capital inflow. Alternative approaches to the analysis of structural change are discussed by Kuznets (1966), Adelman and Morris (1967), and Chenery and Taylor (1968). Kuznets stresses that the value of cross-country analysis is limited unless there is a specific test of the relationship between the intercountry pattern and the comparable relationship in individual countries over time. One of our first objectives has therefore been to test for systematic changes over time and to measure those that appear to be significant.

Both theoretical and statistical analyses suggest that modern economic growth should be conceived of as a process of transition from a primitive to a modern social system rather than as a steady increase in all variables. Aspects of the economic and social structure such as the composition of employment, output, demand, etc., should be expected to have a non-linear relation to the level of income if we consider a wide enough range. For example, industrialization and urbanization increase rapidly at middle income levels, but taper off when industry reaches 35% of GNP and when two-thirds of the population lives in cities. Such processes can be represented by functions that reach a maximum or approach an asymptote. Most previous studies have not examined this phenomenon, since they are based on linear (or log-linear)

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functions. We have followed the procedure of Chenery and Taylor (1968) by assuming a non-linear relation of each structural feature to the level of income and testing several alternative forms.

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In this preliminary exploration, we make only minimal assumptions about the nature of causation. Adelman and Morris (1967) have shown by factor analysis that many economic and social phenomena are systematically related to income level, and hence per capita GNP serves as a general index of development. We will investigate the effects of some of the other principal variables that have been shown to affect development patterns -- size, natural resources, capital inflow -- but leave detailed analysis of individual relations to subsequent studies.

The basic hypothesis that underlies this set of statistical estimates is, then, that there is a set of development processes of sufficient uniformity across countries to produce a consistent pattern of change in resource allocation, factor use, and other structural features as national product rises. Our statistical analysis is designed to explore various aspects of this general hypotheses: (1) the extent of variation in each feature with the income level; (2) the income range over which each process shows the most pronounced change;

(3) differences between time-series and intercountry relations;(4) the major sources of differences in growth patterns and the nature of their effects.

(5) the relationships between the level of development and the rate of growth.

#### II. ECONOMETRICS

The first test of the present econometric approach to comparative structural analysis was made by Chenery and Taylor (1968). They analyzed changes in the sector composition of GDP within the framework described below. We therefore start from the simpler of their two non-linear equations for cross-country analysis (form B):

 $X_i = \alpha + \beta \ln y + \beta' (\ln y)^2 + \gamma \ln N$ 

where: X<sub>i</sub> = dependent variable

y = per capita GNP

N = population (millions)

This equation allows for one of the main characteristics of the transition from a primitive economy to a mature industrial society that has been observed in earlier studies; namely the declining effect of further increases in income as the levels of the advanced countries are approached. (An accurate representation of both the early and later stages of many processes

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would require a more complex function, such as a logistic curve, which we have not yet tested.)

We apply equations of this form to study three types of development pattern: (A) <u>Accumulation</u> (investment, government revenue, education); (B) <u>Resource Allocation</u> (domestic demand, production, exports, imports); (C) <u>Population and Labor Force</u> (population growth, urbanization, labor allocation). Table 2 lists 27 measures of structural change that will be analyzed in this way. In most cases, the measure of the dependent variable used is the share of each aggregate supplied or used in a specified way. Since these relations can be plausibly described by either logged or unlogged forms of the dependent variable, we have computed the regressions in both forms.<sup>1</sup>

#### Why Regressions?

Since the aim of this paper is to describe development patterns as a basis for further analysis, we wish to make only minimal assumptions as to the causal structure underlying those patterns. Clearly Gross Domestic Product, population, and the various indexes on the left-hand side of our regressions are interrelated in a web of mutual causation. A regression treats dependent and independent variables asymmetrically, however, and

1. There are some characteristic disadvantages to each form. Estimates based on the log of the share are systematically lower than the unlogged form because negative deviations have greater weight. The estimated shares thus total less than 100% while the unlogged shares total 100% when the same sample is used. However, for a number of variables, the curvature is exaggerated by the unlogged form and the extreme values are fitted less well. The choice between the two thus depends to some extent on the use that is to be made of the results. We have tended to prefer the unlogged form because of its easier interpretation. The logged form is shown as a dashed line in the graph.

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the usual justification for the asymmetry is a postulated direction of causation running from independent to dependent variables. Our rationale for using regression is that, while for policy purposes the causal relation running, say, from share of manufacturing in GNP to the level of GNP per capita may be very important, statistically this causal link can be safely ignored in an international cross-section.

There are two variables which we treat as approximately exogenous: GNP per capita and population. International differences in population, while perhaps marginally influenced by levels of development, are largely determined by accidents of history and geography. The level of GNP per capita is the best available indicator of the level of development, and the full list of variables we treat as dependent might even plausibly be taken as determining the level of development in a causal sense. However, the causal links from GNP to any <u>one</u> of the dependent variables are probably much stronger than the causal links in the reverse direction. Hence, treating population and GNP per capita as approximately exogenous may be justified.

One could argue that, because directions of causation are hard to sort out with this kind of data, a perfectly symmetrical statistical technique like factor analysis might be more

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appropriate. Adelman and Morris (1967) have chosen this technique for a somewhat similar descriptive analysis. A principal advantage of the regression technique we have chosen is that non-linearities, which are important here, are more easily handled in a regression than in a factor analysis.

At some points we utilize regression equations involving as "independent" variables quantities like net foreign balance or investment rates which cannot be regarded as even approximately exogenous. In these equations the coefficients and t-statistics on the non-exogenous independent variables are merely representative of the size and sign of partial correlations. In no case are regression results presented only for equations involving non-exogenous independent variables if the addition of the non-exogenous variables substantially altered coefficients on per capita GDP and population.

#### Effects of Time.

There are two natural hypotheses about possible differences between time series and cross-country results in estimating development patterns. One, tested by Chenery and Taylor (1968), supposes that income differences within one country over time will produce different patterns of response than appear across countries at one point in time. The other supposes that there

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are homogeneous shifts in some dependent variables occuring over time in all countries independent of within-country income changes. These two hypotheses are, of course, neither identical nor exclusive, but in practice the data do not allow us to distinguish them. We tested the first alternative using forms like

$$x_{ti} = a y_{ti} + b(y_{ti} - \bar{y}_{i}),$$

where  $\bar{y}_i$  is country i's mean income. If the within-country response to income differs from the between-country response, the estimate of b should be significantly different from zero. This formulation gave less sharp results than the forms (like quation BT in Table 1) which allowed for a homogeneous time trend. In a more detailed analysis over longer periods it might be desirable to use a form like (\*) above with "b" replaced by "b<sub>i</sub>" -- i.e., allowing each country a different within-country response to income.

#### Other Independent Variables.

The only other explanatory variables found to have a widespread effect on this set of structural relations are the country's population and the inflow of external capital. The importance of the size effect was stressed in Chenery (1960). The capital inflow effect has been studied theoretically in the context

> of two-gap models and empirically by Landau (1969) and Weisskopf (1970). On the basis of these studies, we can

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expect the inflow of capital (with a given level of income) to be associated with lower savings, exports, and commodity production and higher investment, consumption, imports, and the production of non-traded commodities and services. The capital inflow variable (F) was tested for almost all relations; the results are reported below whenever its t ratio exceeded 1.0.

Other explanatory variables, such as the degree of industrialization, the extent of urbanization, and the composition of exports, have been found significant in specialized studies, but we do not attempt a systematic examination of them here.

The four regression equations listed in Table 1 were computed for all of the variables. Tables 3-5 list the results, including T and F for purposes of comparison even when they were not significant.<sup>1</sup> The predicted values at different income levels are given in Table 6.

#### Extension to the Analysis of Growth.

Although our main purpose in undertaking this analysis was to provide a consistent description of the structural changes that take place in the course of development, some of our results suggested that the rate of growth might show a systematic relationship to the level of income and the economic structure. In the final section of the paper, we have therefore extended

1. In cases where the separate income coefficients are not significant, dropping one of them will produce a significant relation for the other, but the predicted values are very little affected.

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## TABLE 1.

Regression Equations for Measuring Development Patterns

X = dependent variable Y = GNP per capita in 1964 U.S. dollars N = population in millions T = time: 1950 = 1, 1955 = 2, 1960 = 3, 1965 = 4 F = net imports of goods and services minus pet exports of goods and services as % of total resources<sup>2</sup> E = share of primary exports in GNP E<sub>m</sub> = share of manufactured exports in GNP

Code	Ec	qua	ati	ior	1														
в	х	11	α	+	β	ln	Y	+	β'	(lnY) <sup>2</sup>	+	γ	ln	N					
вт	х	=	α	+	β	ln	Y	+	β'	(lnY) <sup>2</sup>	+	γ	ln	N	+	δΤ			
BF	Х	=	α	+	β	ln	Y	+	β'	(lnY) <sup>2</sup>	+	γ	ln	N	+	εF			
BTF	х	=	α	+	β	ln	Y	+	β'	(lnY) <sup>2</sup>	+	γ	ln	N	+	δT	+	εF	

1. A prefix L (LB, LBT, etc.) indicates that the dependent variable is in log form.

2. This form was used instead of the share of GNP because the IBRD tables are computed on this basis. Total resources are defined as GNP plus net imports (see appendix).

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the analysis to test several hypotheses of this sort. The regression equations used for this purpose will be developed after the analysis of structural change is presented.

## III. CONSISTENT MEASUREMENTS OF STRUCTURAL CHANGE

Although there have been numerous measurements of the structural changes that accompany rising income, they have utilized a variety of data and statistical procedures that make it difficult to combine the results into a consistent analysis. To avoid this problem, we have adopted the uniform set of regression equations listed in Table 1. While it would often be possible to discover a better explanation of a given relationship by including additional variables, the uniform procedure adopted here has the advantage of being able to compare the effects of given variables on each structural characteristic.

Of particular interest is the general picture that our study provides of development as a set of interrelated processes. Since the similarities in development patterns have been much discussed, we will try to bring out some of the main differences in timing, intertemporal stability, and the influence of other

I. This approach owes much to the work of Simon Kuznets (1966). The main difference is our use of formal multivariate analysis.

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variables that have emerged so far.

The statistical series used in this test cover the period 1950-1965 at five-year intervals. They were chosen as the best measures of the sources and uses of resources that are readily available for large numbers of countries. The characteristics analyzed and number of countries in each regression are listed in Table 2. The main sets of regression coefficients for each variable are given in Tables 3-5. Further information on both data and results is given in the appendix.

## Comparison of Development Patterns

We start with a comparison of the separate patterns of change in the nine major structural features listed in Table 2. We define a development pattern by the variation of each structural index with the level of income as estimated by multiple regression analysis. For the principal national aggregates -domestic demand, production, exports, imports, labor use -- we have used a sector breakdown similar to that of Kuznets. Modifications were introduced to make the division of production more compatible with the role of each sector in international trade.<sup>1</sup>

Although each structural feature shows substantial variation with the level of income, these development patterns vary in

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<sup>1.</sup> We follow Chenery and Taylor (1968) in combining mining with agriculture in the primary sector because trade in both is based mainly on resource endowments. For similar reasons we separate utilities from industry. The resulting definition of "primary" (ISIC 0,1) and "industry (ISIC 2-4) is followed as far as possible in the analysis of trade and labor use also.

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## TABLE 2

## STRUCTURAL CHARACTERISTICS ANALYZED

Dep	endent Variable	Number of	Number of
Α.	ACCUMULATION PATTERNS	Countries	Observations
	Investment		
	Al Gross National Savings as % of GNP	90 (	) 221 ( )
	A2 Gross Domestic Investment as % of (	GDP 101 (	89*) 246 (220*)
	A3 Capital Inflow (Net Import of Goods & Services as % of GDP)	90 (	) 231 ( )
	Government Revenue		
	A4 Government Revenue as Percentage of A5 Tax Revenue as Percentage of Nation	GDP 95	231
	Income Education	90	215
	Education		
	A6 Education Expenditure by Government	101	225
	as % of GDP	101	236
	A/ Primary and Secondary School Enroll	Lment	250
	Ratio	110	339
	Ab Addit Literacy Rate	04	55
В.	RESOURCE ALLOCATION PATTERNS		
	Final Demand		
	Bl Personal Consumption as Percentage		
	of GDP	101	246
	B2 Government Consumption as Percentage	3	
	of GDP	79	197
	B3 Food Consumption as Percentage of To	otal	115
	Consumption	45	115
	Structure of Production		
	B4 Primary Output as Percentage of GDP	95	282
	B5 Industry Output as Percentage of GDB	93	277
	B6 Service Output as Percentage of GDP	88	254
	B7 Utilities Output as Percentage of GI	DP 77	236
	Trade		
	B8 Exports as Percentage of GDP	95	220
	B9 Primary Exports as Percentage of GDI	95	220
	Bl0 Industry Exports as Percentage of GI	DP 95	220
	Bll Imports as Percentage of GDP	84	192
	B12 Primary Imports as Percentage of GDI	84	192
	B13 Industry Imports as Percentage of GI	DP 84	192

(Continued on following page)

## TABLE 2 (Continued)

Dep	pendent Variable		
<u>C.</u>	POPULATION AND LABOR FORCE	Number of	Number of Observations
	Population Growth	<u>oouncerco</u>	ODDEL VALLOUIS
	Cl Birth Rate	84	221
	C2 Death Rate	80	205
	Urbanization		
	C3 Urban Population 2-5	96	157
	Labor Allocation		
	C4 Share of Primary Labor	120 (	) · 221 ( )
	C5 Share of Industry Labor	79 (6	9*) 123 (102*)
	C6 Share of Service Labor	75 (	) 121 ( )

.

\*We computed an alternative sample for Al-A3 and C4-C6 in order to avoid discrepancies due to differences in sample size. This is referred to in the text as the compatible sample.

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magnitude, timing, and the extent to which they are influenced by other variables. The variation in magnitude and timing is brought out most clearly in the separate graphs of the normal pattern for each attribute. We are particularly interested in identifying variations in the timing of processes, which may suggest causal sequences for further analysis.

Table 6 gives a summary picture of the structural transformation by showing the normal values of each index at selected levels of income.<sup>1</sup> These show the extent of the changes in each characteristic between the least developed (\$50) level and the advanced (\$2000) level and the proportion of this change that has been completed at levels of \$200 and \$400. We classify as "early" those processes in which 50% or more of the total transformation has been completed at a level of \$300, since change is less pronounced thereafter. "Late" processes are those in which less than 50% of the total change as been completed at the \$400 level and change continues to be significant up to high income levels.<sup>2</sup>

1. Since the regression equations are most liable to error at the extremes of income, we have preferred this measure to the regression value.

2. In interpreting these results, it should be noted that a constant rate of structural change (or constant growth elasticity in the log form of the regression equation) will take longer to reach the halfway mark the greater the absolute amount of change involved and the lower the initial starting point. In the greatest changes, such as the growth of literacy or the rise of non-primary employment, a steady rate of increase would only reach the halfway point at between \$500 and \$600. An alternative method of describing the timing of structural change is to utilize the curvature of the logarithmic regression lines in the charts; the results are similar.

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The "early" development patterns reflect processes of change that are important at relatively low income levels but whose impact on resource allocation and growth at higher levels has been largely exhausted. A typical example of an early process is the domestic processing of food and textiles, which causes most of the rise of industry below the \$200 level but has little additional effect on industrialization thereafter. Another early change is the fall in the death rate due to improved public health measures, which also exhaust their impact at low income levels. At the other extreme, late development processes are typified by heavy industry, higher education, and birth control, which only become significant after a certain level of wealth, education, and technology has been acquired.

The general picture of leads, lags, and time trends in development processes indicated by our results can be summarized as follows.

(1) Most measures of increased <u>accumulation</u> -- gross investment, educational expenditures, primary school enrollment, adult literacy -- show early transformations that are more than half complete by the time a country reaches an income level of \$250-300. Furthermore, most of these regressions show significant upward trends in the postwar period, as measured by the coefficients in Table 3. Taken together, these results show an increasing mobilization of resources for development in the

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postwar period in addition to the effects of rising income.

(2) A fall in death rates and increase in urbanization also takes place at a relatively early stage, and the death rate regression also shows the expected downward time trend. The increase in urbanization is explainable by the shift to industry and services with rising income, however, since it shows no significant time trend. The hypothesis of rising urbanization unrelated to growth is not borne out in our results.

(3) The change in composition of output takes place in a fairly constant relation to rising income for all countries taken together. However, as Chenery and Taylor (1968) have shown, industrialization is an early process in large countries and a late process in primary exporters, reflecting the operation of comparative advantage.

(4) The reallocation of the labor force follows a somewhat different pattern from the transformation of production. The shift of labor into services is much more pronounced than the rise of service output and is one of the most significant structural changes at high levels of development.

(5) The transformation in trade patterns and the rise of government revenue and expenditure are late processes which are only half completed at the \$500 level. The significant upward time trend in manufactured exports is favorable to

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more rapid growth, but there is no similar time crend in revenue collection.

(6) While time trends are significant for 7 of the 27 variables shown in Tables 3-5, they only indicate substantial differences between time series and cross-section relations in two or three cases. There are significant upward trends in school enrollment, educational expenditures, government expenditures, and industrial imports. Downward trends are statistically significant in the share of primary output, private consumption, and death

rates.

## Differences in Development Patterns

Differences in development patterns can be studied either by dividing countries into groups (types) or by introducing additional variables into the regression equations. The desirability of combining these two approaches was shown by Chenery and Taylor (1968). Often the nature of a non-linear relationship is better demonstrated by splitting the sample of countries than by adding successive polynomial terms.<sup>1</sup> This is particularly true when it is desired to bring out differences in timing, such as the acceleration of industrialization in large countries. We will only pursue this approach to a limited extent in the present paper, however.

1. The desirability of subdividing the sample is determined by an F test that compares the unexplained residuals from the separate regressions to the results for the combined sample.

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We start with the effects of size, which have been studied in a similar framework by Chenery (1960), Chenery and Taylor (1968), and Keesing (1968). Country size affects directly the advantages of international trade through scale elasticities ( $\gamma$  in the log form) of about -.3 for both exports and imports. The existence of a larger domestic market size favors manufacturing much more than primary production, however. As a result the shares of industrial imports and of primary exports in GNP have scale elasticities of -.4 and -.5 respectively and fall markedly with increasing size.

These effects of comparative advantage are also reflected in the structure of production, where industrial output has a scale elasticity of +.11 while primary production has an elasticity of -.04. The same phenomenon carries over into the extent of urbanization. Somewhat surprisingly, school enrollment and literacy also rise with the size of country, which may be connected to urbanization.

The other explanatory variable that we have studied systematically -- the extent of capital inflow -- turns out to have wider ramifications than was originally anticipated.<sup>1</sup> Combining the separate results for the aggregate variables in the two-gap model of Chenery and Strout (1966), we have the

1. In addition to the four effects noted, it affects the composition of trade and production. The latter only becomes clear in a less aggregated analysis, however.

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following average picture of the effect of a change in the inflow of capital in the unlogged form:

Increase in investment	.11	Increase in imports	.41
Fall in savings	.49	Fall in exports	.19
	.60		.60

In both cases, the aggregate effects are underestimated, since they should total 1.0.<sup>1</sup> This result suggests that in general capital inflow does more to increase imports than investment, in accordance with the notion of a dominant trade gap. Any such inference from inter-country data must be highly qualified, however, particularly because of the problems of interpretation inherent in treating F as an independent variable.

While several variables -- size, trade patterns and the extent of capital inflow -- have been shown to have a significant influence on development patterns, none of these effects is so pronounced as to destroy the usefulness of the underlying notion of universal development processes. The systematic variation detected results mainly from the extent to which the economy is open or closed.<sup>2</sup> An examination of the residuals from some of our regressions given in the Appendix may suggest other sources of systematic variation to the reader.

1. According to the accounting identities: F = I - S = M - E. This reduction in the total "effect" below its theoretical value reflects the fact that F is not properly treated as purely exogenous in these equations.

2. Ranis and Fei (1964) have suggested the importance of classifying less developed economies on the basis of the extent of surplus labor, but so far there are no acceptable measures of this phenomenon that can be tested in intercountry comparisons.

## IV. VARIATION IN GROWTH WITH THE LEVEL OF DEVELOPMENT

There are many possible relations between a country's economic structure and the rate at which it can increase its national product. Many of the structural changes analyzed in the preceding section suggest that growth should become easier as a country becomes richer. Most notably, the level of skills, rate of capital.accumulation, and taxing ability increase substantially as income rises. On the other hand, the growth potential of a poor country benefits from unused labor, from resource transfers from abroad, and from increased efficiency made possible by importing more advanced technology. Apart from such measurable elements, there are many less tangible factors, such as absorptive capacity and administrative competence, that vary with the income level and economic structure. The combined effect of all these elements is hard to predict on a priori grounds.

Previous statistical studies have brought out significant differences in the determinants of growth at different levels of development. In their factor analysis of the relation between social and political factors and growth rates, Adelman and Morris (1967) show that non-economic factors are important at low levels but decline at higher income levels. Hagen and Hawrylyshyn (1969) failed to find any net effect of the level of income on growth rates, however, after allowing for investment rates and

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a number of the other specific factors mentioned above.

Our analysis of structural change suggests a somewhat different approach to this question. We have seen that the changes in structure that are likely to raise the rate of growth ultimately decline in importance as the level of income rises. We therefore hypothesize that a rise in income will increase the rate of growth at lower levels of development but that the effect of the level of development will decline at higher levels. We will break down the combined effect of the income level into labor force, separate effects of investment,/capital inflow, exports and other elements for which a causal hypothesis can be specified. We will then determine whether the level of development explains a significant portion of the remaining variation in growth rates. The analysis will be repeated for high and low income countries separately to determine whether the level of development affects the estimates for other variables.

## Econometrics

Our approach is essentially an extension of the methodology developed for the study of structural change. In addition to the four exogenous variables used above, we include three others-the rate of investment, the growth of the labor force, and the growth of exports -- suggested by various theories of development. We take advantage of previous work by Hagen and

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Hawrylyshyn (1969) and Robinson (1969) in our choice of specification. The independent variables are defined as follows:

(1) log y, where y is per capita GNP in 1964 U.S. dollars;

(2) 
$$(\log y)^{2};$$

- (3) log N, where N is population in millions;
- (4)  $\frac{1}{V}$ , the ratio of gross domestic investment to GDP;
- (5)  $\frac{J}{Y}$ , the capital inflow (investment minus savings) as a ratio to GDP;<sup>1</sup>
- (6)  $\frac{\Delta E}{V} = \frac{E}{Y} \cdot g_E = (export share of GDP) \times (growth of exports).$
- (7)  $\frac{\Delta L}{L}$  growth rate of population (as proxy for growth of labor force).

The dependent variable throughout this analysis is the rate of growth of GNP. We have broken the period under study into two parts: 1950-59 and 1960-65. Our sample includes all countries for which the IBRD <u>World Tables</u> contain the relevant variables. It is subdivided by income level into two groups: developed countries (per capita income over \$700 in 1960) and underdeveloped countries (per capita income under \$700). The number of observations in each sample is shown in column A below, and the countries are listed in the appendix.

1. There are slight conceptual differences (explained in the appendix) between this measure of the capital inflow and the balance of payments measure (F) used in Section III.

Period	Underdeve	loped (U)	Developed (D)	Total	(T)
	A	в	A and B	A	в
1. 1950-59	34	31	19	53	50
2. 1960-65	48	31	19	67	50
3. Pool	82	62	38	120	100

Since the number of underdeveloped countries having the necessary data increases substantially from the first period to the second, we have selected a second sample (B) having a constant composition. When the four subsamples are pooled, the A sample contains 120 observations and the B sample 100.

The treatment of "independent" variables in the study of growth rates raises questions of interdependence similar to those discussed earlier. Country size, income level, and the growth of population are unaffected by the rate of growth in GNP over a period of 5-10 years, but the other three variables are likely to be partly determined by, as well as determinants of, the growth rate. As before, we recognize that regressions including such non-exogenous variables may support different causal interpretations. Where inclusion of such variables has noticeable effects on other coefficients, we have tried to display these effects.

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## Statistical Results

Our analysis of the causes of variation in the rate of growth among countries is summarized in tables 7-9 for the underdeveloped, developed, and all country samples.<sup>1</sup> Our principal finding is the very substantial effect of the level of development, even after other variables have been allowed for. By specifying a non-linear function of the level of income per capita, we also arrive at somewhat different conclusions from other investigators as 'to the importance of other explanatory variables.

In discussing the results, we take up first the partial effect of each explanatory variable. We note the magnitude and significance of the regression coefficients, their stability over time, interaction with other variables, and the extent of the difference between the underdeveloped and developed country samples. A more general assessment of the significance of these findings is given in the concluding section.

<u>Investment</u>. In a Harrod-Domar model, the rate of growth depends on the investment rate  $(\frac{I}{Y})$  and the incremental ratio of output to capital ( $\frac{\Delta Y}{\Delta K}$ ). The regression coefficient of the investment

1. We computed some 800 regressions in arriving at these results. Among the alternative specifications tested were logged values of all variables, the growth of exports relative to GNP, the share of primary production in total output, the share of primary labor in total labor force, and a capital inflow variable in which outflows were set equal to zero. Only the last showed any improvement over the results given here.

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ratio is therefore an estimate of the average value of  $(\frac{\Delta Y}{\Delta K})$ . Alternatively, we can take the investment rate as a proxy for the growth of the capital stock and interpret the regressions including growth of the labor force in terms of a neoclassical production function.<sup>1</sup>

When all the explanatory variables are included in the pooled regression (A3), the coefficient for investment is .22. With population growth omitted -- as in the Harrod-Domar formulation -- the regression coefficient is increased to .24, corresponding to a capital-output ratio of about 4. Differences in investment rates alone explain less than 10% of the variance in the growth rates, however.

When the sample is divided by income level, we find an investment coefficient for advanced countries of .16 and for underdeveloped countries of .27, which confirms the greater importance of capital accumulation for growth in poor countries.<sup>2</sup>

Population Growth. The growth of population is used here as a proxy for the increase in labor inputs, since a direct measure of the latter is not available in many countries. For the pooled samples, we find regression coefficients of .40 for underdeveloped countries, .78 for advanced countries, and .66

1. The assumptions underlying this interpretation are developed in Hagen and Hawrylyshyn (1969).

2. This difference is largely offset by the lower average rates of investment in poor countries, however.

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for the total sample. This variable alone gives a value of  $R^2$  of .50 in advanced countries, but it adds very little to the explanation of growth in underdeveloped countries. This result gives strong support to the surplus labor hypothesis for underdeveloped countries.

The inclusion of population growth has little effect on the regression coefficients of the underdeveloped countries, but it reduces the estimates for investment and capital inflow in the developed countries quite substantially.

<u>Capital Inflow</u>. In a neoclassical context, the capital inflow should add nothing to the effect of the rate of investment. However, if growth is limited by a shortage of imports in a sufficient number of countries, we would expect that the import-augmenting effect of external capital would add something to the pure investment effect. The two-gap hypothesis is therefore tested by the inclusion of  $\frac{F}{Y}$  as well as  $\frac{I}{Y}$  in the regression equation.

The regression coefficient for  $\frac{J}{Y}$  is .12 and highly significant for all countries in regression (A3) and varies only slightly between underdeveloped and developed countries. The coefficients vary between periods but are unaffected by the exclusion of the export variable. They rise slightly when  $\frac{I}{Y}$  is excluded.

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For the underdeveloped countries, these results lend some support to the hypothesis that growth is often limited by a shortage of foreign exchange. An alternative interpretation might be that investment financed by foreign capital is more productive, but this seems less plausible.

Size of Country. The population of the country has a small but significantly positive effect on the rate of growth in almost all regressions. The typical coefficient value (.005) implies that an increase in growth rate of 1% corresponds to a size difference of 7 times. This size effect only shows up when we allow for investment and capital inflow; otherwise the population coefficient is not significant.

<u>Exports</u>. Since exports are part of GNP, we would expect the regression coefficient of  $(\frac{\Delta E}{Y})$  to be 1.0 if the effect of exports on growth is no different from that of any other component. This is approximately the case for the underdeveloped countries, for which the export coefficients are not significantly different from 1.0. In the advanced countries, they are significantly less than 1.0 in almost all cases. These results lend no support to the hypothesis that growth of GNP is generally favored by high export growth.

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<u>Stability of Estimates</u>. We have carried out F-tests to check the stability of all parameters across time and across development levels. The simplest form we estimated (regression "B") relates growth rate to population and income alone. F-tests of the hypothesis that coefficients in that relation were the same in 1950-59 as in 1960-65 would not allow rejection of the null hypothesis of a stable relation at any reasonable level of significance.<sup>1</sup> However, the hypothesis that coefficients were the same across income groups was rejected very strongly for both 1950-59 and the pooled sample. This indicates that our simple log-quadratic form does not capture all of the nonlinearity in the gross effects of income.

The picture changes when we move/the most elaborate regression we present, the "BIJEL" form. The temporal stability persists, but in this relation the null hypothesis of constant coefficients across income groups cannot be rejected. A narrowly classical approach to the statistics might suggest that discussion of differences by income group in the coefficients is unjustified. The actual coefficients in the relations do in some cases differ by economically significant amounts, as we have pointed out. The reader should simply bear in mind that, while we have good evidence that most of the variables discussed

1. F-statistics were all below two with sample size of 50 for each period.

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have important explanatory power, the <u>differences</u> among coefficients by income groups are only suggestive. The data do not provide positive evidence that the estimated BIJEL relation does not hold across all income groups.

Effects of the Level of Development. From the preceding analysis we can distinguish three types of effect of the level of development on the rate of growth: (i) the effect of systematic variations in growth-producing factors -- investment, population growth, capital inflow -- with income level; (ii) changes in the productivity of these factors with the income level; (iii) systematic variations in omitted elements, such as entrepreneurship and technological change. We will analyze the total variation in growth rates in these terms.

Of the six explanatory variables used here, three -investment rates, population growth, and capital inflow -have been shown earlier to vary systematically with the level of income.<sup>1</sup> The total effect of the level of development can therefore be measured by the "B" regressions in Tables 7-9 which have  $\ln \gamma$ ,  $(\ln \gamma)^2$ , and  $\ln N$  as exogenous variables. Graphs of the three pooled regressions against the level of income are shown in Figure DI for a country of 10 million population.

A study of the regression equations and their residuals shows that the simple two-parameter function employed here represents the underlying variation better when it is fitted separately to the poor and rich countries instead of the whole

1. See Table 6 above. The population size is unrelated to the level of income and can therefore be allowed for separately.

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sample. The U3 curve in Figure D1 fits the underlying data well in the range of incomes from \$50 to \$300 and shows a peak in the growth rates of about 5.5% in the vicinity of \$200.<sup>1</sup> At high income levels, the curvature should be reversed (as shown in the D3 curve) with growth rates falling at a declining rate.

Our previous discussion showed that about half of the total variation in growth rates is explained by the three factors which vary systematically with the level of income: investment, labor force growth, and capital inflow. When these factors (plus size and export growth) are held constant at their mean values, we can discover the residual effect of the level of development. Figure D2 is constructed on this basis and shows the variations of growth rates with income level for the two groups of countries and the whole sample.<sup>2</sup> It shows that a rise in the level of development tends to reduce the rate of growth once we have allowed for the three growth-producing factors thereafter.

In summary, we have the following general picture of the factors affecting the rate of growth at different levels of income:

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<sup>1.</sup> Figure D1 is based on the B regressions, which are significantly different for the developed and underdeveloped groups.

<sup>2.</sup> Figure D2 is based on the BIJEL regressions, which are not significantly different for the two groups (as indicated above).

(1) At the lowest income levels investment rates are low and population growth contributes little or nothing to the growth of GNP. The observed rise in growth rates up to \$200 is due partly to rising investment and capital inflow and partly to unspecified factors associated with the level of development.<sup>1</sup>

(2) At middle income levels the growth of the labor force remains high and contributes increasingly to income growth. The productivity of investment falls slightly but is offset by rising levels of investment.

(3) Among the developed countries there is a net decline in aggregate growth rates as income levels rise. This is due to the falling rate of population growth, the shift from capital importings to capital exporting, and perhaps some increase in the capital-output ratio. The unspecified "level effects" are negative at higher incomes.

Several important differences in growth mechanisms are brought out by a comparison of the regression results for underdeveloped and developed countries.<sup>2</sup> While the growth of the labor force is a major determinant of growth in developed countries, it is only marginally significant in the underdeveloped

1. The nature of these factors is suggested in Adelman and Morris (1967).

2. Robinson (1969) gives a comparison to time series analysis that is generally in accord with these conclusions.

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group. The higher savings rates in advanced countries are largely offset by the lower productivity of investment and the outflow of capital. Finally, a rise in the level of development is growth producing in poor countries but growth reducing in rich ones.

Given the complexity of the interaction among these elements and the averaging effects of cross-country analysis, we cannot hope to derive very accurate estimates of individual factors from this type of study. On the whole, our results for the decade 1950-59 are considerably more satisfactory from both a statistical and economic standpoint than the analysis for the shorter period 1960-65, in which the results for the underdeveloped countries differ considerably from the earlier period.<sup>1</sup>

### V. CONCLUSIONS

Our main purpose in this study has been to provide a comprehensive test of a quantitative method of comparative analysis that derives from earlier studies by Colin Clark and Simon Kuznets. The results of section III demonstrate the value of econometric analysis of intercountry relations and

1. For the other three sub-samples, the value of  $R^2$  is over .75 but it falls to less than .40 in the U2 regressions. The differences in the estimates for the two periods are not statistically significant, however.

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confirm their general stability over time. While time trends are observable in a few of the development patterns, they are not large enough to distort an analysis based on cross-country relations very seriously.

In Section IV we have used the analysis of structural change as part of an explanation of sources of growth and showed that growth processes differ considerably between underdeveloped and developed economies.

In general we have focussed on testing the validity of these analytical techniques rather than on a detailed interpretation of the results, which is undertaken elsewhere.<sup>1</sup> It is our hope that the present summary may provide a starting point for more detailed studies of some relations that are only given passing attention here.

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		ACCUMULATION PATI INS (UNLOGGED FORM)								
jak .	TANK CEMENT	Constant	<u>    ln  y</u>	<u>(ln y)<sup>2</sup></u>	1n N	T	F	R <sup>2</sup>	SEE ·	
	INVESIMENT *				Luci-	1.1.1.1.1.1				
A1)	Gross National Saving as % of GNP.	-0.0598 (0.618)	0.0297 (0.919)	0.0010 (0.345)	0.0055 (2.172)	0.0031 (0.847)	-0.4894 (12.25)	.6448	.0436	
A2)	Gross Domestic Invest- ment as % of GDP.	-0.1638 (1.504)	0.0832 (2.232)	-0.0040 (1.271)	0.0004 (0.126)	0.0053 (1.240)	0.1108 (2.169)	.3327	.0533	
A3)	Capital Inflow (Net Imports of Goods & Ser- vices as % of GDP)	0.2229 (2.080)	-0.0531 (1.467)	0.0037 (1.210)	-0.0159 (5.786)	0.0069 (1.685)		.1685	.0498	
	GOVERNMENT REVENUE									
A4)	Government Revenue as % of GDP.	0.1563 (1.314)	-0.0444 (1.096)	0.0086 (2.483)	0.0005 (0.163)	0.0019 (0.377)		.5140	.0588	
A5)	Tax Revenues as % of National Income.	0.3064 (2.137)	-0.1248 (2.533)	0.0178 (4.194)	0.0079 (2.117)	-0.0019 (0.317)		.6237	.0675	
	EDUCATION									
A6)	Education Expenditure by Gov't. as % of GDP	-0.0146 (0.626)	0.0046 (0.581)	-0.0001 (0.178)	0.0008 (1.340)	0.0052		.1776	.0118	
A7)	Primary and Secondary School Enrollment Ratio	-1.420 (5.778)	0.4662 (5.445)	-0.0231 (3.093)	0.0191 (2.958)	0.0269 (3.623)		.6644	.1537	
A8)	Adult Literacy Rate	-1.528 (1.869)	0.5200 (1.811)	-0.0252 (0.990)	0.0233 (1.401)	-0.0071 (0.335)		.4684	.2024	

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	TABLE	3 B	
ACCUMULATION	PATTERNS	(LOGGED	FORM

		Constant	ln v	$(1n y)^2$	1n N	Т	F	R <sup>2</sup>	SEE
	INVESTMENT	Gonstant	<u></u>	<u>(111 ))</u>					
A1)	Gross National Saving as % of GNP	-3.307 (3.104)	0.2555 (0.714)	-0.0010 (0.033)	0.0324 (1.171)	-0.0249 (0.615)	-2.392 (5.437)	.3173	.4801
A2)	Gross Domestic Invest- ment as % of GDP	-3.635 (6.424)	0.4551 (2.374)	-0.0223 (1.362)	-0.0003 (0.017)	0.0204 (0.919)	0.6149 (2.316)	.3555	.2768
A3)	Capital Inflow (Net Imports of Goods & Ser vices as % of GDP)								
	GOVERNMENT REVENUE								
A4)	Government Revenue as % of GDP	-2.397 (3.538)	-0.0282 (0.122)	0.0266 (1.346)	-0.0125 (0.688)	-0.0041 (0.145)		.4477	.3348
A5)	Tax Revenue as % of Nationnal Income	-2.621 (3.122)	-0.0713 (0.247)	0.0402 (1.615)	0.0178 (0.820)	-0.0310 (0.899)		.5310	.3951
	EDUCATION								
A6)	Education Expenditures by Gov't. as % of GDP	-6.392 (5.70)	0.5595 (1.453)	-0.0385 (1.160)	0.0049 (0.161)	0.2163 (4.648)		.1221	.5707
A7)	Primary and Secondary School Enrollment Ratio	-8.022 (11.180)	2.0437 (8.178)	-0.1383 (6.349)	0.0681 (3.607)	0.0578 (2.662)		.5676	.4486
A8)	Adult Literacy Rate	-9.274 (3.852)	2.5483 (3.013)	-0.1783 (2.382)	0.0807 (1.650)	-0.0548 $(0.881)$		.3672	.5962

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RESOURCE ALLOCATION PATTERNS (UNLOGGED FORM)

	(A)								
FIN	AL DEMAND	Constant	ln Y	(ln Y) <sup>2</sup>	ln N	Ţ	F	R <sup>2</sup>	SEE
Bl)	Personal Consumption as % of GDP	0.8697 (6.874)	-0.0003 (0.008)	-0.0038 (1.037)	-0.0029 (0.866)	-0.0108 (2.180)	0.7052 (11.88)	.5551	.0619
B2)	Government Consumption as % of GDP	0.3106 (3.547)	-0.0767 (2.592)	0.0068 (2.693)	-0.0013 (0.594)	0.0088 (2.720)	0.0760 (2.088)	.1135	.0361
B3)	Food Consumption as % of Total Consumption	0.8200 (3.144)	-0.0408 (0.482)	-0.0050 (0.735)	0.0107	-0.0021 (0.303)	0.2272 (2.414)	.7427	.0581
STR	UCTURE OF PRODUCTION								
B4)	Primary Output as % of GDP	1.515 (7.971)	-0.2744 (4.249)	0.0125 (2.249)	-0.0120 (2.654)	-0.0082 (1.590)	0.0020 (0.095)	.6868	.0921
B5)	Industry Output as % of GDP	-0.3546 (3.216)	0.1050 (2.803)	-0.0016 (0.507)	0.0213 (7.930)	-0.0030 (0.977)	0.0059 (0.479)	.7517	.0535
B6)	Service Output as % of GDP	-0.2376 (1.354)	0.1904 (3.197)	-0.0145 (2.838)	-0.0060 (1.354)	0.0101 (1.966)	0.3448 (4.622)	.1879	.0820
B7)	Utilities Output as % of GDP	-0.0134 (0.233)	0.0121 (0.618)	0.0006	-0.0025 (1.780)	0.0022 (1.346)	0.0937 (3.769)	.3953	.0262
TRA	DE								
B8)	Exports as % of GDP	0.2836 (1.319)	-0.0280 (0.391)	0.0044 (0.734)	-0.0498 (9.155)	0.0145 (1.851)	-0.3692 (3.383)	.3283	.0916
B9)	Primary Exports as % of GDP	0.3995	-0.0337 (0.609)	0.0008	-0.0442 (10.516)	0.0028	-0.3315 (3.927)	.4155	.0708
B10)	Industry Exports as % of GDP	-0.1159 (0.572)	0.0057	0.0036	-0.0056 (1.084)	0.0117 (1.588)	-0.0378 (0.367)	.2506	.0863
B11)	Imports as % of GDP	0.0311 (0.133)	0.0654 (0.848)	-0.0362 (0.556)	-0.0498 (8.608)	0.0158 (1.853)	0.2942 (2.222)	.3911	.0930
B12)	Primary Imports as % of GDP	-0.2006 (1.708)	0.0742 (1.910)	-0.0050 (1.541)	-0.0040 (1.382)	0.0032	0.2002 (3.003)	.1578	.0468
B13)	Industry Imports as % of GDP	0.2317 (1.475)	-0.0088 (0.169)	0.0014 (0.327)	-0.0457 (11.746)	0.0125 (2.186)	0.0940 (1.475)	.4859	.0626

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TAE 4B

RESOURCE ALLOCATION PATTERNS (LOGGED FORM)

FIN	LAL DEMAND	Constant	ln Y	(ln Y) <sup>2</sup>	ln N	т	ਤ	R <sup>2</sup>	SFF
B1)	Personal Consumption as % of GDP	-0.1733 (0.948)	0.0156	-0.0067 (1.270)	-0.0033	-0.0155	1.043	. 5539	.0894
B2)	Government Consumption as % of GDP	-0.7387 (0.944)	-0.5895 (2.231)	0.0542 (2.404)	-0.0158 (0.782)	0.0629 (2.171)	0.3946 (1.214)	.0856	.3227
B3)	Food Consumption as % of Total Consumption	-1.232 (1.930)	0.3545	-0.0507	0.0304 (2.648)	-0.0106 (0.631)	0.5879	.7745	.1422
STR	UCTURE OF PRODUCTION								
B4)	Primary Output as % of GDP	0.4215 (0.583)	-0.0110 (0.045)	-0.0423 (2.006)	-0.0427 (2.474)	-0.0519 (2.632)	-0.0693 (0.858)	.6863	.3504
B5)	Industry Output as % of GDP	-6.228 (10.753)	1.1820 (6.010)	-0.0681 (4.040)	0.1079 (7.636)	-0.0209 (1.302)	-0.0279 (0.430)	.7068	.2810
B6)	Service Output as % of GDP	-2.838 (6.379)	0.5632	-0.0426 (3.298)	-0.0085 (0.762)	(0.0257) (1.972)	(1.0755) (5.686)	.2367	.2080
B7)	Utilities Output as % of GDP	-4.569 (7.451)	0.4287 (2.023)	-0.0153 (0.846)	-0.0166 (1.073)	0.0426	1.0566	.4775	.2850
TRA	DE								
B8)	Exports as % of GDP	-1.012 (0.834)	-0.1873 (0.464)	0.0264 (0.772)	-0.3159 (10.293)	0.0550 (1.243)	-2.1059 (3.416)	.3636	.5171
B9)	Primary Exports as % of GDP	0.4080	-0.2210 (0.404)	-0.0087 (0.188)	-0.4926 (11.839)	-0.0026 (0.043)	-2.0385 $(2.439)$	.4939	.7009
B10)	Industry Exports as % of GDP	-15.75 (5.183)	2.7839 (2.753)	-0.1438 (1.682)	0.0322 (0.419)	0.2061 (1.859)	4.0375 (2.616)	.4301	1.295
B11)	Imports as % of GDP	2.754 (2.794)	0.1598 (0.490)	-0.0065 (0.235)	-0.2911 (11.919)	0.0595	0.5055	.5001	.3930
B12)	Primary Imports as % of GDP	-7.506 (4.416)	1.2500 (2.223)	-0.0814 (1.716)	-0.0838 (1.990)	0.0367	3.0420 (3.152)	.2332	.6778
B13)	Industry Imports as % of GDP	-0.3114 (0.310)	-0.3540 (1.066)	0.0308	-0.3941 (15.835)	0.0782	-0.1087 (0.191)	.6081	.4004

PC	OPULATION A	ND LABOR FO	ORCE PATTE	RNS (UNLOG	GED FORM)		
POPULATION GROWTH	Constant	ln Y	(ln Y) <sup>2</sup>	ln N	T	_R <sup>2</sup>	SEE
Cl) Birth Rate	0.7127 (3.765)	-0.0418 (0.650)	-0.0033 (0.613)	-0.0152 (3.376)	0.0007	.4965	.085
C2) Death Rate	0.8378 (9.106)	-0.2211 (7.184)	0.0169 (6.584)	-0.0018 (0.953)	-0.0079	.3663	.0342
URBANIZATION							
C3) Urban Population	-1.250 (3.929)	0.4070 (3.701)	-0.0210 (2.200)	0.0121 (1.694)	-0.0024 (0.271)	.6784	.1153
LABOR ALLOCATION							
C4) Share of Primary Labor	1.708 (6.707)	-0.2123 (2.452)	-0.0004 (0.054)	-0.0006 (0.099)	0.0054 (0.634)	.7723	.1214
C5) Share of Industry Labor	-0.1476 (0.532)	0.0301 (0.323)	0.0060	-0.0055 (0.898)	-0.0006 (0.078)	.5758	.0793
C6) Share of Service Labor	0.7322 (1.831)	-0.2270 (1.713)	0.0265	-0.0147 (2.052)	0.0090	.4662	.0922

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### TABLE 5B

POPULATION AND LABOR FORCE PATTERNS (LOGGED FORM)

POPULATION GROWTH	Constant	ln Y	(ln Y) <sup>2</sup>	ln N	T	R <sup>2</sup>	SEE
C1)							
1							
C2)							
URBANIZATION							
C3) Urban Population	-11.25 (10.260)	3.0456 (8.035)	-0.2164 (6.577)	0.0496 (2.011)	-0.0479 (1.583)	.7062	.3973
LABOR ALLOCATION							
C4) Share of Primary Labor	-1.805 (2.441)	0.8930 (3.552)	-0.1206 (5.818)	0.0140	0.0149 (0.569)	.7425	.3524
C5) Share of Industry Labor	-5.538 (3.847)	0.8593 (1.775)	-0.0298 (0.732)	-0.0127 (0.402)	-0.0251 (0.636)	.5511	.4114
C6) Share of Service Labor	-1.567 (1.085)	-0.1687 (0.352)	0.0383	-0.0398 (1.533)	0.0327 (1.024)	.3952	.3330

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# TABL 5

1.2

## NORMAL VARIATION IN ECONOMIC STRUCTURE WITH LEVEL OF DEVELOPMENT

	*			*Proportion Completed at					
	INVESTMENT	\$50	\$100	\$200	\$400	\$800	\$2000	\$200	\$400
Al)	Gross National Saving as % of GNP	7.8	11.0	14.1	17.1	19.9	23.4	40	78
A2)	Gross Domestic Investment as % of GDP	12.7	14.8	17.1	19.4	21.8	25.2	35	7,3
A3	Capital Inflow (Net Import of Goods & Services as % of GDP equals A2-A1)	4.9	3.8	3.0	2.4	2.0	1.8	61	93
	GOVERNMENT REVENUE	÷							
A4)	Government Revenue as Percentage of GDP	12.2	14.2	17.0	20.6	25.1	32.4	24	42
A5)	Tax Revenue as Percentage of National Income Education	9.8	12.7	16.7	21.8	28.0	38.0	25	43
	EDUCATION								
A6)	Education Expenditure by Government as % of GDP	1.93	2.19	2.44	2.68	2.91	3.20	40	59
A7)	Primary and Secondary School Enrollment Ratio	17.5	36.2	52.6	66.9	78.9	91.4	48	67
A8)	Adult Literacy Rate	15.3	36.5	55.2	71.5	85.4	100.1	47	66
	FINAL DEMAND								
Bl)	Personal Consumption as Percentage of GDP	77.1	74.9	72.2	69.2	65.9	60.9	30	49
B2)	Government Consumption as Percentage of GDP	13.9	12.6	12.0	11.9	12.6	14.5		
B3)	Food Consumption as Percentage of Total Consumption	61.9	56.1	49.9	43.0	35.9	25.6	33	52
	STRUCTURE OF PRODUCTION								
B4)	Primary Output as Percentage of GDP	58.1	46.4	36.0	26.7	18.6	9.8	46	65
B5)	Industry Output as Percentage of GDP	7.3	13.5	19.6	25.5	31.4	38.9	39	58
B6)	Service Output as Percentage of GDP	29.9	34.6	37.9	39.9	40.5	39.3	85	100
B7)	Utilities Output as Percentage of GDP	4.63	5.74	6.95	8.27	9.69	11.74	33	51

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	<u>T</u> 2	BLE 6 (	Continue	d)				1	
1				Per Caj	pita GNP			C 510	eted at
		\$50	\$100	\$200	\$400	\$800	\$2000	\$200	\$400
	TRADE		'						*:
B8)	Exports as Percentage of GDP	16.5	17.1	18.2	19.7	21.6	24.8	21	3.0
B9)	Primary Exports as Percentage of GDP	16.5*	16:3	14.5	12.8	11.2	9.1	41	59
B10)	Industry Exports as Percentage of GDP	0 *	0.8	3.7	6.9	10.5	15.7	24	• 44
B11)	Imports as Percentage of GDP	17.1	19.5	21.5	23.2	24.6	25.9	50	69
B12)	Primary Imports as Percentage of GDP	1.8	3.8	5.4	6.6	7.2	7.4	73	89 .
B13)	Industry Imports as Percentage of GDP	15.3	15.6	15.9	16.4	17.0	18.0	22	41
	POPULATION GROWTH								
Cl)	Birth Rate	46.6	41.8	36.6	31.1	25.3	17.1	34	53
C2)	Death Rate	20.5	15.2	11.4	9.3	8.9	10.7	93	114
	URBANIZATION								
C3)	Urban Population	6.9	20.0	33.8	45.5	55.3	65.1	49	68
	LABOR ALLOCATION								
C4)	Share of Primary Labor	84.2*	74.0*	57.4	43.9	29.0	7.1	35	52
C5)	Share of Industry Labor	6.5*	9.9*	15.3	23.4	31.1	40.5	26	50
C6)	Share of Service Labor	19.5*	21.8*	27.3	32.7	40.0	52.4	24	40

Footnote: a) Estimates based on the unlogged form of the regressions in Tables 3-5 (with N=10 million) except those indicated by an asterisk, where the logged form provides a better fit. Estimates for A1-A3 and C4-C6 were computed from a compatible sample in order for values to add to 100%.

#) The last two columns measure the proportion of the change from \$50 to \$2000 that is completed at the levels of \$200 and \$400.

TABL 7 GROWTH RATE REGRESSIONS

1

Under \$700 GNP Per Capita

5 4

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	Reg. #	Form #	Obs.	Constant	ln Y	(ln Y) <sup>2</sup>	ln N	I/Y	J/Y	AE/Y	AL/L	R <sup>2</sup>	SEE
U1 1950/59	653	BIJE	34	-0.2789 (2.895)	0.1263 (3.380)	-0.0135 (3.726)	0.0053	0.1475 (2.254)	0.1914 (3.560)	0.6080		.7129	.0120
-	517	BIJE	31	-0.3253 (2.538)	0.1449 (2.984)	-0.0153 (3.341)	0.0045 (1.992)	0.1639 (2.340)	0.1824 (3.214)	0.4871 (1.492)		.7254	.0122
1.9	512	BIJ	31	-0.3529 (2.718)	0.1560 (3.174)	-0.0165 (3.562)	0.0029 (1.437)	0.2269	0.1770 (3,051)			.6999	.0125
	508	IJ	31	0.022 (1.688)				0.1538 (1.912)	0.1609 (1.841)			.2227	.0190
	511	В	31	-0.4037 (2.225)	0.1824 (2.663)	-0.0183 (2.834)	0.0040 (1.420)					.3637	.0175
	703	BIJEL	31	-0.2214 (1.722)	0.0935 (1.832)	-0.0100 (2.039)	0.0064	0.1400 (2.117)	0.2125	0.7499 (2.291)	0.5913 (2.165)	.7719	.0114
	708	BL	31	-0.3982 (2.064)	0.1797 (2.385)	-0.0180 (2.499)	0.0041 (1.376)				0.0382	.3639	.0178
U2 1960/65	655	BIJE	48	-0.0042 (0.150)	0.0175 (1.256)	-0.0031 (1.747)	-0.0001 (0.032)	0.2689	-0.0535 (0.475)	0.9710 (2.306)		.3179	.0284
	532	BIJE	31	-0.2579 (0.920)	0.1064 (1.022)	-0.0111 (1.146)	0.0021 (0.472)	0.3255	-0.0170 (0.104)	0.1567		.3811	.0229
	527	BIJ	31	-0:2766 (1.029)	0.1138 (1.143)	-0.0118 (1.273)	0.0015	0.3397	-0.0130 (0.081)			,3786	.0225
	523	IJ	31	0.0071 (0.446)				0.2583	-0.0178 (0.112)			.2562	.0233
	526	В	31	-0.1986 (0.629)	0.0880 (0.752)	-0.0080 (0.741)	0.0055 (1.295)					.0672	.0266
	721	BIJEL	31	-0.1757 (0.539)	0.0675	-0.0072 (0.586)	0.0029	0.3292 (2.986)	0.0147	0.2239	0.3633	.3883	.0233
	726	BL	31	-0.2410 (0.674)	0.1078 (0.771)	-0.0100 (0.755)	0.0053				0.1946	.0698	.0270
U3 1950/65	562	BIJE	62	-0.2763 (1.933)	0.1185 (2.213)	-0.0125 (2.493)	0.0032 (1.350)	0.2677	0.1090 (1.555)	0.2111 (0.722)		.4610	.0181
	745	BIJEL	62	-0.1990 (1.278)	0.0812 (1.323)	-0.0087 (1.491)	0.0041 (1.667)	0.2646	0.1316 (1.824)	0.3004	0.3960	.4756	.0181
	750	BL	62	-0.2908 (1.551)	0.1312 (1.796)	-0.0127 (1.832)	0.0049				-0.0440 (0.117)	.1327	.0226

TAF 8 GROWTH RATE REGRESSIONS

Over \$700 GNP Per Capita

	Reg. #	Form	+ Obs.	Constant	ln Y	(ln Y) <sup>2</sup>	l'n N	I/Y	J/Y	ΔE/Y	∆L/L	R <sup>2</sup>	SEE
D1 1950/59	647	BIJE	19	0.5224 (0.440)	-0.1386 (0.143)	0.0084 (0.350)	0.0062 (1.409)	0.2974 (2.659)	0.1332 (1.420)	0.0317 (0.099)		.6579	.0164
	487	• BIJE	19	0.5224	-0.1386 (0.413)	0.0083 (0.350)	0.0062 (1.409)	0.2974 (2.659)	0.1331 (1.420)	0.0317 (0.099)		.6579	.0163
	482	BIJ	19	0.5211 (0.457)	-0.1374 (0.426)	0.0082	0.0061 (1.478)	0.2965	0.1321 (1.475)			.6576	.0157
	478	IJ.	19	-0.0097 (0.403)				0.2392 (2.244)	0.1630 (2.288)			.4806	.0174
	481	В	19	1.668 (1.437)	-0.4312 (1.299)	0.0285	-0.0014 (0.355)					.3897	.0195
	709	BIJEL	19	0.3396	-0.0749 (0.310)	0.0035	0.0062 (1.958)	0.0794 (0.783)	0.0450	0.3692 (1.482)	1.0974 (3.513)	.8388	.0117
	714	BL	19	0.5687	-0.1227 (0.579)	0.0063 (0.418)	0.0035 (1.313)				1.1380 (5.102)	.7866	.0120
D2 1960/65	649	BIJE	19	-0.0170 (0.021)	0.0193 (0.083)	-0.0020 (0.121)	0.0024 (1.057)	0.1078 (1.564)	0.1780 (3.650)	-0.0302 (0.140)		.7533	.0083
	502	BIJE	19	-0.0170 (0.021)	0.019 (0.083)	-0.0020 (0.121)	0.0024 (1.057)	0.1078 (1.564)	0.1778 (3.654)	-0.0302 (0.140)		.7533	.0083
	497	BIJ	19	0.0134 (0.018)	0.0106	-0.0013 (0.089)	0.0023 (1.090)	0.1056 (1.658)	0.1751 (4.121)			.7529	.0080
	493	IJ	19	0.0330 (2.623)				0.0768 (1.482)	0.1730			.7025	.0081
	496	В	19	0.9213 (0.867)	-0.2274 (0.764)	0.0150 (0.719)	-0.0038 (1.441)	-				.3006	.0126
	727	BIJEL	19	-0.5493 (0.718)	0.1620 (0.756)	-0.0118 (0.785)	0.0038 (1.842)	0.0952 (1.568)	0.1497 (3.352)	0.2028	0.5535 (2.148)	.8262	.0073
	732	BL	19	0.2252 (0.190)	-0.0362 (0.109)	0.0017	-0.0024 (0.829)				0.4643 (1.234)	.3693	.0124
D3 1950/65	547	BIJE	38	0.4577	-0.1208	0.0075	0.0048 (2.106)	0.2456	0.1544 (3.212)	-0.0101 (0.0550)		.6391	.0125
	751	BIJEL	38	0.0378	-0.0048 (0.030)	-0.0005 (0.047)	0.0061 (3.176)	0.1644 (3.027)	0.1104 (2.687)	0.3317 (1.908)	0.7823 (3.968)	.7633	.0103
	756	BL	38	0.4522	-0.0978 (0.506)	0.0055	0.0004				0.9049 (4.158)	.5200	.0139

	TA	29
GROWTH	RATE	REGRESSIONS

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	Reg.	#	Form	# Obs.	Constant	ln Y	(ln Y) <sup>2</sup>	ln N	I/Y	J/Y	AE/Y	AL/L	R <sup>2</sup>	SEE
A1 1950/59	659		BIJE	53	-0.0311 (0.484)	0.0210 (0.959)	-0.0029 (1.565)	0.0057	0.2183 (4.044)	0.1560 (3.418)	0.3191 (1.641)		.5734	.0146
	577		BIJE	50	0.0234 (0.282)	0.0036 (0.129)	-0.0015 (0.650)	0.0048 (2.488)	0.2264 (4.114)	0.1621 (3.430)	0.2765 (1.384)		.5841	.0147
	572		BIJ	50	0.0150 (0.179)	0.0059	-0.0017 (0.708)	0.0042	0.2579	0.1593			.5656	.0149
	568		IJ	50	0.0271 (2.831)				0.0982	0.1844 (3.289)			.2622	.0188
	715		BIJEL	50	-0.0312 (0.454)	0.0121 (0.528)	-0.0018 (0.952)	0.0074 (4.418)	0.1560 (3.294)	0.1540 (3.984)	0.6235	0.8312 (4.735)	.7289	.0120
	720		BL	50	-0.0945 (0.872)	0.0430 (1.197)	-0.0038 (1.258)	0.0039				0.7851 (3.312)	.2675	.0191
A2 1960/65	661		BIJE	67	-0.0014 (0.056)	0.0131 (1.385)	-0.0020 (2.261)	0.0017	0.1873 (2.319)	0.0083	0.7520 (2.499)		.2802	.0250
	592		BIJE	50	-0.0046 (0.040)	0.0075	-0.0014 (0.442)	0.0036	0.2471 (3.673)	0.0989	0.1555 (0.527)		.3629	.0188
	587		BIJ	50	-0.0124 (0.111)	0.0102	-0.0016 (0.516)	0.0033	0.2599 (4.180)	0.1076 (1.481)			.3588	.0187
	583		IJ	50	0.0177 (1.684)				0.1629 (3.258)	0.1165 (1.700)			.2381	.0197
	733		BIJEL	50	-0.0338 (0.305)	0.0075	-0.0011 (0.376)	0.0050	0.2598	0.0901 (1.232)	0.2879	0.6092	.4121	.0183
	738		BL	50	-0.0591 (0.430)	0.0335	-0.0026 (0.721)	0.0021 (0.715)				0.2253	.0217	.0228
A3 1950/65	607		BIJE	100	0.0194 (0.286)	0.0019 (0.084)	-0.0011 (0.600)	0.0041 (2.615)	0.2429	0.1344 (3.271)	0.1837 (1.097)		.4521	.0166
	739		BIJEL	100	-0.0173 (0.272)	0.0049 (0.233)	-0.0011 (0.619)	0.0059	0.2218	0.1242 (3.241)	0.3906 (2.375)	0.6634 (3.932)	.5309	.0155
	744		BL	100	-0.0658 (0.760)	0.0332 (1.167)	-0.0027 (1.158)	0.0030 (1.563)				0.5733 (2.632)	.0992	.0211

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Statement to the U.N. Economic and Social Council by Hollis B. Chenery Economic Adviser to the President International Bank for Reconstruction and Development July 6, 1971: United Nations, Geneva

WBG

### I. ASSESSMENT OF RECENT TRENDS

### Changing Appreciation of the Development Task

1. The World Economic Survey, 1969-70 gives a comprehensive summary of the economic evolution of the developing countries in the 'sixties and their condition as they enter the Second Development Decade. To a great extent the picture is one which must be familiar to the members of this Council - thanks largely to the efforts of the U.N. and UNCTAD Secretariats over the years in collecting the statistics and other information and in bringing out the general tendencies which they reveal. At the same time, the picture before us is inevitably complex, given the differences of geography and history among the many countries, embracing over a billion-and-a-half people, which we classify as "developing."

The Managing Director of the International Monetary Fund 2. has concentrated on developments within, and payments relations between, the main industrial countries, while stressing their importance for the developing countries. There is thus a happy division of labour between the Fund and the Bank, since it is natural for me to concentrate on the developing countries. Last November, Mr. McNamara reported to this Council on developments in the activities of the World Bank Group, and in particular on efforts being made to broaden the scope of these activities, including enlarged lending for agriculture, education and urban development projects. It would not be in the spirit of this discussion for me to concentrate on the part played by the World Bank in the general development effort. Instead, I would like to reflect on the implications for the coming decade of a review of development over the past ten years.

3. While development, in the widest sense, has been very considerable in many of these countries in recent years, perhaps the most striking change in the recent past has been in the collective appreciation of the problems and needs of development. Provision of adequate employment opportunities, and spreading of the gains of development to the most deprived sections of the community, now appear as important, for many countries, as increase of total production and income. The Second Development Decade document presents not only a target for the rate of growth of product but also a series of social objectives. Most of these are stated in rather general terms, reflecting the great diversity of the developing countries. Nevertheless, their inclusion shows concern with the quality of development and the distribution of its benefits.

### Employment and Income Distribution

4. One theme which is coming increasingly to the fore is the problem of providing adequate employment opportunities in the 'seventies for rapidly growing populations of working age. It is admittedly difficult to define and measure "unemployment" and "under-employment" in relation to the circumstances of developing countries. The important point, though, is recognition of the need to search for ways of spreading the material benefits of development to those who need them most.

5. This is something we recognize within the Bank. It has implications for the pattern of our activities and for our project appraisal methods. There is a general need for increased efforts to learn the lessons of past development experience - an activity which should fit naturally into plans for more systematic review and appraisal.

Some experts have argued that there may be a conflict 6. between the goals of rapid increase of output and the provision of adequate employment opportunities. It seems to me that this formulation has only very limited validity. In the short run, it is possible to secure some increase in employment by a shift toward less efficient labour intensive forms of production at a cost of slower growth of output. In the longer term, however, such policies are self-defeating because they produce less capital and foreign exchange to employ the growing labour force of the future. In short, the problem cannot be solved by substituting "employment" for "growth" as the objective of We must help the developing countries devise development. policies that secure greather employment and better distribution of income without a significant sacrifice in the growth of total output.

7. A number of countries have been able, in recent years, to combine rapid growth of product with rapid expansion of employment opportunities. Several of these are countries which have achieved rapid increase of manufacturing, including manufacturing for export, leading also to increase in demand for agricultural products. The lessons to be learnt from these rapidly growing countries deserve careful study - another possible task for review and appraisal.

### Rural Development

8. It is natural for developing countries to look to industrialization as a major part of development; demand for industrial products increases much more rapidly than demand for agricultural goods; industry gives scope for major increases of productivity, and hence of income levels, through adoption of technologies which are widely known; urban unemployment, swollen by the drift from the countryside, thrusts itself on the attention of governments.
Recently, however, the need to provide increased employment 9. opportunities in the countryside has become more obvious. It has been pointed out that manufacturing employment typically grows at only 60% or 70% of the growth of output, and that provision of adequate urban amenities is costly. Against these considerations must be set the slower growth of effective demand for agricultural products, both for export and for internal use in spite of pressing needs to improve nutrition, and the high cost of providing such things as electricity and pure water to scattered rural populations. To meet the needs of rapidly growing populations, there is a pressing need for the development of economic, non-agricultural activities in the countryside or in small towns, and international organizations will have to consider what can be done to help this form of development.

#### Experience of Accelerated Growth

10. While recent thinking has emphasized that it is not enough to think in terms of the growth of total product and income, it is clear that a fairly rapid growth of national product in the poorer countries is a necessary condition for the achievement of their economic social goals.

11. The World Economic Survey brings out the dispersion of growth experience of the developing countries over the past decade. Looking at figures for the rate of growth of real GNP in 83 countries in the period 1960-69, we find that countries with total population of 373 million had growth rates in the range of 4.5-6.4% per annum.\* I choose this range as extending from rather below the average growth experience of the past decade to rather above the average target for the next decade. Countries with total population of 358 million had notably high growth rates of 6.5% and above, while countries with total population of 953 million had low growth rates of under 4.5%.

#### Fast-growing Countries

12. Among the countries with high product growth rates, we find not only countries with large exports of primary products (mainly petroleum and minerals), but also several others which have achieved rapid increase of manufacturing output, including manufacturing for export.

13. Despite the continued importance of tariffs and quantitative restrictions on certain goods, it is clear that there are important opportunities for the countries which are able to take them, to build up exports of manufactures. During the period 1962-69, exports of manufactured goods from the developing countries expanded at an annual rate of about 15%. There has been an encouraging diversity in the kinds of manufactures exported by

\*Based on the IBRD, World Tables, January 1971.

developing countries, thus avoiding the dangers which may arise if too many countries concentrate on increasing exports of certain particular types of goods.

14. Institution of general preference arrangements for manufactures should give a valuable stimulus to continued rapid growth of these exports. At the same time, experience shows that favourable market conditions alone are not enough. Developing countries have to overcome the problems of producing supplies which are competitive in quality and consistency as well as price.

15. This calls for an educated labour force and entrepreneurship. At the same time, there are signs that management of the economy has also played an important part - notably establishment of a competitive exchange rate and avoidance of the artificial cheapening of capital in relation to labour.

16. There are encouraging signs that policies of this kind not only lead to rapid growth of output - by making for the optimum mix of labour and capital and exploiting international comparative advantage on the basis of the countries' factor endowments - but also result over time in plentiful employment opportunities. Thus the alleged conflict between total income and provision of employment may be more apparent than real, provided that the right policies are followed - but provided also that the country has the necessary pre-conditions for rapid development of manufacturing.

#### Slow-growing Countries

17. At the other end of the scale are countries which have had low rates of product growth - in some cases too little to allow any significant increase of the average incomes of their growing populations.

18. Some of these should be able to follow the example of the fast-growing countries of the 'sixties. However, many have special problems due to their small and often scattered populations. Such countries are unable to benefit from economies of scale in many types of manufacturing for the home market, and so have difficulty building up manufacturing industries which could subsequently break into export markets. A few such countries have been able to develop rapidly on the basis of increase and diversification of exports of agricultural produce. However, given the slow increase of demand for agricultural goods, this is not a strategy which is open to a large number of countries at the same time.

19. These countries are among the prime claimants for IDA funds. These are the countries whose development will be made still more difficult if adequate amounts of aid on concessional terms are not forthcoming, since they are not able to use, with benefit, any but limited amounts of external capital on commercial or near-commercial terms. Such countries often feel the need of increased help in the identification and preparation of investment projects, as is given, for example, by the Bank's Permanent Missions in Eastern and Western Africa. There may be more that the Bank and other international organizations could do to help groups of small countries in various parts of the world to join together so as to be able to reap the benefits of larger markets and associated economies of scale.

#### II. REVIEW AND APPRAISAL

2). I have attempted to draw a few lessons from recent experience. Undoubtedly we have learnt a lot in the course of the past decade; but, as the area of our knowledge and understanding grows, so too does the perimeter at which we recognize our present ignorance. I think that we all accept the need to learn more from the past in order to improve the effectiveness of our efforts in the future. Hence, no doubt, the emphasis which is now being placed on review and appraisal.

#### Country Reports

21. Last November, Mr. McNamara described to the Council in some detail those activities within the Bank which are directly related to the review and appraisal process.

22. The principal contribution by the Bank to the assessment of development is, of course, the production and distribution of the reports of its country economic missions. During the financial year ending on June 30 last, 63 missions have been in the field making broad reviews of developments and prospects in the countries concerned, and increased efforts are being made to cover the range of topics mentioned by Mr. McNamara last November.

23. On an increasing number of these missions the Bank is benefitting from the cooperation of expert staff of the other specialized agencies, both in the field and through headquarters briefings. Our continued close working relationships with the IMF are especially significant.

24. The purpose of these missions, aside from providing the Bank with information required for its own lending operations, is to analyze development experiences and prospects of member countries for the benefit of the countries themselves and of the suppliers of development assistance. After review by the governments concerned, these reports are made available to the Specialized Agencies, the Regional Economic Commissions, other UN bodies, the Regional Development Banks, and to the bilateral sources of finance. These reports are thus available to those within the UN system who are concerned with review and appraisal.

25. Perhaps less widely known, but of growing importance, are reports of a more specialized kind containing both economic and technical analyses of the problems of particular economic and social sectors. These sector studies, provide all concerned with a much improved basis for making decisions affecting the commitment of resources for both technical assistance and investment projects. During the fiscal year ending June 30, 1971, there were 23 sector missions organized either by the Bank, or by FAO or Unesco under the cooperative programs.

#### Coordination Groups

26. Although the term "review and appraisal" has gained currency in international discussons in connection with DD II, the Bank and some of its developing member countries have been engaged in an intensive review and appraisal process in connection with the consortia, consultative groups and other aid coordination groups. An aid coordination group provides a framework for regular private consultations between the government of a developing country, the governments of countries interested in providing financial and technical assistance to that country, the Bank, the International Monetary Fund, the United Nations Development Programme, and other international financial organizations. The meetings of the groups provide an opportunity to review and appraise a country's development progress and programs with the benefit of comprehensive economic reports and sector studies, prepared by the Bank's staff, with frequent assistance from the staff of the other specialized agencies.

27. In the financial year just ended, 14 meetings of this kind were held under the Bank's chairmanship, and the Bank participated in two meetings of similar groups chaired by others. Sixteen such groups are now active, covering 18 countries and one international community. The Bank expects the importance of these groups to increase, both for the developing countries and for the governments and international agencies engaged in assisting those countries.

### III. PROSPECTS

28. The basic development target for the 'seventies is to increase the collective growth rate of the developing countries to six percent per annum - higher if possible. In thinking about the future role of the World Bank we have recently had occasion to review growth prospects and associated calls for external capital of the developing countries which are likely to receive the greatest part of World Bank loans and IDA credits. This study was based on the analyses made for each of these countries in the Bank's country economic reports. Aggregation of the individual country results suggests that the 6% is feasible as an average target, but that such an acceleration of development depends crucially on three elements: mobilization of savings and policies to make efficient use of resources; continued rapid increase of developing country exports of manufactures; and increase of the flow of development assistance.

31. Several of the developed countries have been increasing their assistance and have plans to increase it further. Yet we in the Bank have good reason to be acutely aware that the total future supply of assistance on concessionary terms remains precarious. Several countries that have established rapidly growing exports are able to meet their needs for external capital by transactions on commercial terms, or will continue to be creditworthy for borrowing from the World Bank. The countries which would suffer from inadequate provision of concessionary assistance are those with the most difficult development tasks, and especially those of lowest levels of income.

32. There is now a considerable momentum of development throughout the world, not unsatisfactory in some places, still painfully inadequate in others. Given rapid increases in population and labour forces, the possible consequences of faltering at this stage are too grave to contemplate. The need is still for sufficient inputs of material and intellectual resources to begin to measure up to the problems and opportunities.

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**Hollis B. Chenery and Helen Hughes** 

# The International Division of Labor: The Case of Industry

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# THE INTERNATIONAL DIVISION OF LABOR: THE CASE OF INDUSTRY\*

#### Hollis B. Chenery and Helen Hughes

#### (International Bank for Reconstruction and Development)

The attitudes of developing countries toward international specialization have undergone several marked changes in recent years.

The initial postwar enthusiasm for industrialization based on import substitution has dwindled as its limitations have become apparent. Although the need for more balanced development of agriculture and industry is now recognized, there is little desire to return to the earlier pattern of exchanging primary products for manufactured goods. Instead, there is a search for new patterns of international specialization based on the growing skills and industrial capabilities of the developing countries.

The continuing controversy over the proper role of industrialization in development stems in large part from the multiple functions that it performs. Industry is expected to satisfy the growing demand for manufactured goods, to improve the balance of payments, to provide employment and to raise the level of efficiency in the economy. The search for a better division of labor must therefore take account not only of international markets and comparative advantation of the domestic functions of the industrial sector as well.

This paper examines the present and prospective role of industrialization from this point of view. Although it would be theoretically possible to include all of these elements in a dynamic analysis of comparative advantage, empirical attempts to measure comparative advantage on a sectoral basis have not proven very satisfactory. Our evaluation will therefore be based on a comparison of the development strategies that have been adopted by industrializing countries and an assessment of the prospective markets for industrial exports.

#### I. ALTERNATIVE PATTERNS OF INDUSTRIALIZATION AND TRADE

In order to determine the kind of specialization that is desirable in manufacturing, it is necessary to consider first the role of industrialization in different types of economy and at different levels of income. The poorest countries are alike in their extreme specialization in primary production and the absence of modern industry. Their limited demand for manufactured goods is largely satisfied by imports secured through the export of primary products. As per capita income rises from \$50 to \$100, domestic manufacture of processed foods, beverages, textiles, clothing and other simple consumer goods is undertaken in response to growing

\*Castilian version by Adolfo Alarcon.

local demand. By the time a country has reached a per capita income of \$100, industry approaches 25% of total commodity production, with its output going almost entirely to the local market.

As development continues above the \$100 income level, there is scope for increasing variation in the forms of specialization. At one extreme, countries with rich natural resources and a strong comparative advantage in primary exports such as Venezuela or New Zealand — may progress to high income levels by continuing the traditional trade pattern with only a limited development of industry for the domestic market. At the other extreme, countries without a significant resource base for primary exports, such as Japan, Taiwan, Korea or India, must begin to specialize in industry for exports at very low income levels in order to earn the foreign exchange needed for further growth. In the extreme cases, we find Pakistan with an income level of \$90 and Venezuela with \$850, each exporting \$3 per capita of manufactured goods. For Pakistan this represents half its total export earnings, while for Venezuela it is only 1%.

There are some thirty developing countries that have started to move beyond the traditional pattern of specialization in primary exports and have become significant exporters of manufactured goods. The initiation of industrial exports on any substantial scale normally requires both a reorientation of policy and changes in the structure of the economy. Once these have taken place, the growth of industrial exports is typically quite rapid, at least in the early stages. For the group of 30, it has averaged over 15% in the past decade. This section will analyze the factors that affect this shift in policy orientation and the differences in the export ence of the countries that have started on this course.

#### Normal patterns of production and trade

A number of studies have established that there is a uniform pattern of increase in the share of industry in GNP as per capita income rises.<sup>1</sup> There is an equally marked fall in the share of primary production, leaving the share of commodity production in total GNP fairly constant. These intercountry patterns have shown marked stability over the past twenty years. The effect of this shift in the composition of commodity production is shown in Figure 1, in which normal per capita production of industry and primary products is plotted for income levels ranging from \$100 to \$1,500.<sup>2</sup>

Two major factors are responsible for the observed intercountry uniformity in production patterns: similar changes in the composition of domestic demand with rising income and the limited possibilities of supplying the rapid growth of demand for manufactured goods through primary exports. Taking all developing countries together, both internal and external demand for primary products rise less rapidly than income and a shift of resources from primary production to

1. Notably Kuznets (1957, 1971), Chenery (1960), United Nations (1964).

2. Data are taken from multiple regressions in Chenery, Elkington and Sims (1970), which included per capita income, population, and export composition as explanatory variables. In this study, construction is included in industry; primary production is comprised of mining and agriculture. Value added and per capita GNP are in 1964 dollars.

cotton mmf.	13 242 n.a.	3 566	n.a.	<b>16 743</b> n.a.	21.3 n.a.
Men's & boys' suits & coats (all fibers)	98 027	360	52	98 335	0.4
Women's & girls' dresses (all fibers)	33 842	655	349	34 148	1.9

SOURCE: L

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Cotton

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TABLE VI [Conclusion]

manufacturing is necessary. The uniformity among countries has probably been accentuated by the widespread adoption of policies favoring import substitution over exports.

The average composition of exports shows a similar change from primary to manufactured goods in the course of development, but the timing of the shift lags behind the change in production. Figure 1 shows that industrial output (including construction) equals primary output at an income level of less than \$400. The corresponding point in the normal change in export composition is only reached at an income level of \$900, as shown in Figure 2.

The development of industry for the domestic market is an important phase in the shift in comparative advantage toward industrial exports. The usual infant-industry arguments for protecting domestic industry are readily extended to the learning period in which product quality is raised to export standards and costs are reduced to competitive levels. In general, new industries specifically oriented toward the export market can only develop a comparative advantage after skills and entrepreneurship have been acquired through domestic production.<sup>3</sup>

Of major interest for the present discussion is the variability in the export pattern for countries at similar levels of income and its relationship to resource endowments, country size, and development policies. The first two factors have been allowed for in an earlier study<sup>4</sup> by classifying countries according to their size and trade patterns into three groups: large countries (over 15 million population), small countries with relatively high primary exports (generally reflecting vorable natural resourc endowments), and small countries with a relatively high proportion of manufactured exports. The last group is identified as "industry oriented" and will be discussed in some detail in the next section.

The normal trade patterns for each of these three groups of countries are shown in Figure 2. The effect of a larger domestic market is to permit industries having economies of scale to develop at a lower income level and hence to shift comparative advantage toward industry. The level of exports per capita varies inversely with country size, being twice as great for a country of 5 million people as for a country of 40 million.

Figure 2 is constructed in such a way as to show both levels of per capita exports of primary and industrial products and the composition of total exports. Either measure can be used as an indicator of the shift toward industrial exports. For the average country of population 10 million, industrial exports reach a level \$10 per capita at an income level of about \$250, as shown in Figure 2. At this point, industrial exports are slightly more than 20% of total exports. We have identified the principal industrial exporters among the developing countries as those having either per capita industrial exports greater than \$10, total industrial exports greater than 20%. The 30 developing countries that meet one or more of these criteria for the

 This argument is stressed by Kravis (1956) and Linder (1967). It is offset in some industries by the importation of management through multinational corporations, as discussed below.
 Chenery and Taylor (1968).

#### FIGURE 1-2 COMPARISON OF TRADE PATTERNS



SOURCE: "Uniform Analysis of Development Patterns", Chenery, H.B., Elkington, H. and Sims, C.: Harvard University Ec. Dev. Rep. No.148(1970). year 1968 are listed according to their trade patterns in Table I, and the latter are shown graphically in Figure 2.

For the typical small country having high primary exports — represented by the curve SP in Figure 2 — the threshold level of \$10 per capita of industrial exports is not reached until income reaches a level of \$350 per capita; at that point industrial products represent only 10% of total exports. Jamaica, Malaysia and Ivory Coast illustrate this pattern. At the other extreme, a country lacking in primary resources usually must attain this level of industrial exports before it can achieve a per capita income of \$200, as shown by the *SM* curve. Examples are found in the postwar development of Singapore, Taiwan and Tunisia.

Large countries have a trade pattern that is quite similar to the small, industry-oriented (SM) pattern but with lower levels of exports and especially of primary exports. The shift in comparative advantage resulting from larger domestic markets leads to earlier import substitution and exports of intermediate goods and machinery as well as of consumer goods. The composition of industrial exports may be quite different from those of the smaller countries at the same level of income.

This summary of the average effects of scale, resources and income levels provides a background for the following analysis of the experience of individual countries. Since it is based on estimates of average relations in the postwar period, the "normal" patterns reflect the existing policy biases that have favored import substitution over exports and industry over agriculture. Although results thus represent the typical experience rather than a norm, they provide starting point for discussing what the more optimal trade patterns of the future might look like.

#### Characteristics of principal industrial exporters

In recent years, attention has tended to focus on a few countries such as Hong Kong, Singapore, Taiwan, Israel and Korea that have made rather spectacular progress in the export of manufactured goods. Although there is much to be learned from these examples, they are representative of only one of the patterns described above — the country that is forced into manufactured exports for lack of primary resources. A more balanced analysis of the role of manufactured exports must take account of the differences in resource endowments and their effect on the point at which it is desirable to shift toward manufactured goods.

Table I lists the thirty principal exporters of manufactured goods, as identified by the three criteria suggested above. Of these, 12 are large countries and 18 are small. Within the latter group, 7 can be classified in the mid 1960s as "industry oriented" in relation to the average trade pattern. Although the population of the 18 small countries is only 100 million, they account for a somewhat greater share of total industrial exports than the 12 large countries, which contain more than a billion people.

The role of industrial exports in each of the three groups is quite different. In the large countries industrial exports have typically followed the development of manufacturing for the domestic market. In only three cases — Yugoslavia, Korea, and Pakistan — are exports now more than 5% of industrial output. In this context, Korea is more remarkable for the rapidity with which it has made up for the lag in its exports (which had initially been offset by foreign aid) than for the extent of specialization of its industry.

The experience of the small industry-oriented countries represents a sharper break from the past and has therefore attracted the most attention. On the criteria used here, this group includes Tunisia, Portugal and Lebanon as well as the better known cases of Taiwan, Singapore, Hong Kong and Israel. The main characteristic that these countries have in common is their limited opporunity for primary exports, which range from \$20 to \$40 per capita — not much greater than the more self-sufficient large countries. Their per capita levels of manufactured exports are substantially higher than those of large countries and represent a higher proportion of their total manufacturing. The export market is thus a more important factor in the decision to establish a new plant and in determining its efficiency of production.

The small, primary oriented group consists of eleven countries that until recently have followed the traditional pattern of specialization in primary exports. By 1960 they had attained relatively high per capita levels of primary exports, ranging from \$50 to \$100 or more. As their primary resources have become more fully developed and their supplies of labor and capital have increased, their marginal comparative advantage has shifted toward industry. Starting from a low level, their industrial exports have grown rapidly for the past decade and they now become significant industrial exporters. As will be discussed below, the fact that the shift toward industrial exports is taking place at a higher level of income and wages that in the other two patterns usually requires the development of manufactured exports that are less dependent on low cost labor.

#### **II. CHANGES IN SPECIALIZATION**

Since the early 1950s, development economists have pointed out that the existing pattern of international specialization does not provide a viable basis for the rapid growth of less developed countries. The uncritical acceptance of this conclusion led initially to an exaggerated swing in policy against exports in general. It is becoming the conventional wisdom of the early 1970s to shift back from inward to outward oriented policies and to stress manufactured exports. As we suggested in the preceding section, this advice needs to be differentiated to take account of a country's primary export potential, variations in skills and factor proportions, and the time required to change the structure of production.

#### Responses to policy changes

Trade theory concludes that a country should specialize its productive structure according to its comparative advantage. While it is recognized that comparative advantage may change over time and can be affected by various types of policy, there is little systematic evidence on how such changes are brought about. We will therefore summarize briefly the nature of the responses to policy changes favoring industrial exports in the postwar period as a background for our subsequent recommendations.

Several recent studies<sup>5</sup> have distinguished between inward and outward looking types of trade policy, referring to a bias toward import substitution as opposed to export promotion. It is equally important to identify the sectoral bias of trade policies as between primary production and industry and among different types of industry. For example, colonial policies were both outward looking and biased toward primary production — not only in commodity production and trade but in the location of infrastructure and other indirect ways.

The reaction to colonial patterns of specialization has been as much a shift in emphasis from primary production to industry as from outward to inward looking trade policies. In most cases the two have gone together because it has been easier and usually more efficient to develop industry initially for the domestic market. This combination of policies has been inefficient when it has penalized investment in primary production too heavily and has involved policy instruments — such as tariffs and quotas instead of exchange rate devaluation — that favor the domestic market over exports.

Apart from the city states of Hong Kong and Singapore, there are no postwar examples of developing countries that have been able to develop industrial exports without an initial phase of protection and import substitution. By 1960 there were only four developing countries — Israel, Portugal, Hong Kong Singapore — in which industrial exports predominated and outward looking policies were established. It was only in the past ten years that Taiwan, Korea, Yugoslavia, Spain, and Ireland joined the group of countries having an established industrial specialization and policies leading to an adequate growth of total exports.

The initial identification and promotion of comparative advantage in industry in this group of nine was simplified by the fact that primary export possibilities are quite limited and tourism is the only significant alternative to industrial exports. As the possibilities for import substitution were exhausted, sufficient incentives were provided to exporters to secure growth rates of industrial exports of the order of 20%.<sup>6</sup>

The next group of countries to achieve a substantial shift toward industry in their export structure includes Brazil, Colombia, Mexico, the Philippines, Egypt, Costa Rica, Guatemala and El Salvador. The five large countries first attempted to offset the slow growth of primary exports for a decade or more through import substitution; a shift to export promotion came only after the limitations of this

5. Little, Scitovsky, and Scott (1970), B. Balassa and Associates (1971) and H. Myint and Associates (1971).

6. In Israel, Korea and Taiwan the availability of substantial amounts of foreign aid made it possible to develop infrastructure and domestic industry during the 1950s and only shift to industrial exports to reduce the dependence on aid in the 1960s. In the period 1960-1968, Pakistan was following a similar course. In the other countries, the growth of GNP was more closely related to the growth of manufactured exports.

policy had been demonstrated.<sup>7</sup> The last three small countries owe the rapid growth of industrial exports to the formation of the Central American Common Market, which is the only attempt at regional integration among less developed countries to lead to a substantial growth of national exports. To some extent, however, such export orientation came at the expense of more competitively oriented trade with outside markets. As indicated below, the successful change in specialization achieved by this group of countries resulted for the most part from policies of trade liberalization and the maintenance of realistic exchange rates.

Table I includes a number of other countries in which import substitution policies have been maintained for too long and where a shift toward industrial exports should produce fairly rapid results. In the more extreme cases, greater stress on exports is necessary to remove a major limitation to more rapid growth. These include Argentina, India, Turkey, Chile and Uruguay. In each of these countries, an outward looking policy mix should stimulate some growth of primary exports as well as manufactures.

#### Sources of comparative advantage

The leading exporters of the 1960s have been countries which have based their exports on low labor costs and concentrated on those products which required only limited amounts of capital and skills. During the decade the composition of exports has changed in the leading exporters, reflecting their frowing skills and experience.

Hong Kong is the largest LDC exporter of manufactured products – despite its small size – and its rate of export growth is still high. Pakistan and Korea, starting from very low export bases, have achieved the highest average annual increase in the growth of manufactures over the decade. For Pakistan and Korea this achievement has implied some heavy economic costs<sup>8</sup>, but in both countries the shortage of foreign exchange was critical when they began to give high incentives to exports. Three low income European countries, Spain, Portugal and Yugoslavia, have also achieved high export growth rates in manufactures from low starting point. Here long established trading links, cultural affinities and sheer geographic proximity lessened the problems of establishing export markets.

For all these countries the export of manufactures has been highly concentrated among a few products. Textiles, clothing, leather products and footwear were among the first exports from developing countries, and they are still the most important for each of the leading exporting countries (Table II). Food products are the other important traditional manufactured exports; for countries such as Taiwan, they combine a resource base with labor intensity. This has also been true for some countries of wood and wood products, which form an important component of LDC exports. In these industries, this initial spurt of export growth in some respects corresponds to the first phase of "easy" import substitu-

8. Lewis (1970).

<sup>7.</sup> The Philippine export orientation remains largely resource based; the principal exports are plywood, veneer and vegetable oil.

tion. As will be shown in the next section, it also encounters a market limitation that requires countries to seek new opportunities for continued export growth.

The development of electronic and electrical components introduced a new phase of industrial exports in the mid-1960s, combining the international mobility of capital and its associated technology and management with the ready availability of relativity skilled, low cost labor and technicians. Hong Kong was again both pioneer and principal exporter. Taiwan, Korea and Singapore have also shared in a growth made possible by the opening up of new markets in this field in developing countries. The movement of multinational corporations to LDC locations as a base of supply for developed country markets introduced a new element in the international division of labor. In this type of industry the ready availability of skilled labor, technicians and engineers at costs much below those of developed countries is a significant attraction.

The benefits of low cost production have only been passed on in part to the consumers in the developed countries, so that the advantages of trade have not been fully exploited. Problems of direct foreign investment have complicated the situation in both lending and host countries. However, this combination of capital, technology, management and market access has opened new export opportunities for countries with little industrial development. Particularly where foreign exchange availability is a serious bottleneck, more countries may be expected to turn to manufacturing designed for the export market at a lower per capita income level than was true in the past.

Countries with low per capita incomes tend to have relatively low wages, and are thus best able to enter into exports of manufactures in very labor intensive products. Those with a good resource base are able to rely on primary product exports until higher per capita income levels are reached, usually have a higher wage level, and have to concentrate on more capital intensive products for exports. However, there is considerable variation of wage levels in manufacturing in countries at the same level of income, since wage levels are influenced by social and political as well as by economic factors. Rapid population growth and rural exodus may mean that even primary export oriented countries may have relatively low wages; exporting labor intensive products may thus be an appropriate policy choice.

The most recent trend in exports of manufactures from developing countries is associated with the growing sophistication of the originally "labor intensive" economies and the entry into export of a second group of previously inward oriented, but now relatively industrialized developing countries. The former have upgraded their production towards more capital intensive goods within existing industrial sector (e.g. textiles) and moved to new types of products. This is particularly true of Hong Kong, Israel and Singapore. In the latter group, the desire to benefit from economies of scales has laid an emphasis on exports of chemicals, transport equipment and similar products. In most of these semi-industrial countries costs of production — at equilibrium exchange rates — for efficient, intramarginal firms are often no higher than in developed countries, and they are frequently markedly lower. Not only are wage levels lower than in developed countries.

tries, but the marginal productivity of labor is frequently higher for individual industries than it is in developed countries.

The products now being exported to developed countries<sup>9</sup> include telecommunications equipment, switchgear, machine tools, accounting machines and typewriters, railway vehicles, steel and steel products. Current trends, moreover, suggest that as this trade develops, several of the more industrialized developing countries, may have a comparative advantage so large that moderate tariff barriers — as hitherto in clothing and cotton textiles — are little impediment to them. It is also relevant that semi-industrial countries have a comparative advantage vis-a-vis the less developed countries in all but extremely labor intensive products. The less developed countries may therefore have to rely heavily on foreign investment if they are to succeed in exporting manufactures.

#### **III. TRENDS IN MANUFACTURED EXPORTS**

As the composition of exports from developing countries is changing rapidly, and as new countries are becoming interested in export orientation, the trends of the 1960s must be interpreted with some caution. They nevertheless provide a framework from which the 1970s patterns may be expected to develop.

#### Exports to developed market economies

Exports to developed market economies were somewhat over half of outfactured product exports of developing countries in 1960, and by 1967, having grown at some 14 per cent per annum, they reached nearly 60 per cent of all such exports (Table III). The United States was the largest single importer, and the developing countries' share of total imports into the United States was the highest for any developed country at 10.8 per cent in 1968. The United Kingdom and Japan were next with 9.2 per cent and 8.1 per cent (Table IV). The United States is, however, a country which places relatively little reliance on trade, and ratio of imports from developing countries to GNP is second lowest only to Japan among developed countries. The United Kingdom, Norway, the Netherlands and Belgium-Luxemburg are the countries where the ratios of imports from developing countries to GNP are the highest.

The exports of manufactured products from developing countries have made the greatest impact on total imports in clothing, where in 1968 they accounted for 25.5 per cent of total imports. This was followed by 15 per cent of leather and footwear, 14.6 per cent of textiles, 14.2 per cent of wood products and furniture and 12 per cent of food products (Table V). Broad categories, however, tend to give too diffused a picture, and a more detailed product by product approach is necessary to indicate the importance of the impact of developing country products on the developed countries' economies. Table VI showing imports of clothing from developing countries to the United States, indicates that in relation

9. Export incentives are frequently needed for such products to offset overvalued exchange rates.

to domestic production (and exports) such imports represent up to a fifth of total consumption. Two conclusions may be drawn. Firstly, that a relatively low share of the market, broadly interpreted, has led to import restrictions; secondly, that within such a broad market classification there may be a heavy enough impact in specific product groups to cause substantial dislocation of production in the advanced country. This generally leads, unless effective adjustment assistance is available, to quantitative restrictions.

The imposition of formal and informal quantitative restrictions on those imports which have been growing rapidly has contributed to the relative stability in the share of exports from developing countries in the imports into developed market economy countries. The pattern has not been the same for all developed market economies. Developing country imports grew less rapidly than all imports in the European Economic Community, and at about the same rate as all imports into the EFTA trade area and the United States. Australia and Canada absorbed developing country imports at a slightly more rapid rate than all imports, and for Japan the ratio of growth of developing to total trade imports was almost double (Table VII). It is true that Japan's imports from developing countries were negligible in 1960, but in the 1960s it recorded the fastest rate of import growth from developing countries. This was true for all major product categories, particularly textiles.<sup>10</sup>

#### Exports to social countries

Developing countries' exports of manufactured products to socialist countries were small, representing only some 5 per cent of total developing country exports, but they grew faster in the 1960s than exports to developed market economies. The principal exporting countries were India and the United Arab Republic, but towards the end of the decade Iran's exports to the socialist countries began to grow rapidly. Although textiles and clothing were an important component of this trade, machinery exports also played a significant role

The developing countries' trade with socialist countries has a number of unique features. It is generally organized in the framework of bilateral agreements, and the developing countries have benefited from their access to market economy design and production methods, particularly in finding a ready acceptance for consumer goods. In some cases, however, socialist countries have supplied capital equipment on extremely generous terms<sup>11</sup>, and the developing countries have been able to negotiate generous purchases of the finished products as repayment means. In some cases there have been difficulties in calculating export prices and the actual value of foreign exchange gained, because shadow exchange rates for currencies for countries from which inputs are purchased, and those with socialist countries, can differ considerably from actual exchange rates. As such trade grows in volume, there may be difficulties in obtaining a sufficient sup-

11.2½ to 4 per cent interest terms, competitive prices for quality of machinery supplied, and generous repayment terms are usual.

ply of imports in return from the socialist countries. However, these difficulties can usually be overcome, and the prospects for increasing exports of manufactured products to socialist countries appear to be favorable.

#### Trade among developing countries

Trade in manufactures among developing countries is roughly two-thirds of that to developed market economies and socialist countries. The rate of growth has been slower than for trade with developed market economies and with socialist countries, so that the share of trade fell somewhat in the 1960s. The high trade barriers developing countries had erected against the developed countries were beginning to affect their mutual trade opportunities. Among developing countries the bulk of exports of manufactures in the 1960s went to Southeast and East Asia. Growth in trade was most rapid among the Latin American countries, reflecting the regional arrangements of the Central American Common Market, the Andean Group and more generally LAFTA.

#### CONCLUSIONS

Several conclusions emerge from this analysis of trade patterns in the 1960s. Firstly, it is clear that an increasing number of developing countries, particularly those with relatively advanced levels of industrialization, have been able to break into developed country markets in spite of the tariff and other barriers against from. Secondly, even a relatively small import by developing countries has led to quantitative restrictions against them.<sup>12</sup>

Such restrictions have a particularly deterring effect on the export ability of the less industrialized countries. Thirdly, trade in manufactures among developing countries has been neglected because of the high tariff walls they initially erected against imports from developed countries. While there are great opportunities for trade expansion among developing countries, the policy problems which have to be overcome are formidable.

#### IV. POLICY IMPLICATIONS

For both developing and developed countries, policies directly affecting trade are obviously the most critical aspect of policy changes required to extend the international division of labor in manufactured products. But these are not the only policy issues involved. For developing countries other policies which affect relative factor prices are particularly important. For both developed and developing countries changes in policies which affect the competitive structure of industry are necessary to a reorientation of trade toward a better use of productive factors.

#### Policies for developing countries

With the exception of Hong Kong and Singapore, which have predominantly

12. Shepherd (1969 and 1971), Keough (1971).

<sup>10.</sup> U.N., Trade in Manufactures, 1970.

free trade economic policies, developing countries' trade policies vary from those with moderate levels of nominal protection of 35 to 40 per cent to those with high tariffs of 60 to 80 per cent buttressed by an extensive system of quantitative controls and import prohibitions.

While the former countries generally have exchange rates which are close to a long run equilibrium level, many of the latter have overvalued exchange rates which require the continuation of a protectionist tariff system. Countries with overvalued exchange rates and high protection, moreover, generally require a barrage of administrative controls, including licensing of various types, to keep the system working.

The extent to which such protection creates a bias against exports is now well known, and it is generally recognized that export incentives in the form of drawbacks, tax exemptions<sup>13</sup>, capital subsidies, and trade promotion, are required to offset them.<sup>14</sup> However, the experience of the last decade also suggests that there is little direct link between the generousness of incentives and export performance. As in the case of import substitution, the rationale for offsetting the bias against exports, and for encouraging exports on various "infant industry" grounds tends to become confused.

Many countries are now engaged in introducing all the incentives for exports which are used by other countries, and the result is a strong tendency to an "overkill" of incentives. Manufacturers are given more incentives than they require to turn to exports, the bias of high protection against other economic activities is not only uncorrected but exaggerated because such incentives are usually limited to exports of manufactures, and terms of trade against the agricultural population are worsened.

In extreme cases the rural population is subsidizing not only its country's own industrial sectors but consumers in developed countries. Whereas high protection for import substitution tends to be self-defeating because it leads to high costs, export subsidies are often less noticeable, and in some cases, notably where they are given through differential exchange rates, they may be self-perpetuating.<sup>15</sup>

A rational approach to export orientation thus does not merely require extensive export incentives to offset the existing biases of protection, but rather a reasonable program for reducing protective levels both by tariff reductions and by

13. According to GATT rules these are the only permissible incentives, but the rules have hitherto not been implemented. It should be noted that the GATT rules are not soundly based in economic theory as direct as well as indirect taxes may be interpreted as costs. The nature and extent of subsidies is likely to become an issue in the 1970s, as exports of manufactures from developing countries grow, and the GATT rules would then require some serious examination.

14. Little, Scitovsky and Scott (1970), Balassa and Associates (1971) and Myint and Associates.

15. The actual level of tariff will of course depend on the country's rate of exchange as well as its stage of industrial development. Given equilibrium exchange rates tariffs of 25 to 35 per cent may be regarded as moderate in the light of current trade practices which may be expected to take some time to improve. Temporary infant industry tariffs might be set above this level.

the dismantling of prohibitions and quantitative restrictions.16

This is not to deny the "infant industry" argument, particularly where industries require relatively large scale operations to operate efficiently. But the relatively high protection granted such industries should be clearly of a temporary nature and manufacturers should be put on notice of a program of reducing tariffs. Tariffs should not only be moderate, they should also be as uniform as possible, at most divided into two or three "bands". Widely differentiated tariffs, "tailor-made" to the needs of the marginal firm, are generally the ones most inimical to efficiency and good export performance. Some of the best opportunities for manufactured exports may arise in conjunction with economic import substitution, but they will only be realized if import substitution is reasonably efficient. A country which is only now beginning to industrialize is particularly well advised to keep the eventual prospects of export opportunities in mind. The more moderate its protection, the better geared by temporary measures for infant industries, the easier will export orientation become.

It can not be denied that the practice of reserving the domestic market for local producers, frequently as a basis of marginal pricing, and stimulating exports by incentives has been a successful method of entry into exports. Japan's industrialization owes a great deal to such tactics, and as has been noted, many other countries, by simply adding export incentives to import barriers, are following its example. The marginal pricing practices of developed countries give developing countries a rationale for such policies, but as a general approach to increasing inrnational trade in manufactured products such latter-day mercantilism cannot, nowever, be successful.

In the long run a developing country seeking a comparative advantage in increasingly productive industries will not be satisfied with a knowledge of price distortions for its inputs into manufacturing, it will seek to rectify them by suitable policies.

Infrastructure costs may be out of line because of inappropriate public revenue collection or expenditure patterns or pricing policies, and these may have to be corrected. More commonly the prices of both capital and labor tend to be out of line with real factor proportions, and this may require more immediate remedies because they are generally a more important component of manufacturing costs.

It is usual for fixed capital to be under-priced in developing countries for a number of reasons. Capital equipment is frequently subject to very low import duties in contrast to intermediates and particularly to finished products, and even such small duties are frequently subject to exemptions for "essential" industries which usually turn out to be most industries. In addition concessionary finance is

16. Where protection is high and exchange rates are overvalued, the evaluation of the correct level of export incentives becomes extremely difficult. The only reliable method, in fact, is that of project evaluation which is able to establish, on a case by case basis, whether the economic returns from exports justify subsidy. Essentially this means taking into account the total costs and benefits of a given export project at border prices, and discounting such returns. But exchange rates and protection levels are not the only distortions in most economies. Wage and capital prices are frequently also distorted, and this has to be taken into account by the estimation of shadow prices of capital and labor if the cost/benefit calculation is to reflect resource use and external economies accurately.

frequently available, at least to large, favored firms, for fixed capital, although working capital is not subject to such concessions. Corporate tax exemptions and concessions tend to be related to fixed capital. Such distortions tend to encourage capital intensive industries and processes at the cost of labor intensiveness.<sup>17</sup>

The price of labor is also frequently distorted in developing countries. In some cases this is due to the political strength of trade unions, but more frequently it is the result of the pressure to bring social services commensurate with twentieth century concepts and standards of welfare to developing countries. Both Israel and Singapore have demonstrated that a rapid growth of exports is consonant with relatively high wage levels and good working conditions. In many developing countries, however, manufacturing wages and particularly fringe benefits, are not in keeping either with productivity in manufacturing or with the labor supply situation. High costs of severance pay for workers protect the existing manufacturing wage at the cost of work force growth in manufacturing. Maternity benefits for women workers do not so much raise the cost of employing women workers, but prevent their employment in industries in which their skills are traditionally important for high productivity, and at the same time deny them employment opportunities.<sup>18</sup>

To argue for realistic prices for labor, particularly for unskilled labor, is not to suggest a return to the exploitation of manufacturing workers. Rather it is suggested that labor remuneration should be in keeping with overall labor market conditions, and that a greal deal of attention should be paid for differentiated rewards for skill and high productivity by individual workers. Where a propriate, wage subsidies may be a suitable alternative incentive for infant industries, and a means of introducing appropriate factor prices.

Direct promotional activity is often the most neglected aspect of export promotion, yet in a number of countries it has proved the most important. Puerto Rico initiated this type of activity in the early 1960s, and several other countries have used this technique with varying success. In recent years the most outstanding promotional effort has been undertaken by the Economic Development Board of Singapore, whose activities were the most important factor in the country's successful export orientation.

#### Trade among developing countries

As noted above, trade in manufactures among developing countries offers considerable opportunities for growth. In the past poor transport and other communications impeded trade among developing countries. Until the 1960s it was

17. This trend is often exaggerated, and supported by apocryphal stories of developing countries' desire for "shiny new machinery". It must be recognized that in most manufacturing processes the advantages of capital intensive processes in productivity, raw material economy and final product quality are so great that there is often little room for the substitution of labor intensive for capital intensive methods, once an industry is chosen. But the possibilities for labor intensiveness vary with industries, and undervaluing capital thus distorts the industry mix and reduces what opportunities for labor substitution exist.

18. Such policies also conflict with family planning programs.

creasing competitiveness of the developing countries' manufacturing sectors. Adjustment policies which can deal with the fact that the marginal productivity of labor and capital is higher in some developing than in many developed countries, that there are a "half dozen Japans around the corner", cannot be conceived merely in terms of assistance to a limited number of firms and workers. The developed countries will have to rethink their economic and social priorities and policies in the face of the growing competition from developing countries in the 1970s in terms which may require sacrifices of growth to welfare if a return to protection is to be avoided. The long run costs of such a return to protection political as well as economic — would be very high indeed.

The mobility of capital in contrast to the immobility of labor is an important aspect of the adjustment process, and one of increasing political importance. Multi-national corporations are free to leave a stagnating economy behind them as they were once free to leave a depressed region. They can take advantage of low cost labor in developing countries, but because of their oligopolistic situation, do not have to pass on their lower costs to the consumers in the lending country. Such a country sometimes benefits from increased profits in terms of revenues, but sometimes it does not. A tax haven may do so instead. Thus not only is it important that the benefits of direct foreign investment exceed the costs in the host country if such investment is to be lasting and have a positive social as well as private marginal product, but it is equally important that the benefits also exceed the costs in the lending country. This too is a problem which requires much more eful attention than it has thus far received.

In general it seems that economists have concentrated their effort on persuading developing countries to export to the neglect of the trade orientation of developed countries, until it is now the latter which requires the most attention. Moreover, not all the policy advice given to the developing countries has been sound. An emphasis on export incentives to offset protection without a commensurate effort to improve internal efficiency by lowering tariffs, particularly against other developing countries, is not sound policy for the long run and may be as wasteful of a country's domestic resources as excessive import substitution.

#### V. THE OUTLOOK FOR THE 1970s

The analysis presented in this paper suggests a somewhat more stormy trade picture for manufacturing in the 1970s than is usually envisaged.

The small number of semi-industrialized countries which contributed the bulk of manufactured exports in the 1960s is being joined in export orientation by many others, and less industrialized countries are placing an earlier emphasis on the importance of export markets than was the case in the 1960s.

The rapid growth characteristic of a turn towards manufactured exports by developing countries in the 1950s and 1960s suggests that the 1970s may see an export potential in manufactures substantially above the 10 to 15 per cent per annum growth rate which has been used for most 1970s trade projections.

With an expected 5.5 per cent per annum growth in imports by developed

countries, a 10 to 15 per cent growth in manufactured exports of developing countries to them would have had little overall impact, although it must be noted that the experience of the 1960s suggests that even a low overall impact may be significant at the margin, and thus lead to unemployment which in turn precipitates quantitative restrictions and other trade barriers.

Should the semi-industrial and industrializing developing countries achieve a growth rate of 20 per cent or more in manufactured exports, their impact on developed country markets could be substantial indeed. It is true that if international trade arrangements are sufficiently flexible, then the developed countries will have access to proportionately increased markets in developing countries as the latter generate more foreign exchange. Such optimism, however, assumes a more rapid restructuring of manufacturing production in developed countries than is now in sight.

The experience of the 1960s suggests that semi-industrialized countries have a significant comparative advantage in a wide range of products in which they can combine relatively low labor costs, that is relatively low wages but high skills, with modern technology, management and commercial practice. Existing tariff levels cannot keep out textiles, clothing, footwear, electrical products and steel; a wide variety of new products, ranging from optical instruments to hydro-electric generators are now coming into the same category. Developed countries, working on the assumption that developing country exports are going to continue to be simple, labor intensive consumer goods are likely to find themselves — indeed are already finding themselves — totally unprepared for such new directions, international trade in manufactures.

For the less industrialized countries, it is true that export orientation is more difficult than for the semi-industrial ones. Where manufacturing production is easy, and they have a clear comparative advantage — as in textiles and clothing — the markets are already circumscribed and they are likely to become more limited for each individual country as more producers attempt to enter the field. There is thus a considerable danger of the oversupply of labor intensive goods, and a consequent turning of commodity terms of trade against them.

In the short and medium term the developing countries' concentration on labor intensive products usually means an increase in the income terms of trade, even though commodity terms of trade may be turning against them. However, the long run implications threaten to repeat the early twentieth century pattern of the international division of labor, with a surplus of labor intensive products competing for limited markets, and declining income terms of trade.

A serious approach to increasing the international division of labor in manufacturing through trade has to take a somewhat longer and more dynamic view than that of existing comparative advantage if advanced countries are not to be accused of a new wave of neo-colonialism.

While concentration on labor intensive products may be the only way in which a developing country can enter the export market, the gains from rising income should be invested in changing the structure of exports. In the longer run, industries in which technological progress and future growth are more rapid need easier to ship goods from Djakarta to the Netherlands than to Manila, and from Manila to San Francisco than to Bangkok, because these were the long established colonial trade routes. The situation, though still far from adequate is greatly improved, and it will improve further as trade develops.

Other difficulties are still, however, formidable. Although there has been a considerable emphasis on regional trade agreements in the last decade, most of the argument has been in terms of the establishment of multi-national enterprises which could benefit by relatively large scale operations from multi-national markets. That is, there has been an emphasis on the gains from complementarity and trade diversion, to the exclusion of the prospects for increased competitiveness and trade creation which could follow from regional groupings. But such multi-national corporations have been extremely difficult to organize to the mutual satisfaction of partner countries. This approach, moreover, overlooks the benefits achievable through increased specialization in such well established industries as textiles and clothing where efficiency and productivity may be low in each country in the shelter of high protective barriers.

A regional lowering of tariffs on such products could increase productivity and lower prices without exposing manufacturers to open world wide competition where such measures are of course not easy to take. The very concept of improving efficiency often means absorption or bankruptcy for the marginal firm, and in the short run at least unemployment for its workers, and while this was tolerable in the developed economies of the European Economic Community in a period apid overall growth and low unemployment rates, it is much more difficult for developing countries with high unemployment rates to accomplish. Even though such measures are likely to lead through greater productivity and lower prices to higher rates of growth and employment in the long run, protecting existing employment is usually the *sine qua non* of political economy in the short run. Measures seeking greater trade among developing countries thus require a great deal of careful, detailed attention of a type which is not being encouraged by the current trend to gear exports to developed country markets by export incentives.

#### Policies for developed countries

The adoption of the general preference scheme for developing countries by the European Economic Community, Japan and provisionally, by the United States, has been the principal step toward increased imports of manufactured goods. This is expected to increase the ability of developing countries to export manufactures to developed countries by \$1 billion, compared to the current level of exports of some \$7 billion to developed countries. Textiles and clothing have, however, not been included in the preference scheme, and the schemes as announced and proposed are also otherwise circumscribed, and it seems likely that quantitative restrictions will be imposed when imports in any single category become significant in spite of the scheme. As semi-industrial countries are not seriously deterred by tariffs, the principal gains are likely to go to those less developed countries which take particular measures to take advantage of such preferences. The generalized preference scheme in any case cannot be regarded as an alternative to that restructuring and lowering of tariffs which is required to end discrimination against the initial processing of raw materials<sup>19</sup>, but here there is little evidence of initiatives being taken by developed countries. Tariffs on initial processing of raw materials are a particularly important deterrent because value added is low, and effective protection is thus very high. These are, moreover, activities which are particularly important to the less developed, agricultural export oriented countries.<sup>20</sup>

Tariff and quota restrictions are not the only obstacles to the developing countries' increasing participation in trade in manufactured products. The developed countries, because of their large and prosperous domestic markets are frequently able to engage in marginal pricing practices in exports. This not only encourages high protective levels in developing countries, but makes competition extremely difficult in third countries, whether developing or developed. Another trade practice which makes competition difficult for developing countries is the provision of finance, particularly with government subsidy and thus on concessionary terms, for trade and suppliers' credit. Socialist countries, with interest rates ranging from 2 to 4 per cent on medium term loans provide particularly severe competition. Developing countries seeking such credit terms are finding it understandably difficult to borrow on concessionary terms from developed countries for such purposes.

Tied aid loans and purchases are becoming important as the more industrialized of the developing countries seek to compete in these products which of have a significant labor component. Developed country corporations sometimes bid for equipment contracts from developing country subsidiaries, often introducing an additional mis-pricing element in their internal transfers which seek to maximize earnings in low tax countries. Such trading activities are not of course confined to trade with developing countries, but also occur among developed countries. However, it is important to note that where trade is created by government assisted concessionary loans among countries, although direct private returns may be increased a social loss equal to the cost of the concessionary finance is incurred by the exporting countries. It is only in national trade and income statistics that such transactions lead to growth.

In general need for policy reform is at least as great on the developed country side if the 1970s are to see a considerable expansion in the international division of labor in manufacturing, but at present this seems to be less well understood and accepted than in developing countries. On the contrary, there are dangerous signs of a return to protectionism. Developed countries are at least as reluctant as the developing to overcome the political difficulties and incur the economic and social costs of the short term adjustments necessary although they are better able to do so both in terms of political and social stability and economic wealth. The costs of adjustment are likely to increase if they are delayed, because of the in-

19. Balassa (1967 and 1968). 20. Vandendriessche (1971) and Snape (1971). to be widely distributed among developing and developed countries along new lines of comparative advantage — as they are now distributed among developed countries. If such a change in trade patterns is to take place, the structure of tariffs, quantitative restrictions and export incentives in developed countries will require detailed examination and radical reform. It is unfortunate that only a very small proportion of the world economic community's effort is directed to these problems.

Increased trade amongst themselves should be an important priority for developing countries if they are to realize their trade potential in manufactures. While it may be more difficult to initiate such trade than that with developed countries, the potential for growth may be greater if the protectionist barriers can be overcome. In this case manufactured export growth will increasingly be in the developing countries' own hands, although the 1970s are only likely to see the beginning of this change in trade patterns.

For the more industrialized of the LDCs, trends in trade are already far more important than aid, and this will become increasingly so in the 1970s. However, aid is still of great importance to the least developed countries, where development of an export potential may take decades.

If the developing countries' expectations of gains from trade in manufactures, toward which they are now gearing their policies, are frustrated by the developed countries' unwillingness to change their policies in the direction of greater specialization, the 1970s is likely to be a decade of confrontation rather than operation.

		GNP/N	11.10	n /n	E 41	5.04	Em	Grov	wth Rates	%	
	N Mill. 1969	(US\$ 1964) 1969	MV/CV % 1968	Em/E % 1968	Em/N US\$ 1968	Em/Mo % 1966	Mill. US\$ 1968	Em 1958- 1968	Мv 1960- 1969	GNP/N 1960- 1969	Ep/N US\$ 1968
Large Countries (12) <sup>a</sup>									14 i		
Pakistan	126.7	89	19.2	50.5	3.0	8.0	363.5	30.0	7.6	2.9	2.9
India	526.0	91	20.7	51.7	1.8	2.5	935.8	6.6	2.5	1.1	1.9
U.A.R.	32.5	135	42.1	27.0	5.3	4.0	167.4	12.2	-	1.2	14.3
Thailand	35.7	135	27.9	8.3	1.6	1.0	54.7	17.1	8.1	4.7	17.7
Philippines	35.9	177	32.0	13.4	3.5	1.9	126.5	21.0	4.3	1.9	22.6
Korea (Rep.)	31.1	181	33.8	74.3	11.1	9.0	338.2	61.4	14.2	6.4	3.8
Brazil	92.3	228	56.3	11.5	2.5	0.8	216.7	14.7	6.6	1.4	19.2
Colombia	20.5	245	44.4	9.6	2.7	1.4	53.3	25.0	4.5	1.5	25.4
Yugoslavia	20.4	488	60.6	69.4	43.4	11.4	876.4	16.2	-	4.6	19.1
Mexico	48.9	495	61.2 <sup>b</sup>	19.4	5.2	0.9	244.4	8.4	10.0	3.5	21.6
Spain	32.9	697	56.8	57.7	28.1	3.4	917.2	21.0	7.4	6.5	20.6
Argentina	24.0	902	61.8	21.8	12.6	0.8	297.7	8.0	4.3	2.6	45.2
Small Primary-Oriente	d (11)										
Morocco	15.0	158	23.4°	16.2 <sup>b</sup>	5.0b	2.5	73.3b	30.0	2.7	3.4	25.9
Ivory Coast	4.9	210	19.1	12.3	11.1	20.2	52.3	-	11.2	4.7	79.1
Algeria	13.3	220	17.05	7.8	4.4	6.1	56.7	12.2	16.4	-2.8	52.0
El Salvador	3.4	250	38.7	34.2	21.9	8.6	72.3	35.0	9.0	1.9	21.9
Malaysia	10.6	291	19.1°	9.7	9.8	7.4	101.7	13.2	12.0	3.8	91.2
Guatemala	5.0	300	35.4	20.6b	9.1b	7.3	44.40	_	7.9	1.9	35.1b
Costa Rica	1.7	429	23.4	19.0	20.3	9.2	32.5			2.9	86.5
Jamaica	1.9	465	35.6	P	11.7	4.8	22.2	13.4	4.4	3.0	101.9

TABLE I. Some Characteristics of Leading LDCs in Manufacturing and Exports

			TAI	BI [C	Continuea	[]					
Greece	8.8	715	39.6	8.9	8.9	2.1	78.0	13.6	6.2	6.2	91.1
Trinidad and Tobago	1.0	752	30.9	12.8 <sup>b</sup>	48.2b	8.6	48.2 <sup>b</sup>	26.0	10.1	3.8	328.4b
Ireland	2.9	940	40.0°	41.2	109.6	11.0	320.2	12.7	—	3.5	156.4
Small Industry-Oriented (	(7)										
Tunisia	4.9	193	38.0	23.0	7.6	4.9	36.3	-	6.2	2.1	25.4
Taiwan	13.8	255	45.9	77.0	44.9	24.8	606.1	28.0	13.5	6.3	13.4
Portugal	9.6	430	61.6	71.7	57.5	11.8	546.1	12.4	7.9	4.9	22.7
Lebanon	2.6	493	48.7b	25.2	14.2	5.4	36.8	29.0		2.1	42.1
Singapored	2.0	681	65.9	23.2	53.4	53.0	106.2	14.4 <sup>h</sup>	19.0	4.5	176.8
Hong Kong	4.0	718	87.5	91.8	410.7	-	1 601.9	14.5	14.3	8.7	36.7
Israel	2.8	1 337	61.5	73.2	173.3	21.0	468.0	19.6	-	5.3	63.4
Other Industrialized Court	atries										
Congo (Rep.)	17.3	69	38.6	1.2 <sup>t</sup>	0.3 <sup>2</sup>	10.0	3.9t	-	12.7	0.2	21.2 <sup>t</sup>
Indonesia	116.6	95	13.7	4.50	0.3b	0.3	30.0 <sup>b</sup>	19.8	1.2	0.8	6.4 <sup>b</sup>
Ghana	8.3	160	23.5°	9.7	3.6	4.3	29.9	40.5	3.7.	0.0	33.5
Ecuador	5.9	202	32.3	4.6	1.7	0.4	9.5	19.5	5.4	1.2	35.2
Paraguay	2.3	202	32.6	-	-	0.0	—	_	4.0	1.0	21.61
Rhodesia (Southern)	5.1	205	42.0°	-	-	6.3		-	5.5	0.4	52.04
Dominican Republic	4.0	235	38.4	3.0 <sup>b</sup>	1.3b	1.4	5.1 <sup>b</sup>		3.6	0.4	38.6
Peru	13.2	281	33.9°	-		0.5	-		2.9	1.4	67.71
Iran	28.5	290	37.0*	0.8 <sup>b</sup>	0.5 <sup>b</sup>	2.4	14.8 <sup>b</sup>	31.0 <sup>b</sup>	11.00	4.9	70.90
Turkey	34.5	294	30.9	3.9	0.6	0.3	19.2	17.3	8.6	3.4	14.8
Nicaragua	1.9	341	31.0	9.5	8.1	4.9	14.9	48.0	12.0	3.5	77.2
Chile	9.6	432	56.2	3.5	0.9 <sup>b</sup>	0.8	8.4 <sup>b</sup>	-	5.6	1.7	99.4b
Uruguay	2.9	478	51.2°	5.0	3.2	1.4	8.9			0.8	60.4
Panama	1.4	562	37.2	2.0	1.4	0.3	2.0	-	10.7	4.8	69.2
Venezuela	10.0	852	29.7	1.2	3.4	0.6	33.3	81.7	7.0	2.5	279.9

<sup>a</sup>Over 15 million population in 1960.

## TABLE I [Conclusion]

<sup>b</sup> 1967.		
°1966.		
dLocally	v produced exports only; figures do not include re-exports.	
e1968.		
1965.		
*1969. https://	0.00	
iPossibly	708. V includes exports of manufactures also	5. G
TOSSIDIY	includes exports of manufactures also.	
SOURCE Statistics, 1	E: U.N., Yearbook of National Accounts Statistics, 1969, vol. 1; U.N., Yearbooks of International Trade Statistics, 1958, 1968; I.B.R.D., Word 1971 World Bank Atlas, and their work sheets, etc.	d Tables, January 1971; Draft
N	Population in millions, mid-1969.	
GNP/N	GNP per capita in 1964 US\$, 1969.	
Mv/Cv	Gross value added in manufacturing as percentage of gross value added in commodity production, 1968. Value added may be at	factor cost of market prices.
Em/E	Nonresource-based manufacturing exports as percentage of total merchandise exports, 1968.	
Em/N	Exports of nonresource-based manufacturing per capita in US\$, 1968.	
Em/Mo	Nonresource-based manufacturing exports as percentage of total manufacturing output, 1966.	
Em	Exports of nonresource-based manufacturing in millions of US\$, 1968. Exports include goods classified under SITC codes 5, 7 an parts of 0. For nonferrous metals (Code 68) and food products (Code 0), the definition of manufactures suggested in UNCTAD, <i>Trade ing Countries: 1970 Review</i> , has been followed, except for refined sugar (Code 061.2), which has been included by us.	d 8; 6 except parts of 68; and e in Manufacturing of Develop-
Em	Percentage Average annual growth rate of nonresource-based manufacturing exports at current prices, 1958-68.	
Mu	Growth Average annual growth rate of real gross value added in manufacturing, 1960-69.	
GNPIN	Rate Average annual growth rate of real GNP per capita, 1960-69.	

*Ep/N* Exports of primary products per capita in US\$, 1968.

# TABLE II. Exports of Manufactures<sup>a</sup> from the Ten Largest LDC Manufactured Product Exporters,<br/>by Product Category Export Values<sup>b</sup> by Conodity in Millions of U.S. Dollars

		1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
SITO	2											
No.												
Prod	ucts											
	Argentina											
5	Chemicals	36.5°	36.2	35.1	29.6	n.a.	32.4	41.4	40.0	41.4	44.3	49.9
6	Leather, textiles, rubber, wood &											
	metal products	6.4	6.2	5.7	4.5	n.a.	32.9	31.5	16.9	23.5	31.3	60.2
7	Machinery and transport equipment	2.5	2.2	2.0	3.4	n.a.	12.6	18.8	16.2	20.5	29.0	35.8
8	Miscellaneous manufactured articles	1.6	1.3	1.5	1.7	n.a.	6.0	12.6	11.2	13.5	15.8	22.4
	Brazil											
5	Chemicals	7.42	8.08	13.38	20.00	14.77	16.60	17.65	14.58	26.84	29.64	27.05
6	Leather, textiles, rubber, wood &											
	metal products	6.80	7.44	12.47	10.33	9.46	13.34	38.77	77.83	60.99	85.82	80.33
7	Machinery and transport equipment	1.86	2.15	2.00	11.26	12.02	10.63	18.27	28.88	33.31	43.63	41.10
8	Miscellaneous manufactured articles	0.40	0.45	0.74	1.14	0.93	1.14	1.66	2.98	3.70	4.17	4.62
	Mexico											
5	Chemicals	18.49	16.49	20.24	26.82	32.05	35.66	34.46	56.29	63.76	67.24	68.57
6	Leather, textiles, rubber, wood &											
	metal products	131.01	144.62	138.92	144.16	146.77	190.67	154.32	155.02	181.36	160.72	208.49
7	Machinery and transport equipment	10.66	8.06	8.73	9.83	8.96	10.81	13.50	13.51	21.47	23.26	36.45
8	Miscellaneous manufactured articles	12.37	15.35	14.32	13.85	14.65	18.76	20.72	19.67	23.21	30.20	37.33
	Yugoslavia											
5	Chemicals	6.92	7.42	10.91	8.11	8.62	10.20	15.13	59.60	69.58	74.15	76.77
6	Leather, textiles, rubber, wood &											10.00 L 0 10
	metal products	48.40	56.25	63.61	51.43	62.56	67.64	81.89	247.64	282.31	280.71	323.93
7	Machinery and transport equipment	22.34	39.26	40.18	37.74	62.92	61.59	60.64	256.74	299.43	254.66	275.49
8	Miscellaneous manufactured articles	11.60	13.71	18.17	16.58	20.20	29.16	42.28	125.15	143.18	216.96	184.32

I ABLE II [Continued]
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19         27.18           91         226.08           30         9.02           50         24.18	3 42.91 3 271.36 2 14.22	49.03 274.55	55.66 305.80
91 226.08 30 9.02 50 24.18	3 271.36 2 14.22	274.55	305.80
91 226.08 30 9.02 50 24.18	271.36 2 14.22	274.55	305 80
.30 9.02 .50 24.18	2 14.22		
.50 24.18		35.60	26.47
	3 27.20	34.10	48.26
53 23.34	19.82	20.97	31.60
			01.00
84 722.16	654.20	680.98	804.01
.08 22.02	20.53	25.52	58.17
.95 45.41	36.62	47.92	62.06
.87 3.97	7.81	5.75	9.02
.04 167.41	236.25	235.43	299.58
.66 4.56	5 9.04	38.95	26.64
.60 12.68	8 14.93	16.33	25.37
			*
80 51.07	53.95	61.73	74.90
.09 289.16	5 349.42	367.88	389.84
20 72.87	109.48	134.62	168.37
.99 585.64	662.20	757.70	973.89
81 21.52	20.93	21.72	n.a.
33 112.22	160.18	192.13	n.a.
30 19.64	39.66	57.92	n.a.
55 37.26	51.14	95.68	n.a.
	53       23.34         84       722.16         08       22.02         95       45.41         87       3.97         04       167.41         .66       4.56         .60       12.68         .80       51.07         .09       289.16         .09       289.16         .99       585.64         81       21.52         .33       112.22         .30       19.64         .55       37.26	53       23.34       19.82         84       722.16       654.20         08       22.02       20.53         95       45.41       36.62         87       3.97       7.81         04       167.41       236.25         66       4.56       9.04         60       12.68       14.93         80       51.07       53.95         09       289.16       349.42         20       72.87       109.48         99       585.64       662.20         81       21.52       20.93         33       112.22       160.18         30       19.64       39.66         55       37.26       51.14	53       23.34       19.82       20.97         84       722.16       654.20       680.98         08       22.02       20.53       25.52         95       45.41       36.62       47.92         87       3.97       7.81       5.75         04       167.41       236.25       235.43         66       4.56       9.04       38.95         60       12.68       14.93       16.33         80       51.07       53.95       61.73         09       289.16       349.42       367.88         20       72.87       109.48       134.62         99       585.64       662.20       757.70         81       21.52       20.93       21.72         33       112.22       160.18       192.13         30       19.64       39.66       57.92         55       37.26       51.14       95.68

TABLE II [Codusion]

-					2					200		
		1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
1	Korea			Sec. 1	1	1.1.1						1.1
5	Chemicals	0.01	0.12	0.40	0.55	0.99	0.90	0.63	0.38	0.71	2.36	3.12
6	Leather, textiles, rubber, wood &											
	metal products	2.41	2.14	3.94	4.00	6.18	28.12	42.31	66.41	84.18	101.38	143.60
7	Machinery and transport equipment		0.05	0.09	0.88	1.45	4.07	2.20	5.50	9.56	14.19	24.46
8	Miscellaneous manufactured articles	0.15	0.09	0.09	0.79	1.95	6.40	13.20	34.49	59.20	97.24	167.01

Note:

Chemicals (SITC Code 5):

Chemical elements and compounds

Mineral tar and crude chemicals from coal, petroleum and natural gas Dyeing, tanning and coloring materials Medicinal and pharmaceutical products Essential oils and perfume materials Fertilizers, manufactured Explosives and polytechnic products Chemical materials and products

Machinery and transport equipment (SITC Code 7): Machinery other than electric Electrical machinery, apparatus and appliances Transport equipment Manufactured materials classified chiefly by materials (SITC Code 6): Leather, leather manufactures, n.e.s., and dressed furskins

Rubber manufactures, n.e.s.

Wood and cork manufactures (excluding furniture)

Paper, paperboard and manufactures thereof

Textile yarn, fabrics, made-up articles and related products

Nonmetallic mineral manufactures, n.e.s.

- Iron and Steel
- Nonferrous metals
- Manufactures of metal, n.e.s.

Miscellaneous manufactured articles (SITC Code 8): Sanitary plumbing, heating and lighting fixtures and fittings Furniture

- Travel goods, handbags and similar articles
- Clothing

Footwear

Professional, scientific and controlling instruments; photographic and optical goods, watches and clocks

Miscellaneous manufactured articles not elsewhere classified

<sup>a</sup>Total manufactures excluding processed food products. <sup>b</sup>Converted at current exchange rates for each period, as given in the "International Financial Statistics." <sup>c</sup>Prior to 1961 data is not available according to the SITC Codes. <sup>d</sup>Prior to 1964 data is not available according to the SITC Codes. SOURCE: U.N., Yearbooks of International Trade Statistics.

/	Destination						DC		
Exporting DC	Wo	rld	DMEC	SCEEA	Total	Latin America	Africa	Western Asia	Other Asia
All DC	10 G.					1	10		
Value of exports (million dollars)									
1960	25	40	1 365	75	1 079	121	224	115	592
1967	57	20	3 370	268	2 065	407	381	226	971
Percentage of total									020
1960	1	00	54	3	42	5	9	5	23
1967	1	00	59	5	36	7	7	4	17
Growth rate 1960-67 (%)		12	14	20	10	19	8	10	7
Latin America									.*
Value of exports (million dollars)									
1960	2	69	187	4	68	58	1		7
1967	7	60	365	29	364	343	4	1	7
Percentage of total									
1960	1	00	70	1	25	22	0		3
1967	1	00	48	4	48	45	1	0	1
Growth rate 1960-67 (%)		16	10	33	27	29	22	—	0
Africa									
Value of exports (million dollars)				0					

TABLE III. Exports of Manufactures (SITC 5-8 Less 68) from DC, 1960 and 1967

Т	ABLE III [	Conclusio	<i>n</i> ]				
348	220	17	115	3	80	25	8
683	377	88	206	5	160	26	12
100	63	5	.33	1	23	7	2
100	55	13	30	1	23	4	2
10-	8	26	9	8	10	1	6
224	129	3	78	2	21	43	10
558	365	14	164	5	29	90	37
100	58	1	35	1	9	19	4
100	65	3	29	1	5	16	7
14	16	25	11	14	5	11	21
1 620	776	52	798	54	117	46	565
3 465	2 059	134	1 285	39	184	106	915
100	48	3	49	3	7	3	35
100	59	4	.37	1	5	3	26
11	15	14	7	5	7	13	7
	1 348 683 100 100 100 10- 224 558 100 100 14 1 620 3 465 100 100 100 11	TABLE III [         348       220         683       377         100       63         100       55         10-       8         224       129         558       365         100       58         100       58         100       65         14       16         1620       776         3 465       2 059         100       48         100       59         11       15	TABLE III [Conclusio $348$ $220$ $17$ $683$ $377$ $88$ $100$ $63$ $5$ $100$ $63$ $5$ $100$ $55$ $13$ $10^{-}$ $8$ $26$ $224$ $129$ $3$ $558$ $365$ $14$ $100$ $58$ $1$ $100$ $58$ $1$ $100$ $58$ $1$ $100$ $58$ $1$ $100$ $65$ $3$ $14$ $16$ $25$ $1620$ $776$ $52$ $3465$ $2059$ $134$ $100$ $48$ $3$ $100$ $59$ $4$ $11$ $15$ $14$	TABLE III [Conclusion] $348$ $220$ 17115 $683$ $377$ $88$ $206$ $100$ $63$ 5 $33$ $100$ $55$ $13$ $30$ $10^{-}$ $8$ $26$ $9$ $224$ $129$ $3$ $78$ $558$ $365$ $14$ $164$ $100$ $58$ $1$ $35$ $100$ $65$ $3$ $29$ $14$ $16$ $25$ $11$ $1620$ $776$ $52$ $798$ $3465$ $2059$ $134$ $1285$ $100$ $48$ $3$ $49$ $100$ $59$ $4$ $37$ $11$ $15$ $14$ $7$	TABLE III [Conclusion] $348$ $220$ $17$ $115$ $3$ $683$ $377$ $88$ $206$ $5$ $100$ $63$ $5$ $33$ $1$ $100$ $55$ $13$ $300$ $1$ $100$ $55$ $13$ $300$ $1$ $100$ $55$ $13$ $300$ $1$ $100$ $55$ $13$ $300$ $1$ $100$ $55$ $13$ $78$ $2$ $558$ $365$ $14$ $164$ $5$ $100$ $58$ $1$ $35$ $1$ $100$ $65$ $3$ $29$ $1$ $14$ $16$ $25$ $11$ $14$ $1620$ $776$ $52$ $798$ $54$ $3465$ $2059$ $134$ $1285$ $39$ $100$ $48$ $3$ $49$ $3$ $100$ $59$ $4$ $37$ $1$ $11$ $100$	TABLE III [Conclusion] $348$ $220$ $17$ $115$ $3$ $80$ $683$ $377$ $88$ $206$ $5$ $160$ $100$ $63$ $5$ $33$ $1$ $23$ $100$ $55$ $13$ $30$ $1$ $23$ $100$ $55$ $13$ $30$ $1$ $23$ $100$ $55$ $13$ $30$ $1$ $23$ $100$ $55$ $13$ $30$ $1$ $23$ $100$ $55$ $14$ $164$ $5$ $29$ $100$ $58$ $1$ $35$ $1$ $9$ $100$ $65$ $3$ $29$ $1$ $5$ $14$ $16$ $25$ $111$ $14$ $5$ $1620$ $776$ $52$ $798$ $54$ $117$ $3465$ $2059$ $134$ $1285$ $39$ $184$ $100$ $48$ $3$ $49$ $3$ $7$ $100$ <	TABLE III [Conclusion] $348$ $220$ $17$ $115$ $3$ $80$ $25$ $683$ $377$ $88$ $206$ $5$ $160$ $26$ $100$ $63$ $5$ $33$ $1$ $23$ $7$ $100$ $55$ $13$ $30$ $1$ $23$ $4$ $10^{-}$ $8$ $26$ $9$ $8$ $10$ $1$ $224$ $129$ $3$ $78$ $2$ $21$ $43$ $10^{-}$ $8$ $26$ $9$ $8$ $10$ $1$ $224$ $129$ $3$ $78$ $2$ $21$ $43$ $558$ $365$ $14$ $164$ $5$ $29$ $90$ $100$ $58$ $1$ $35$ $1$ $9$ $19$ $100$ $65$ $3$ $29$ $1$ $5$ $16$ $14$ $16$ $25$ $11$ $14$ $5$ $11$ $16$ $3$ <th< td=""></th<>

SOURCE: U.N., Trade in Manufactures of Developing Countries, 1969 Review, 1970.

	Population (million \$)	GNP (billion \$)	GNP per capita \$	Total Imports (million)	Imports from Developing Countries (million \$)	Imports per capita \$	Total Imports as % of GNP	Imports from Developing Countries as a % of GNP	Ratio of Developing Countries' Imports to Total Imports (%)
United States	201.2	800.8	3 980	20 776	2 236	11.10	2.6	.28	10.8
EEC	185.2	321.2	1 734	34 773	1 343	7.25	10.8	.42	3.9
Belgium-Luxembourg	9.6	9.4	980	4 728	56	5.83	50.0	.60	1.2
Fed. Rep. Germany	60.9	120.0	1 970	10 657	604	9.92	8.9	.50	5.6
France	49.9	106.3	2 130	8 4 15	348	6.97	7.9	.33	4.2
Italy	52.8	64.9	1 230	4 754	180	3.41	7.3	.28	3.8-
Netherlands	12.7	20.6	1 620	6 208	155	12.20	30.1	.75	2.5
United Kingdom	55.3	99.0	1 790	9 524	875	15.82	9.6	.88	9.2
Japan	101.1	120.3	1 190	3 303	267	2.64	2.7	.22	8.1
Sweden	7.9	20.7	2 620	3 521	107	13.54	17.0	.52	3.1
Norway	3.8	7.6	2 000	1 622	66	17.36	21.3	.87	4.1
Denmark	4.9	10.1	2 070	2 245	45	9.18	22.2	.45	2.0
Total	559.4	1 379.7	2 466	75 764	4 939	8.83	5.5	.36	6.5

TABLE IV. Imports of Manufactures<sup>a</sup> by Developed Countries from Developing Countries

<sup>a</sup>Excluding petroleum and unworked nonferrous metals.



 

 TABLE V. Imports of Selected Groups of Manufactures by Developed Market Economics from Developing Countries and from the World, 1964, 1967 and 1968

Product Group	D 1964	IMPORTS FROM EVELOPING COUNTRIE 1967 (millions of dollars)	s 1968	Averag Percenta, of Imp Developin 1964-1968	e Annual ge Increase orts from g Countries 1967-1968	L 1 1964	Developing Countries Share in Developed Countries Total Imports 1967	1968
Food products	480	678	755	12.0	11.3	16.9	19.1	19.9
Drink and tobacco products	261	145	130			20.8	10.1	8.1
Wood products and furniture	366	434	562	11.3	29.5	12.6	13.2	14.2
Leather and footwear	135	194	259	17.8	33.5	13.3	14.2	15.0
Textiles	712	828	899	6.0	8.5	14.8	15.3	14.6
Clothing	374	597	795	21.0	33.3	20.9	23.4	25.5
Chemicals	273	427	460	13.9	7.8	4.2	4.7	4.4
Iron and steel	94	153	175	16.8	14.3	1.9	2.5	2.5
Engineering products	164	347	494	32.0	42.3	0.6	1.0	1.2
Other products	418	639	896	21.0	40.2	5.2	4.3	5.2
Total A	3 276	4 441	5 425	13.5	22.2	5.4	5.4	5.7
Petroleum products	1 669	1 691	1 769	1.5	4.6	48.1	41.4	39.3
Unworked nonferrous metal	1 416	2 098	2 4 4 8	14.7	16.7	46.1	47.4	48.4
Total B	6 261	8 230	9 642	11.0	17.2	9.3	9.1	9.2

SOURCE: U.N., Trade in Manufacturing of Developing Countries, 1969, review. TD/B/C.2/90/Rev.1.

		996 I					
fo % b sb shoqm	inəraqqA noi1qnu2noD	stroqx3	suoduuj	Production			
(%) Contantantion	(uəzop 000,)		(uəzop 000,)		÷ /		
S.0	224 933	3 102	243 I	226 992	Underwear, cotton & mmf. <sup>b</sup>		
ULL	100 01		VIIO		stints ind 'syot' knit shirts		
6'11	10 C L	TIT	TIT Z	16/ SI	uonoo		
1.18	648 8	16	84Z I	7 137			
U ML	ULL D		0.00		Men's & boys' dress shirts, not knit		
671	611 /	TPO	8/7 I	100.9	cotton		
E.EI	£1.4 L	15	866	675 9	'Imm		
					Men's & boys' sports shirts, not knit		
1.41	778 71	88I	5 216	767 SI	cotton		
8.7	SIOL	79	SIS	e 295.	յաա		
210	0,1,1,1	20	2010		Women's & girls' blouses, not knit		
C'IZ	ZOT OT	CQ	084 8	19/ 21	cotton		
0.11	010.0	96	807	055 5	·iuu		
Vat	10.200	000	002 1	0 220	Men's & boys' trousers & shorts		
4.CI	000 01	866	86C I	091.6	cotton		

 

 TABLE VI. U.S. Production, Trade and Apparent Consumption of Selected Items of Wearing Apparel of Cotton and Man-made Fiber 962 and 1966<sup>a</sup>

			1962		
	Production	Imports	Exports	Apparent Consumption	Imports as a % of Apparent
	(*000 c	iozen)	(*000	Consumption (%)	
Underwear, cotton & mmf. <sup>b</sup>	211 770	385	3 588	208 567	0.2
Men's & boys' knit shirts					
cotton	12 839	2 276	44	15 071	15.1
mmf.	1 093	6	n.a.	1 099°	0.5ª
Men's & boys' dress shirts, not knit					
cotton	9 333	856	117	10 072	8.5
mmf.	814	112	n.a.	926°	12.1ª
Men's & boys' sports shirts, not knit					
cotton	19 367	1 876	85	21 158	8.9
mmf.	n.a.	59	n.a.	n.a.	n.a.
Women's & girls' blouses, not knit					
cotton	14 832	3 332	47	18 117	18.4
, mmf.	3 070	51	n.a.	3 121°	1.64
Men's & boys' trousers & shorts					
cotton	8 300	1 729	n.a.	10 029°	17.2
mmf.	5 580	151	n.a.	5 731°	2.6
Women's & girls' slacks & shorts					
cotton	11 095	2 589	13	13 671	18.9
mmf.	n.a.	63	n.a.	n.a.	n.a.
Men's & boys' suits & coats					
(all fibers)	8 066	102	n.a.	8 168°	1.24
Women's & girls' dresses					
(all fibers)	31 826	662	n.a.	32 488°	2.04



TABLE VII. Imports of Manufactures (	(excluding petroleum and unworked nonferrous metal)	by Major I	Developed
	Market Economi 1964 and 1968		

Importing Country or Area	Imports from World (million dollars)		Developed Countries (million dollars)		Annual Average Percent Increase 1964-68		Developing Countries' Percentage Share	
	1964	1968	1964	1968	World	D.C.	1964	1968
EEC								
Total	23 341	34 773	1 033	1 343	10.4	6.8	4.4	3.9
Belgium-Luxembourg	3 330	4 728	44	56	9.2	6.3	1.3	1.2
Fed. Rep. Germany	6 859	10 657	355	604	11.7	14.2	5.2	5.7
France	5 246	8 4 1 5	428	348	12.6		8.1	4.1
Italy	3 411	4 754	124	180	8.6	9.8	3.6	3.8
Netherlands	4 465	6 208	82	155	8.6	• 17.3	1.8	2.5
EFTA								
Total	17 894	23 889	918	1 236	7.5	7.7	5.1	5.2
Austria	1 263	1 835	25	41	10.2	13.6	2.0	2.2
Denmark	1 774	2 245	34	45	6.5	6.9	2.0	2.0
Finland	1 0 27	1 077	7	10	1.2	10.8	0.7	0.9
Norway	1 1 29	1 622	37	66	9.5	15.7	3.3	4.1
Portugal	430	692	5	10	12.6	21.0	1.1	1.5
Sweden	2 566	3 521	55	107	8.2	18.2	2.1	3.0
Switzerland	2 584	3 368	52	81	6.8	11.7	2.0	2.4
United Kingdom	7 146	9 524	703	875	7.4	5.6	9.8	9.2
Australia	2 181	2 926	89	129	7.6	9.8	4.1	4.4
Canada	4 881	8 717	90	185	15.6	19.8	1.9	2.1
Japan	1 969	3 303	103	267	13.8	26.9	5.2	8.1
New Zealand	758	699	28	30	-2.0	2.5	3.8	4.5
United States	9 615	20 776	1 014	2 236	21.2	21.9	10.6	10.8
Total 18 DMEC	60 641	95 081	3 276	5 425	11.9	13.5	5.4	5.7

SOURCE: U.N., Trade in Manufactures of Developing Countries, 1969 Review. TD/B/C.2/90/Rev. 1.

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The International Division of Labor: The Case of Industry

Hollis B. Chenery and Helen Hughes

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# La división internacional de la fuerza de trabajo: El ejemplo en la industria

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## La división internacional de la fuerza de trabajo: El ejemplo en la industria

Hollis B. Chenery y Helen Hughes

Sobretiro de EL TRIMESTRE ECONOMICO Vol. XXXIX (3), Núm. 155 México, Julio-Septiembre de 1972

# LA DIVISIÓN INTERNACIONAL DE LA FUERZA DE TRABAJO: EL EJEMPLO EN LA INDUSTRIA\*

# Hollis B. Chenery y Helen Hughes

(Banco Internacional de Reconstrucción y Fomento)

Las actitudes, criterios o puntos de vista de los países en proceso de desarrollo hacia la especialización internacional del trabajo, han sufrido varios cambios notables en años recientes.

El entusiasmo inicial del periodo de la posguerra hacia una industrialización basada en la sustitución de las importaciones, se ha venido debilitando poco a poco a medida que han llegado a ser aparentes sus limitaciones. Aunque ahora se reconoce la necesidad de que haya un desarrollo más equilibrado entre la agricultura y la industria, existen pocos deseos de retornar al modelo o patrón primitivo del intercambio de materias primas por artículos manufacturados. En su lugar, hay una búsqueda por nuevos modelos de especialización internacional basada en las crecientes habilidades y capacidades industriales de los países en desarrollo.

La continuada controversia sobre el papel adecuado que ejerce la industrialización en el proceso del desarrollo, surge en gran parte de las múltiples funciones que desempeña la industrialización. Todo mundo espera que la industria satisfaga en primer lugar la demanda por artículos manufacturados, que mejore la balanza de pagos, que proporcione empleo a la población y que eleve el nivel de eficiencia de la economía. Por lo tanto, la búsqueda de una mejor división de la fuerza de trabajo debe tomar en consideración no solamente los mercados internacionales y su ventaja comparativa, sino al mismo tiempo las funciones domésticas del sector industrial.

En este estudio se examina el papel, tanto actual como en su perspectiva para el futuro, de la industrialización desde este punto de vista. Aunque teóricamente sería posible incluir todos estos elementos en un análisis dinámico de la ventaja comparativa, no han resultado muy satisfactorios los intentos empíricos para medir esta ventaja comparativa sobre bases sectoriales. Por lo tanto, nuestra evaluación se basará en una comparación de las estrategias para el desarrollo que han sido adoptadas por los países en proceso de industrializarse y sobre una evaluación de los posibles mercados para las exportaciones industriales.

\* Versión al castellano de Adolfo Alarcón.

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## I. Alternativa de modelos para la industrialización y el comercio

Con el fin de determinar la clase de especialización que es deseable en las manufacturas, es necesario considerar en primer lugar el papel que desempeña la industrialización en los diferentes tipos de economía y a diferentes niveles de ingresos. Los países más pobres son igualmente pobres en sus extremos de especialización en la producción primaria frente a la ausencia de una industria moderna. Sus limitadas demandas por artículos manufacturados se satisfacen en su mayor parte con importaciones que se compensan mediante la exportación de sus materias primas. A medida que el ingreso *per capita* aumenta de 50 a 100 dólares al año, se inicia la fabricación de manufacturas domésticas de alimentos procesados, bebidas, telas, ropa y otros productos elementales de consumo, en respuesta a la creciente demanda local. En esta etapa, un país ha alcanzado un ingreso *per capita* del orden de los 100 dólares, y la industria se acerca al 25 % de la producción total de artículos manufacturados, los que se destinan totalmente al mercado local.

A medida que continúa el desarrollo y se sobrepasa el nivel de 100 dólares de ingreso por persona, se presenta una amplia gama de variaciones en las formas de especialización de la mano de obra. En un extremo se tienen a países que son ricos en recursos naturales y que muestran una fuerte ventaja comparativa en el capítulo de las exportaciones de productos primarios -como son los casos de Venezuela y de Nueva Zelandia-, que pueden progresar para obtener niveles altos de ingresos apegándose a los modelos tradicionales del comercio exterior, con un limitado desarrollo de sus industrias para el mercado doméstico. En el lado opuesto, los países que no cuentan con una base sólida de recursos de materias primas para su exportación, tales como el Japón, Formosa, Corea e India, deben principiar la especialización de sus industrias de exportación a niveles más bien bajos, con el propósito de ganar las divisas extranjeras que les son necesarias para lograr un mayor desarrollo. En casos extremos hemos encontrado que en Pakistán y en Venezuela, respectivamente, los niveles de ingresos per capita son del orden de los 90 a los 850 dólares anuales, correspondiendo a las exportaciones de artículos manufacturados la cantidad de 3 dólares al año por persona. Para Pakistán esto representa la mitad del total de sus ganancias por concepto de exportaciones, mientras que para Venezuela es solamente el 1 %.

Existen alrededor de treinta países en desarrollo que han principiado

a desplazarse más allá de los modelos tradicionales de especialización en las exportaciones primarias, y han llegado a convertirse en exportadores importantes de artículos manufacturados. La iniciación de las exportaciones industriales en una escala sustancial requiere normalmente tanto de una reorientación de las políticas como de cambios en la estructura de la economía. Una vez que esto se ha logrado, el crecimiento de las exportaciones industriales es un fenómeno típicamente rápido, por lo menos en sus primeras etapas. Para el grupo de los 30 países considerados, se ha tenido un promedio ligeramente mayor al 15 % en la última década. En esta sección se analizarán los factores que afectan este cambio en la orientación de las políticas, así como las diferencias observadas en la experiencia tenida por los países que se han iniciado en este camino.

### Modelos normales de producción y comercio

Un crecido número de estudios han establecido que existe un modelo uniforme de aumento en la participación de la industria en el Producto Nacional Bruto (PNB) a medida que aumenta el ingreso *per capita.*<sup>1</sup> Al nismo tiempo hay un descenso igualmente marcado en la participación de la producción primaria, dejando que la participación de la producción de artículos sea relativamente constante en el total del PNB. Estos modelos entre los países han mostrado una notable estabilidad durante los últimos veinte años. El efecto de este cambio en la composición de la producción de artículos se muestra en la gráfica 1, en la cual la producción normal *per capita* tanto en la industria como en las materias primas se ha ajustado para niveles de ingresos que varían de 100 a 1 500 dólares.<sup>2</sup>

Son dos los factores principales a los que se atribuye la uniformidad observada internacionalmente en los modelos de la producción: los cambios similares en la composición de la demanda interna con ingresos crecientes, y las limitadas posibilidades de abastecer el rápido crecimiento de la demanda por artículos manufacturados, mediante las exportaciones de materias primas. Tomando en conjunto a todos los países en proceso de desarrollo, tanto la demanda interna como la externa por productos primarios crece menos rápidamente que el ingreso, siendo necesario un

<sup>1</sup> Los más prominentes son Kuznets (1957, 1971); Chenery (1960); y Naciones Unidas (1964).

<sup>2</sup> Las cifras fueron tomadas de las regresiones múltiples en los estudios de Chenery, Elkington y Sims (1970), las cuales incluyen el ingreso *per capita*, el número de habitantes y la composición de las exportaciones como variables explícitas. En el presente estudio se considera a la construcción como industria, comprendiendo la producción primaria a la minería y a la agricultura. El valor agregado y el PNB *per capita* se calcularon en dólares de 1964.

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cambio de recursos de la producción primaria hacia las manufacturas. Probablemente la uniformidad entre las naciones se ha acentuado por la amplia adopción de políticas que favorecen la sustitución de las importaciones por encima de las exportaciones.

La composición promedio de las exportaciones muestra un cambio similar de artículos primarios a los manufacturados en el curso del desarrollo, pero el momento cronológico del cambio viene a la zaga del cambio en la producción. La gráfica 1 muestra que la producción industrial (incluyendo la construcción) iguala a la producción de materias primas a niveles de ingresos inferiores a los 400 dólares. El punto correspondiente al cambio normal en la composición de las exportaciones se alcanza solamente a niveles de ingresos del orden de los 900 dólares, como se muestra en la gráfica 2.

El desarrollo de la industria para el mercado interno constituye una fase importante en el cambio de la ventaja comparativa hacia las exportaciones industriales. Los argumentos usuales de las industrias nacientes para proteger la industrialización interna, por lo general se extienden durante el periodo de aprendizaje en el cual se mejora la calidad del roducto para satisfacer las normas de exportación, y se reducen los costos a niveles competitivos. Por regla general, las industrias nuevas que han sido orientadas hacia los mercados de exportación pueden desarrollar una ventaja comparativa solamente después de que se ha adquirido el adiestramiento o la capacitación y el espíritu empresarial a través de la producción nacional.<sup>3</sup>

De interés principal para nuestra discusión es la variabilidad del modelo de la exportación para países a niveles similares de ingresos, y sus relaciones de dotación de recursos a nivel nacional, así como las políticas de desarrollo. Se han considerado los dos primeros factores en un estudio anterior,<sup>4</sup> mediante la clasificación de los países entre grupos de acuerdo con su tamaño y los patrones de su comercio: países grandes (con más de 15 millones de habitantes), países pequeños con exportaciones relativamente grandes de materias primas (que reflejan generalmente una dotación favorable de recursos naturales), y países pequeños con una proporción relativamente alta de exportaciones de productos manufacturados. Este último grupo se identifica como "industrialmente orientado", y será objeto de una discusión más detallada en la próxima sección.

<sup>3</sup> Este argumento fue subrayado por Kravis (1956) y por Linder (1967). En algunas industrias se compensa mediante la importación de dirección y tecnología a través de corporaciones multinacionales, como se examinará después.

<sup>4</sup> Chenery y Taylor (1968).

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Los modelos normales de comercio exterior para cada uno de estos tres grupos de países se muestran en la gráfica 2. El efecto de un mercado de mayores dimensiones es el de permitir que las industrias que tengan economías de escala puedan desarrollarse a niveles bajos de ingresos y de ahí cambien hacia una ventaja comparativa en la industria. El nivel de exportaciones *per capita* varía inversamente con el tamaño del país, siendo dos veces mayor para una nación de 5 millones de habitantes que para un país con una población de 40 millones.

La gráfica 2 se ha elaborado de tal manera que muestre tanto los ni-

GRÁFICA 2. Comparación de los modelos de comercio



EXPORTACIONES INDUSTRIALES PER CAPITA, 1968 (US \$)

FUENTE: "Uniform Analysis of Development Patterns", Chenery, H. B., Elkington, H. y Sims, C.: Harvard University Ec. Dev. Rep. núm. 148 (1970).

veles de exportaciones per capita de materias primas y de productos industriales, así como la composición de las exportaciones totales. Cualquiera de las dos medidas puede usarse como un indicador del cambio hacia las exportaciones industriales. Para un país promedio con una población de 10 millones de habitantes, las exportaciones industriales alcanzan un nivel de 10 dólares per capita cuando el ingreso es de alrededor de los 250 dólares, como se muestra en la gráfica 2. En este punto, las exportaciones industriales son ligeramente superiores al 20 % de las exportaciones totales. Entre los países en desarrollo hemos identificado los principales exportadores industriales como aquellos que tienen: a) una exportación industrial per capita superior a los 10 dólares; b) exportaciones industriales totales mayores a los 50 millones de dólares, o c) una participación de las exportaciones industriales superior al 20 % de las exportaciones totales. Las 30 naciones que satisficieron uno o más de estos criterios en el año de 1968, se enlistan en el cuadro 1 de acuerdo con sus modelos de comercio; y las últimas se muestran en la gráfica 2.

Para un país típicamente pequeño que tiene exportaciones altas de materias primas —representadas por la curva SP en la gráfica 2— no e alcanza el nivel de los 10 dólares de exportación sino hasta que el ingreso alcanza un nivel de 350 dólares *per capita*; en este punto los productos industriales representan solamente un 10 % de las exportaciones totales. Jamaica, Malaya y la Costa de Marfil son ejemplos que ilustran este modelo. En el extremo opuesto, un país que carece de recursos primarios, por regla general debe llegar a este nivel de las exportaciones industriales antes de que se logre un ingreso *per capita* del orden de los 200 dólares, como se muestra en la curva *SM*. Los ejemplos de este modelo se encuentran en los desarrollos posbélicos de Singapore, Formosa y Tunisia.

Los países grandes tienen un modelo de comercio exterior que es bastante similar al de los pequeños industrialmente orientados (SM), pero con niveles más bajos de exportaciones y especialmente de exportaciones primarias. El cambio en la ventaja comparativa resultante de mercados internos más grandes conduce a una temprana sustitución de las importaciones, así como a la exportación de artículos intermedios, maquinaria y bienes de consumo. Al mismo nivel de ingresos, la composición de las exportaciones industriales puede ser bastante diferente de aquellas de los países más pequeños.

Este resumen de los efectos promedio de la escala, de los recursos y de los niveles de ingresos, proporciona un antecedente para el análisis

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que sigue a continuación sobre la experiencia tenida por algunos países. Como se ha basado en estimaciones de las relaciones promedio en el periodo de la posguerra, los modelos "normales" reflejan las políticas actuales un tanto prejuiciadas que han favorecido la sustitución de las importaciones sobre las exportaciones, y de la industria sobre la agricultura. Aunque los resultados representan así la experiencia típica más bien que una norma, proporcionan un punto de partida para discutir lo que podrían ser en el futuro los modelos más óptimos de comercio.

#### Características de los principales exportadores industriales.

En años recientes ha habido la tendencia de enfocar la atención hacia unos pocos países, tales como Hong-Kong, Singapore, Formosa, Israel y Corea, que han alcanzado progresos más bien espectaculares en el campo de la exportación de artículos manufacturados. Aunque hay mucho que aprender de estos ejemplos, ellos representan solamente uno de los modelos ya descritos —o sea el de países que se han visto forzados a la exportación de manufacturas debido a la falta de recursos primarios (materias primas). Un análisis más equilibrado sobre el papel que desempe nan las exportaciones de manufacturas debe tomar en cuenta las diferencias en la dotación de recursos y sus efectos sobre el punto en el cual es deseable cambiar hacia los productos manufacturados.

En el cuadro 1 aparece una lista de treinta de los principales países exportadores de artículos manufacturados, los cuales se han identificado por los tres criterios ya mencionados. De estos países, 12 son grandes y 18 pequeños. Dentro de este último grupo, 7 pudieron clasificarse a mediados de la década de los años 60 como "industrialmente orientados" en relación al modelo promedio de comercio. Aunque la población de los 18 países pequeños es apenas de 100 millones de habitantes, ellos representan una participación más bien grande en el total de las exportaciones industriales que los otros 12 países, los cuales contienen más de mil millones de habitantes.

Es bastante diferente el papel que juegan las exportaciones industriales en cada uno de estos tres grupos. En los países grandes las exportaciones industriales han seguido típicamente el desarrollo de las manufacturas para el mercado nacional. Solamente en tres casos —Yugoslavia, Corea y Pakistán— las exportaciones son ahora de poco más del 5 % de la producción industrial. A este respecto, Corea se ha destacado más por la rapidez con la cual ha compensado la falta de exportaciones (que inicialmente fueron desquiciadas por la ayuda extranjera) que por la extensión de la especialización de su industria

La experiencia de los países pequeños industrialmente orientados representa una ruptura radical con el pasado y, por lo tanto, ha atraído mucha atención. Con base en el criterio expuesto aquí, este grupo incluye a Tunisia, a Portugal y a Líbano, así como a los ejemplos más conocidos de Formosa, Singapore, Hong-Kong e Israel. La característica principal que tienen en común estos países es su limitada oportunidad para las exportaciones primarias, que varían desde 20 hasta 40 dólares *per capita* —lo cual no es mucho mayor que el de países grandes más autosuficientes. Sus niveles de exportación de manufacturas *per capita* son considerablemente más altos que aquellos de países más grandes, y representan una mayor proporción del total de sus manufacturas. De esta manera el mercado de exportación es el factor más importante en la decisión para establecer una nueva planta y para determinar la eficiencia de su producción.

El grupo de países pequeños industrial aente orientados consiste de 11 naciones que hasta fecha muy reciente siguieron los modelos tradicioales de especialización en sus exportaciones primarias. Para 1960 habían alcanzado niveles relativamente altos *per capita* de exportaciones primarias, oscilando desde 50 a los 100 dólares, o poco más. A medida que sus recursos primarios alcanzaron un mayor desarrollo, y de que aumentaron sus disponibilidades de mano de obra y de capital, su ventaja comparativa marginal se derivó hacia la industria. Principiando desde un bajo nivel, sus exportaciones industriales crecieron rápidamente durante la última década, y en la actualidad se han constituido en exportadores industriales de consideración. Como se describirá más adelante, el hecho de que el cambio hacia las exportaciones industriales esté ocurriendo a niveles más elevados de ingresos y de salarios que en los otros dos modelos, requerirá generalmente el desarrollo de las exportaciones de manufacturas que sean menos dependientes de la mano de obra barata.

### II. CAMBIOS EN LA ESPECIALIZACIÓN

Desde principios de la década de los años de 1950, los especialistas en desarrollo han señalado que los modelos actuales de especialización internacional no proporcionan una base viable para un rápido crecimiento de los países menos desarrollados. La aceptación indiscriminada de esta conclusión condujo inicialmente a un exagerado cambio en las políticas

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contra las exportaciones en general. Ha llegado a constituirse en la sabiduría convencional de principios de la década de los años de 70 el regreso a las políticas orientadas de adentro hacia afuera, y el darle mayor énfasis a las exportaciones de productos manufacturados. Como se ha sugerido en la sección precedente, esta deliberación necesita diferenciarse para tomar en consideración el potencial de exportaciones primarias de un país, las variaciones en los grados de adiestramiento o calificación y en las proporciones factoriales y, por último, el tiempo que se necesita para cambiar la estructura de la producción.

#### Respuestas a los cambios de las políticas

La teoría del intercambio comercial concluye que un país debe especializar su estructura productiva de acuerdo con su ventaja comparativa. Mientras lo anterior reconoce que la ventaja comparativa puede cambiar durante el transcurso del tiempo y puede ser afectada por varios tipos de política, hay muy poca evidencia sistemática sobre cómo se efectúan esos cambios. Por lo tanto, debemos resumir brevemente la naturaleza de las respuestas a los cambios de políticas favoreciendo las exportaciones indus triales en el periodo de la posguerra, como un antecedente para nuestras recomendaciones subsecuentes.

Varios estudios recientes<sup>5</sup> han hecho una distinción entre los tipos de política comercial hacia adentro y hacia afuera, refiriéndose a un prejuicio hacia la sustitución hacia adentro de las importaciones en oposición a la promoción de las exportaciones. Es igualmente importante identificar los prejuicios sectoriales de las políticas comerciales según se refieran a la producción primaria y a la industria, y entre diferentes tipos de industria. Por ejemplo, las políticas coloniales fueron tanto hacia afuera como prejuiciadas hacia la producción primaria no solamente en la producción y comercio de artículos, sino en la ubicación de la infraestructura y en otros caminos indirectos.

La reacción a los modelos coloniales de especialización ha producido tanto un cambio en énfasis de la producción primaria a la industria, como unas políticas comerciales que cambian su orientación externa hacia su orientación hacia adentro. En la mayoría de los casos las dos han marchado juntas debido a que ha sido más fácil y generalmente eficiente desarrollar una industria que ha sido diseñada originalmente para el

<sup>5</sup> Little, Scitovsky y Scott (1970); B. Balassa y asociados (1971); y H. Myint y asociados (1971).

mercado interno. Esta combinación de políticas ha sido ineficiente cuando ha repercutido desfavorablemente sobre las inversiones hacia la producción primaria, y ha involucrado instrumentos de política —tales como tarifas y cuotas en lugar de la devaluación del tipo de cambio— que favorecen al mercado nacional sobre el de la exportación.

Dejando a un lado los dos ejemplos de las ciudades-estados de Hong-Kong y Singapore, no hay casos durante la posguerra de países en desarrollo que hayan sido capaces de incrementar las exportaciones industriales sin tener una fase inicial de protección y de sustitución de las importaciones. Para 1960 habían solamente cuatro países en desarrollo —Israel, Portugal, Hong-Kong y Singapore—, en los cuales las exportaciones industriales predominaban y en donde se estableció una política orientada hacia afuera. No fue sino durante los últimos diez años en los que Formosa, Corea, Yugoslavia, España e Irlanda se unieron al grupo de países que habían establecido una especialización industrial y políticas encaminadas a un crecimiento adecuado de las exportaciones totales.

En este grupo de nueve países, la identificación inicial y la promoción de la ventaja comparativa en la industria fueron simplificadas por el hecho de que las posibilidades de exportaciones primarias son bastante limitadas, y el turismo es una alternativa de significación a las exportaciones industriales. A medida que se agotaron las posibilidades de sustitución de las importaciones se proporcionaron a los exportadores suficientes incentivos para asegurar tasas de crecimiento de las exportaciones industriales del orden del 20 %.<sup>6</sup>

El siguiente grupo de países que logró un cambio sustancial hacia la industria y su estructura de exportaciones incluye al Brasil, Colombia, México, las Islas Filipinas, Egipto, Costa Rica, Guatemala y El Salvador. Los cinco países más grandes intentaron primero compensar el lento crecimiento de las exportaciones primarias durante una década, o más, mediante la sustitución de las importaciones; y fue posible un cambio hacia la promoción de las exportaciones solamente después de que se demostraron las limitaciones de esta política.<sup>7</sup> Los últimos tres pequeños países

<sup>6</sup> En Israel, Corea y Formosa la disponibilidad de cantidades considerables de ayuda del exterior hizo posible el desarrollo de una infraestructura y de una industria nacional durante la década de los años de 1950; y solamente hasta la década de los de 1960 hubo un cambio hacia las exportaciones industriales para reducir la dependencia en la ayuda exterior. Durante el periodo de 1960 a 1968 Pakistán estuvo siguiendo un curso similar. En otros países, el crecimiento del PNB se relacionó más íntimamente al crecimiento de la exportación de manufacturas.

<sup>7</sup> La orientación que se le dio en las Islas Filipinas a las exportaciones siguió estando basada principalmente en recursos naturales, siendo las principales exportaciones las correspondientes a madera laminada, chapas de madera y aceites vegetales.

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deben el rápido crecimiento de sus exportaciones industriales a la formación del Mercado Común de Centroamérica, que es el único intento de integración regional entre los países menos desarrollados para conseguir un crecimiento sustancial de sus exportaciones nacionales. Sin embargo, hasta cierto punto, tal orientación exportadora se consumó a expensas de un comercio orientado más competitivo con los mercados exteriores. Como se indicará más adelante, el afortunado cambio en la especialización logrado por este grupo de países fue resultado en su mayor parte de políticas de liberalización del comercio y del mantenimiento de tipos realistas en el cambio de divisas.

El cuadro 1 incluye un número de otros países en los cuales las políticas de sustitución de las importaciones han sido mantenidas por mucho tiempo, y en donde un cambio hacia las exportaciones industriales produciría resultados más bien rápidos. En los casos más extremos es necesario poner un mayor énfasis en las exportaciones para eliminar una mayor limitación a un crecimiento más acelerado. Estos países incluyen a la Argentina, la India, Turquía, Chile y el Uruguay. En cada una de estas naciones una mezcla de política orientada hacia afuera debe estimular algún crecimiento de las exportaciones primarias, así como de artíco los manufacturados.

## Fuentes de la ventaja comparativa

Los principales exportadores durante la década de los años de 1960 fueron los países que basaron sus exportaciones en mano de obra barata, concentrándose en aquellos productos que requerían solamente cantidades limitadas de capital y de capacitación o calificación. Durante esa década, la composición de las exportaciones cambió entre los principales exportadores como reflejo de su creciente adiestramiento y experiencia.

Hong-Kong es el *PMD* exportador más importante de productos manufacturados —no obstante su reducido tamaño territorial—, y la tasa de crecimiento de sus exportaciones es aún más alta. Durante esa misma década, Pakistán y Corea, que comenzaron sobre niveles muy bajos de exportación, lograron el más alto promedio anual de incremento en el aumento de sus manufacturas. Para estos dos países, el logro alcanzado representó costos económicos demasiado altos,<sup>8</sup> pero en ambas naciones fue crítica la escasez de divisas extranjeras cuando principiaron a otorgar incentivos demasiado altos a sus exportaciones. Tres países europeos de

8 Lewis (1970).

bajos ingresos, como son España, Portugal y Yugoslavia, también lograron tasas altas en el crecimiento de sus exportaciones de artículos manufacturados, habiendo partido de niveles muy bajos. En estos casos, los eslabones comerciales largamente establecidos, las afinidades culturales y la mera proximidad geográfica atenuaron los problemas inherentes al establecimiento de mercados de exportación.

Para todos estos países, la exportación de manufacturas se ha concentrado fuertemente en unos cuantos productos. Entre las primeras exportaciones de los países en desarrollo se tienen los textiles y telas, la ropa hecha, los productos de cuero y los zapatos, y todavía siguen siendo los más importantes para cada uno de los principales países exportadores (cuadro 2). Los productos alimenticios son las otras manufacturas tradicionales que se exportan en cantidades considerables; y para países como Formosa combinan un recurso básico con la intensidad de la fuerza de trabajo. Para algunos otros países esto también ha sido cierto tratándose de la madera y sus productos; artículos que constituyen un componente importante de las exportaciones de PMD. En estas industrias, la chispa o brote inicial del crecimiento de las exportaciones corresponde en algunos spectos a la primera fase de la sustitución "fácil" de las importaciones. Como se mostrará en la siguiente sección, también se enfrentan a una limitación de mercados, lo cual requiere que los países busquen nuevas oportunidades para continuar el crecimiento de sus exportaciones.

A mediados de la década de los años de 1960 el desarrollo de los componentes electrónicos y eléctricos introdujo una nueva fase en las exportaciones industriales combinando la movilidad internacional del capital y su inherente tecnología y administración con la pronta disponibilidad de mano de obra relativamente calificada, bajos salarios y técnicos. En este caso, Hong-Kong fue nuevamente el iniciador y principal exportador. Formosa, Corea y Singapore también participaron en un crecimiento que fue posible por la apertura de nuevos mercados en este campo de actividades en los países en desarrollo. El movimiento de las corporaciones multinacionales a sitios de *PMD* como una base de abastecimiento a los mercados de los países desarrollados introdujo un nuevo elemento en la división internacional del trabajo. En este tipo de industria, la pronta disponibilidad de mano de obra calificada, de técnicos y de ingenieros, a costos muy inferiores que los que se tienen en los países desarrollados constituye una atracción muy significativa.

Los beneficios de la producción a bajo costo apenas han sido pasados, en parte, a los consumidores en los países desarrollados, de manera que

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las ventajas de este comercio no han sido explotadas plenamente. Los problemas de las inversiones extranjeras directas han complicado la situación tanto en los países prestamistas como en los recipientes. Sin embargo, esta combinación de capital, de tecnología, de administración y de acceso a los mercados, ha abierto nuevas oportunidades de exportación para países con poco desarrollo industrial. Particularmente en aquellos países en donde la escasa disponibilidad de divisas extranjeras constituye embotellamiento se espera que la mayoría de ellos se convierta —ahora más que antes en un manufacturero de artículos para el mercado de exportación, a un nivel bajo de ingresos *per capita*.

Los países con un ingreso bajo per capita tienden a tener salarios relativamente bajos y, por lo tanto, están más capacitados para entrar al negocio de la exportación de manufacturas concentradas en productos que requieran una intensa mano de obra. Aquellas naciones con una buena base de recursos naturales son capaces de preferir las exportaciones de productos primarios hasta que se alcancen niveles de ingresos más altos per capita, hasta que tengan un nivel general más alto de salarios, y se concentren más en un capital intensivo para sus productos de exportación. Sin embargo, existe una fuerte variación en los niveles de salarios indus triales en países con el mismo nivel de ingresos, ya que los niveles de salarios están influidos por factores sociales y políticos, así como por factores económicos. Un rápido crecimiento de la población y el éxodo rural pueden significar que aun los países orientados a las exportaciones primarias pueden tener salarios relativamente bajos exportando productos de su fuerza intensiva de trabajo y, por lo tanto, ello sea una adecuada política a seguir.

La tendencia más reciente en la exportación de manufacturas de los países en proceso de desarrollo está asociada con la creciente sofisticación de economías originalmente de "mano de obra intensiva" y la entrada al campo de las exportaciones de un segundo grupo de los países previamente orientados hacia adentro, pero que ahora son países con un desarrollo relativamente industrializado. Los primeros han elevado su producción hacia más bienes de capital intensivo dentro de los sectores industriales existentes (por ejemplo, textiles) y se han desplazado a nuevos tipos de productos. Esto es particularmente aplicable a Hong-Kong, Israel y Singapore. En el último grupo, el deseo de obtener beneficio de economías de escala ha dado un mayor énfasis a la exportación de materias químicas, de equipos de transporte y de productos similares. En la mayoría de estas naciones semiindustrializadas, los costos de producción por eficiencia —a tasas o tipos de cambio equilibrados—, y para las firmas intramarginales, frecuentemente no son más altos que en los países desarrollados, y con frecuencia esos costos son considerablemente menores. No solamente los niveles de salarios son inferiores a los de los países desarrollados, sino que la productividad marginal de la mano de obra es frecuentemente más alta para industrias individuales que en los países desarrollados.

Los productos que están siendo exportados actualmente a los países desarrollados<sup>9</sup> incluyen equipo de telecomunicación, interruptores, herramientas para maquinado, máquinas calculadoras y de escribir, carros de ferrocarril, acero y productos acerados. Es más, las tendencias actuales sugieren que a medida que se desarrolla más este comercio, varios de los países en desarrollo más industrializados tienen una ventaja comparativa tan considerable que las barreras arancelarias moderadas —hasta ahora impuestas a ropa y textiles de algodón— pueden ser impedimento menor para ellas. Es también importante que los países semiindustrializados tengan una ventaja comparativa vis à vis con los países menos desarrollados en todo, excepto en productos que requieren de una mano de obra extreadamente intensiva. Por lo tanto, los países menos desarrollados tienen que depender fuertemente de las inversiones extranjeras si es que van a tener éxito como exportadores de manufacturas.

# III. TENDENCIAS EN LAS EXPORTACIONES DE MANUFACTURAS

A medida que cambia rápidamente la composición de las exportaciones de los países en proceso de desarrollo, y que nuevos países se están interesando en orientarse hacia las exportaciones, las tendencias seguidas en la década de los años de 1960 deben interpretarse con alguna precaución. De cualquier manera, ellas nos proporcionan un marco de referencia del cual se puede esperar que surjan los modelos para la década de los años de 1970.

# Exportaciones a mercados de economías desarrolladas

En 1960 las exportaciones de los países en desarrollo a los mercados de economías desarrolladas fueron un poco superiores a la mitad de las exportaciones de artículos manufacturados, y para 1967 habían crecido

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<sup>&</sup>lt;sup>9</sup> Con frecuencia se necesita ofrecer incentivos para la exportación de tales productos, con el propósito de compensar las tasas sobrevaluadas del cambio de divisas.
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en cerca del 14 % por año, habiendo alcanzado el 60 % del total de estas exportaciones (cuadro III). Los Estados Unidos fueron el más grande de los importadores, y la participación de los países en desarrollo en esas importaciones totales por los Estados Unidos fue la más alta para cualquier país desarrollado, siendo del orden del 10.8 % en 1968. El Reino Unido y el Japón ocuparon el segundo y el tercer lugar, respectivamente, con 9.2 % y 8.1 % (cuadro IV). Sin embargo, los Estados Unidos son un país que relativamente no pone mucha confianza en el comercio exterior, y la relación de las importaciones hechas de los países en desarrollo frente al PNB ocupa el penúltimo lugar (el Japón es el último) entre los países desarrollados. El Reino Unido, Noruega, Holanda y Bélgica-Luxemburgo son los países que tienen proporciones más altas entre las importaciones procedentes de los países en desarrollo y el PNB.

Las exportaciones de productos manufacturados de los países en desarrollo han producido su mayor efecto en las importaciones totales de ropa, capítulo en el cual representaron en 1968 el 25.5 % del total de las importaciones. Esta cifra fue seguida por 15 % de artículos de cuero y calzado, 14.6 % de textiles, 14.2 % de productos de madera y muebles y 12 % de productos alimenticios (cuadro V). Sin embargo, la agrupa ción en estas categorías generales tiende a producir un panorama bastante difuso, siendo necesario un enfoque más detallado de producto por producto para indicar la importancia del efecto que están produciendo los productos de los países en desarrollo sobre las economías de los países desarrollados. El cuadro VI, que muestra la importación de ropa de los países en desarrollo por los Estados Unidos, indica que en relación a la producción nacional (y a la exportación), tales importaciones representaron hasta una quinta parte del consumo total. Pueden derivarse dos conclusiones: primero, que una participación relativamente baja del mercado en su más amplia interpretación, ha dado por resultado una restricción de las importaciones; y, segundo, que dentro de tan amplia clasificación de mercados puede producirse un efecto lo suficientemente fuerte sobre grupos específicos de productos para causar una dislocación sustancial de su producción en el país más desarrollado. Esto conduce generalmente a restricciones cuantitativas, a menos que se disponga del auxilio de un ajuste efectivo.

La imposición de restricciones cuantitativas formales e informales a esas importaciones, las cuales han venido creciendo rápidamente, ha contribuido a la relativa estabilidad en la participación de las exportaciones de los países en desarrollo hacia los mercados de las economías desarrolladas. El modelo no ha sido el mismo para todos los mercados de economías desarrolladas. En un país en proceso de desarrollo sus importaciones crecen menos rápidamente que todas las importaciones hechas por la Comunidad Económica Europea y casi a la misma tasa que todas las importaciones de la región del EFTA y de los Estados Unidos.

Australia y el Canadá absorben importaciones procedentes de países en desarrollo a una tasa ligeramente menos rápida que todas las demás importaciones; y para el Japón la relación o proporción de crecimiento del total de las importaciones de los países en desarrollo fue casi del doble (cuadro VII). Es cierto que las importaciones japonesas de los países en desarrollo fueron insignificantes en 1960, pero en esa década se registró la tasa más rápida de crecimiento de las importaciones procedentes de los países en desarrollo. Esto se aplica para todas las categorías de productos, particularmente textiles.<sup>10</sup>

# Exportaciones a los países socialistas

Las exportaciones de productos manufacturados a los países socialistas fueron muy reducidas, representando apenas alrededor del 5 % del total de las exportaciones de los países en desarrollo; pero aumentaron más rápidamente durante la década de los años de 1960 que las exportaciones a los mercados de economía desarrollada. Los principales países exportadores fueron la India y la República Árabe Unida, pero hacia el fin de esa década las exportaciones de Irán a los países socialistas comenzaron a crecer rápidamente. Aunque los textiles y las prendas de vestir fueron componentes importantes de este comercio, las exportaciones de maquinaria desempeñaron también un papel de significación.

El comercio exterior de los países en desarrollo con los países socialistas tiene un número de características únicas. De manera general se ha organizado dentro de un marco de trabajo de convenios bilaterales, y los países en desarrollo se han beneficiado con su acceso a un mercado de economía y métodos de producción especialmente diseñados, habiéndose encontrado una buena aceptación por los bienes de consumo. Sin embargo, en algunos casos los países socialistas han proporcionado equipo de capital bajo términos extremadamente liberales,<sup>11</sup> y los países en desarrollo han podido negociar adquisiciones generosas de productos termina-

<sup>10</sup> Naciones Unidas, Trade in Manufactures, 1970.

<sup>11</sup> Son cosas normales las tasas de interés del 2,5 al 4%, los precios competitivos para la calidad de la maquinaria proporcionada y los plazos generosos para el pago del adeudo.

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dos, como medios de pago. En algunos casos han habido dificultades para calcular los precios de exportación y el valor real de las divisas extranjeras obtenidas, debido a los tipos cambiarios de sombra de las divisas en los países en donde se compran los insumos; tasas de cambio que en los países socialistas pueden diferir considerablemente de sus tipos de cambio reales. A medida que crece el volumen de ese comercio pueden presentarse dificultades para obtener de los países socialistas un abastecimiento suficiente de importaciones a cambio de los productos o artículos exportados. Sin embargo, por regla general estas dificultades pueden superarse, siendo por ahora favorables las perspectivas para aumentar las exportaciones de productos manufacturados a los países socialistas.

#### Comercio entre los países en desarrollo

El intercambio comercial de manufacturas entre los países en desarrollo representa en términos generales las dos terceras partes del comercio entre los mercados de economías desarrolladas y los países socialistas. La tasa de crecimiento en el primer caso ha sido menor que el comercio entre estos dos últimos grupos de naciones, de manera que la participación de su comercio descendió algo en la década de los años de 1960. Las altas barreras comerciales que han erigido los países en desarrollo frente a los países desarrollados comenzaron a afectar sus oportunidades mutuas de comercio. Entre los países en desarrollo, la mayor parte de las exportaciones de manufacturas en la misma década se dirigieron al Asia Oriental y Sudoriental. El crecimiento de este comercio fue más rápido entre los países de la América Latina, como reflejo de los arreglos regionales del Mercado Común Centroamericano, del Grupo Andino, y más generalmente de la ALALC.

#### CONCLUSIONES

Varias conclusiones emergen de este análisis de los modelos de comercio exterior en la década de los años de 1960. En primer lugar resulta claro que un creciente número de países en desarrollo, particularmente aquellos con niveles relativamente avanzados de industrialización, han sido capaces de entrar a los mercados de los países desarrollados, a pesar de los aranceles y de otras barreras levantadas contra ellos. En segundo lugar, aun una importación relativamente reducida por los países en desarrollo ha dado lugar a restricciones cuantitativas contra ellos.<sup>12</sup>

12 Shepherd (1969 y 1971) y Keough (1971).

Tales restricciones tienen un efecto particularmente depresivo sobre la habilidad exportadora de los países menos industrializados. Por último, entre los países en desarrollo ha sido descuidado el intercambio comercial de manufacturas, debido a las altas barreras arancelarias que erigieron inicialmente en contra de las importaciones procedentes de los países desarrollados. Aunque existen grandes oportunidades para una expansión del comercio entre los países en proceso de desarrollo, son todavía formidables los problemas de políticas que hay que superar.

#### IV. IMPLICACIONES DE LAS POLÍTICAS

Es obvio que tanto para los países en proceso de desarrollo, como para los que ya están desarrollados, las políticas que afectan más directamente su comercio exterior constituyen el aspecto más crítico de los cambios de política que se requieren para extender la división internacional del trabajo de los productos manufacturados. Pero éstos no son los únicos problemas de política que están considerados. Para los países en proceso de desarrollo son particularmente importantes otras políticas que afectan los factores que se relacionan con los precios. Para ambos grupos de países, los desarrollados y los que se están desarrollando, son necesarios los cambios en las políticas que afectan la estructura competitiva de la industria, con el propósito de reorientar el comercio exterior hacia el mejor uso de los factores productivos.

### Políticas para países en desarrollo

Con la excepción de Hong-Kong y de Singapore, en donde predomina una política económica de comercio libre, las políticas de comercio de los países en proceso de desarrollo varían desde aquellas con niveles moderados de protección nominal del orden del 35 al 40 %, hasta aquellos otros con tarifas altas que van del 60 al 80 %, sostenidas por un sistema extensivo de controles cuantitativos y de prohibición de las importaciones.

Mientras los países del primer grupo tienen generalmente tipos de cambio que se encuentran cercanos a un nivel de equilibrio a largo plazo, muchos de los últimos tienen tasas sobrevaluadas de cambio, lo cual los obliga a la continuación del sistema de tarifas proteccionistas. Además, los países con tipos sobrevaluados de cambio y alto proteccionismo requieren por lo general de una verdadera avalancha de controles administrativos, incluyendo el otorgamiento de permisos de varios tipos con el fin de mantener funcionando el sistema.

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Ya es de sobra conocida la amplitud del prejuicio que origina este proteccionismo contra las exportaciones, y se reconoce de manera general que son necesarios los incentivos a las exportaciones en la forma de rebajas, de exención de tarifas,<sup>13</sup> de subsidios de capital y de promoción del comercio para compensar las exportaciones.<sup>14</sup> Sin embargo, la experiencia de la última década también sugiere que existe muy poco eslabonamiento directo entre la generosidad de los incentivos y el comportamiento de las exportaciones. Como sucede en el caso de la sustitución de las importaciones, aquí también tiende a ser confusa la racionalización para contrarrestar los prejuicios contra las exportaciones y para estimular las exportaciones de productos con el argumento de las "industrias nacientes".

Actualmente muchos países están ocupados en introducir para sus exportaciones todos los incentivos usados por otros países, y el resultado es una fuerte tendencia a la exageración de los incentivos. Los fabricantes reciben más incentivos de los que realmente requieren para fomentar las exportaciones; los prejuicios de un alto proteccionismo contra otras actividades económicas no solamente son incorrectos, sino exagerados, debido a que dichos incentivos se limitan por regla general a la exportación de manufacturas, empeorando los términos de comercio contra la población agrícola.

En casos extremos la población rural no sólo está subsidiando a los sectores industriales de su propio país, sino también a los consumidores de los países desarrollados. Además, mientras por un lado el alto proteccionismo a la sustitución de las importaciones tiende a ser autoderrotista por producir costos altos, por otro lado los subsidios a la exportación son con frecuencia menos notorios, y en algunos casos —notablemente cuando se otorgan a través de tipos diferenciales de cambio— pueden perpetuarse indefinidamente.<sup>15</sup>

Por lo tanto, un enfoque racional a la orientación de las exportaciones

<sup>13</sup> De acuerdo con las reglas del GATT éstos son los únicos incentivos permitidos, pero hasta la fecha los reglamentos no han sido de cumplimiento forzoso. Debe hacerse notar que las reglas del GATT no estuvieron basadas sobre teoría económica pura, de manera que los impuestos directos y los impuestos indirectos pueden interpretarse como costos. Es probable que la naturaleza y la amplitud de los subsidios vuelva a ser motivo de discusión en la década de los años de 1970, a medida que aumenten las exportaciones de manufacturas de los países en desarrollo, y entonces las reglas del GATT serán objeto de un examen detallado.

14 Little, Scitovsky y Scott (1970); Balassa y asociados (1971) y Myint y asociados (1971).

<sup>15</sup> El nivel actual de tarifas dependerá seguramente del tipo de cambio que adopte el país, así como de su etapa de desarrollo industrial. Suponiendo un equilibrio en el tipo cambiario de divisas, las tarifas del 25 y del 35 % pueden considerarse como moderadas a la luz de las prácticas actuales de comercio, las cuales se tomarán algún tiempo en mejorar. Las tarifas temporales para las industrias nacientes podrán ser fijadas por arriba de este nivel. no requiere meramente de incentivos amplios para compensar las bases existentes de protección, sino más bien un programa razonable para reducir los niveles proteccionistas tanto por la disminución de los aranceles, como por el desmantelamiento de las prohibiciones y de las restricciones cuantitativas.<sup>16</sup>

Con lo anterior no se niega el argumento en favor de las "industrias nacientes", particularmente en donde las manufacturas necesitan de una escala relativamente grande de operaciones para trabajar con eficiencia. Pero la protección relativamente alta que se otorga a tales industrias debe ser claramente de naturaleza temporal, y los manufactureros deben ser notificados cuando se implante un programa de reducción de los aranceles. Las tarifas no solamente deben ser moderadas, sino también ser tan uniformes como sea posible, y cuando más estar divididas en dos o en tres "bandas". Las tarifas ampliamente diferenciadas, "hechas a la medida" de las necesidades de las firmas marginales, son por regla general las más inímicas a la eficiencia y buen comportamiento de las exportaciones. Algunas de las mejores oportunidades para las exportaciones de manufacturas pueden surgir conjuntamente con la sustitución económica de las importaciones, pero solamente deben hacerse si la sustitución de las importaciones es razonablemente eficiente. Un país que apenas está comenzando a industrializarse debe tener en mente las perspectivas eventuales que se presenten para las oportunidades de sus exportaciones. Mientras más moderada sea su protección y mejor dirigida por medidas temporales para las industrias nacientes, más fácil le será orientar sus exportaciones.

No puede negarse que la práctica de reservar el mercado interno para los productores locales, frecuentemente como una base de los precios marginales, y estimulando las exportaciones con incentivos, ha sido un buen método para entrar con éxito a las exportaciones. La industrialización del Japón debe mucho a tales tácticas y, como ya se ha mencionado, muchas otras naciones están siguiendo su ejemplo, simplemente añadiendo incentivos a las exportaciones mediante barreras a las importaciones. Las

<sup>16</sup> En donde la protección es severa y los tipos de cambio de divisas están sobrevaluados viene a ser extremadamente difícil la evaluación del nivel correcto de los incentivos a la exportación. De hecho, el único método que merece confianza es la evaluación del proyecto para establecer, en cada caso en particular, si las ganancias económicas que se obtienen de las exportaciones justifican el subsidio. Esencialmente esto significa tomar en cuenta los costos y los beneficios totales de un proyecto dado de exportación a precios en la frontera, descontando tales ganancias. Pero en la mayoría de las economías, los tipos de cambio y los niveles de protección no son los únicos elementos de distorsión. El precio de los salarios y del capital son igualmente el cálculo del precio del capital y del trabajo si se quiere que la estimación del costo/ beneficio refleje con precisión el uso del recurso y las economías esternas.

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prácticas de los países desarrollados de fijar precios marginales dan a los países en desarrollo una razón para tales políticas. Sin embargo, como enfoque general para aumentar el comercio internacional de productos manufacturados, tal como el mercantilismo de última hora, no puede tener mucho éxito.

A largo plazo, un país en desarrollo que busca una ventaja comparativa en industrias crecientemente productivas, no estará satisfecho con un conocimiento de las distorsiones de precios que sufren sus insumos para las manufacturas, sino que buscará rectificarlos a través de políticas adecuadas.

Los costos de la infraestructura pueden ser desorbitados debido a un cobro inadecuado del impuesto público o a modelos no apropiados de gastos y de políticas de precios, los cuales tendrán que corregirse. Más comúnmente los precios tanto del capital como de la fuerza de trabajo tienden a estar fuera de línea con las proporciones reales de los factores, y esto puede requerir más remedios inmediatos debido a que generalmente son los componentes más importantes de los costos de manufactura.

Es usual que por diversas razones el capital fijo esté depreciado en los países en desarrollo. El equipo de capital está sujeto frecuentemente a derechos de importación muy bajos en contraste con los productos intermedios y particularmente los terminados, y aun tales pequeños derechos gozan frecuentemente de exención tratándose de industrias "esenciales", que por regla general resultan ser casi todas las industrias. Además, con frecuencia se dispone de financiamiento de capital fijo otorgado como una concesión, cuando menos para firmas importantes y favorecidas, aunque el capital de trabajo no está sujeto a tales concesiones. Las exenciones a los impuestos corporativos y las concesiones tienden a estar relacionadas al capital fijo. Tales distorsiones tienden a favorecer a las industrias y procesos de capital intensivo, a expensas de la intensidad del uso de mano de obra.<sup>17</sup>

Es frecuente que en los países en desarrollo sufra distorsiones el precio de la mano de obra. En algunos casos esto se debe a la fuerza política de las agrupaciones o sindicatos de trabajadores; aunque más frecuentemente es el resultado de la presión para crear en los países en proceso de desarrollo los servicios sociales que estén de acuerdo con los conceptos y normas de bienestar del siglo xx. Tanto Israel como Singapore han demostrado que un crecimiento rápido de las exportaciones está en consonancia con niveles relativamente altos de salarios y con buenas condiciones de trabajo. Sin embargo, en muchos países en desarrollo los salarios industriales y particularmente las prestaciones, no están de acuerdo ni con la productividad manufacturera ni con la situación de la oferta de la mano de obra. Los altos costos de despido que se debe pagar a los trabajadores estabilizan los actuales salarios industriales en detrimento del uso de más fuerza de trabajo en las manufacturas. Los beneficios de maternidad para las trabajadoras no eleva mucho el costo de emplear mujeres, aunque evita su empleo en industrias en las cuales su preparación y adiestramiento es tradicionalmente importante para obtener una alta productividad, y al mismo tiempo se reducen sus oportunidades de empleo.18

Argumentar en favor de precios más reales para el pago del salario de los trabajadores, particularmente para la mano de obra no calificada, no es sugerir precisamente un regreso a la explotación de los trabajadores industriales. Más bien es una sugerencia para que la remuneración del trabajador corra paralelamente a las condiciones generales del mercado de trabajo y de que se otorgue bastante atención a las remuneraciones diferenciadas por la calificación y la alta productividad de cada trabajador en lo individual. Cuando sea conveniente, los subsidios a los salarios pueden constituir una alternativa adecuada dentro de los subsidios que se otorgan a las industrias nacientes, así como un medio para introducir factores adecuados de precios.

Muy frecuentemente, la actividad promocional directa es el aspecto más descuidado dentro de la promoción de las exportaciones, a pesar de que en gran número de países ha demostrado ser el factor más importante. Puerto Rico inició este tipo de actividad a principios de la década de los años de 1960, y muchos otros países han usado esta técnica con diversos grados de éxito. En años recientes, el Consejo de Desarrollo Económico de Singapore inició un destacado esfuerzo promocional, actividad que ha sido el factor más importante para la afortunada orientación de ese país hacia las exportaciones.

18 Tales políticas entran también en conflicto con los programas de planificación familiar.

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<sup>&</sup>lt;sup>17</sup> Esta tendencia se exagera frecuentemente, y es apoyada en relatos apócrifos del supuesto deseo de los países en desarrollo de contar con "maquinaria nueva y resplandeciente". Debe reconocerse que en la mayoría de los procesos industriales son tan grandes las ventajas de los procesos intensivos del capital sobre la productividad, sobre la economía de las materias primas y sobre la calidad final del producto, que frecuentemente queda poco lugar para sustituir métodos intensivos de capital por una mano de obra intensiva, una vez que se ha seleccionado la industria. Pero las posibilidades para intensificar el uso de mano de obra varían con las industrias de que se traten; y el capital devaluado distorsiona así el complejo industrial reduciendo las oportunidades que existan para sustituir la fuerza de trabajo.

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## Intercambio comercial entre los países en desarrollo

Como se ha mencionado anteriormente, el crecimiento del comercio de manufacturas entre los países en proceso de desarrollo ofrece bastantes oportunidades.-En el pasado, la escasez y deficiencia de los transportes y de otros medios de comunicación impidió el comercio entre los países en desarrollo. Hasta antes de la década de los años de 1960 era más fácil embarcar productos de Indonesia a Holanda que a las Islas Filipinas, y de Manila a San Francisco que a Bangkok, debido a que éstas fueron las rutas tradicionales del comercio colonial por mucho tiempo establecidas. Esta situación, aunque no es todavía muy adecuada, ha mejorado considerablemente y no hay duda que mejorará más en el futuro a medida que progrese el comercio.

Sin embargo, existen todavía otras grandes dificultades. Aunque se le ha dado un énfasis considerable a los convenios regionales de comercio durante la última década, la mayoría de los argumentos ha sido en términos del establecimiento de empresas multinacionales que puedan sacar beneficios de operaciones comerciales en escala relativamente grande, en mercados también multinacionales. En otras palabras, se le ha dado un buen grado de énfasis a las ganancias derivadas del comercio complementario y diversificado, a expensas de las perspectivas de un aumento de la competencia, y de la creación de un comercio que podría derivarse de las agrupaciones regionales. No obstante, ha sido extremadamente difícil la organización de tales corporaciones multinacionales para satisfacer mutuamente a los países contratantes. A mayor abundamiento, este enfoque está pasando por alto el beneficio que puede obtenerse mediante la creciente especialización de industrias establecidas, como las de textiles y vestuario, en las cuales la eficiencia y la productividad pueden ser bajas en cada país, al amparo de barreras muy altas de protección.

Una disminución regional de las tarifas en tales artículos podría aumentar la productividad y disminuir los precios sin necesidad de exponer a los manufactureros a una competencia mundial abierta en donde tales medidas son, por supuesto, difíciles de adoptar. El mero concepto de mejorar la eficiencia significa frecuentemente la absorción o la quiebra de firmas marginales, y cuando menos a corto plazo el desempleo de sus trabajadores. Aunque esto fue tolerable en las economías desarrolladas de la Comunidad Económica Europea en periodo de rápido desarrollo total y de tasas bajas de desempleo, es mucho más difícil de adoptar y resolver en países en desarrollo que ya tienen tasas muy altas de desocupación. Aun cuando sea probable que dichas medidas produzcan —a través de una mayor productividad y de precios más bajos— altas tasas de crecimiento y de empleo a largo plazo, la protección de los empleos ya existentes es por regla general la condición *sine qua non* de la economía política a corto plazo. De esta manera, las medidas que buscan un mayor comercio exterior entre los países en desarrollo requieren una dosis considerable de atención cuidadosa y detallada hacia un tipo de comercio que no está siendo estimulado por las tendencias actuales hacia la derivación de las exportaciones a países desarrollados mediante el incentivo de las mismas.

#### Políticas para los países desarrollados

La adopción de un esquema general de preferencias hacia los países en desarrollo por la Comunidad Económica Europea, por el Japón, y provisionalmente por los Estados Unidos, ha sido el paso principal hacia el aumento de las importaciones de artículos manufacturados. Se espera que esto incremente la habilidad de los países en desarrollo para exportar manufacturas con un valor de 1 000 millones de dólares a los países desarrollados, por encima del actual nivel de exportaciones de alrededor de los 7 000 millones de dólares. Sin embargo, los textiles y la ropa no han sido incluidos en el esquema de preferencias; y los esquemas anunciados y propuestos son igualmente circunscritos, de manera que es probable que se impondrán restricciones cuantitativas cuando a pesar del esquema las importaciones en una sola categoría lleguen a ser de significación. Como los países semiindustriales no están obstaculizados seriamente por tarifas o aranceles, es probable que las ganancias principales correspondan a aquellos países menos desarrollados que adopten medidas especiales para obtener ventajas de tales preferencias.

En todo caso, el esquema generalizado de preferencias no puede ser considerado como una alternativa para la restructuración y disminución de las tarifas, que es requisito para terminar la discriminación contra el procesamiento inicial de las materias primas,<sup>19</sup> aunque existe poca evidencia de que los países desarrollados hayan tomado alguna iniciativa al respecto. Las tarifas sobre el procesamiento inicial de las materias primas constituyen un obstáculo particularmente importante debido a que el valor agregado es bajo, y la protección efectiva resulta ser entonces muy

19 Balassa (1967 y 1968).

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alta. Éstas son, además, actividades de importancia particular para los países menos desarrollados orientados a las exportaciones agrícolas.<sup>20</sup>

Las restricciones arancelarias y de cuota no son los únicos obstáculos a la creciente participación de los países en desarrollo dentro del comercio de productos manufacturados. Los países desarrollados, debido a sus grandes y prósperos mercados internos, frecuentemente son capaces de adoptar prácticas de precios marginales para sus exportaciones. Esto no solamente estimula la imposición de niveles muy altos de protección en los países en desarrollo, como medida defensiva, sino hace que la competencia sea extremadamente difícil en terceros países, ya sean en desarrollo o desarrollados. Otra práctica comercial que hace difícil la competencia para las naciones en proceso de desarrollo es el financiamiento, particularmente en forma de subsidio gubernamental y por lo tanto en términos de concesión, para otorgar créditos al comercio y a los abastecedores. Los países socialistas, que tienen réditos o tasas de interés que varían del 2 al 4 % sobre préstamos a plazo intermedio, son fuertes competidores. Las naciones en desarrollo que buscan esos términos de crédito tienen muchas dificultades para obtener para tales fines préstamos en términos de concesión de los países desarrollados.

Los préstamos atados de ayuda, y las compras condicionadas, están cobrando importancia a medida que las naciones más industrializadas dentro del grupo de las subdesarrolladas buscan competir en aquellos productos que frecuentemente tienen un componente considerable de mano de obra. Algunas veces las corporaciones de los países desarrollados licitan por contratos de equipos a través de sus subsidiarias en los países en desarrollo, introduciendo con frecuencia el elemento de la rebaja de precios en sus transferencias internas, con lo cual tratan de minimizar sus ganancias económicas en los países que tienen bajos impuestos. Por supuesto que tales actividades de intercambio comercial no se constriñen al comercio de los países en desarrollo, sino también entre los países desarrollados. Sin embargo, es importante hacer notar que en donde el comercio se ha estimulado a través de préstamos concesionados entre países, con el respaldo de los gobiernos, los países exportadores incurren en una pérdida social igual al costo del financiamiento concesionado, a pesar de que las ganancias directas en el sector privado puedan aumentar. Es solamente a través del comercio nacional y de las estadísticas de ingresos que tales transacciones pueden producir cierto desarrollo.

De manera general, la necesidad por una reforma de las políticas es

20 Vandendriessche (1971) y Snape (1971),

cuando menos tan grande en los países desarrollados, si es que en la década de los años de 1970 se va a lograr en las manufacturas una considerable expansión en la división internacional del trabajo; pero por lo pronto esto parece que se entiende y acepta menos bien que en los países en desarrollo. Por el contrario, existen señales peligrosas hacia un regreso al proteccionismo. Los países desarrollados son cuando menos tan recalcitrantes como las naciones en desarrollo para superar las dificultades políticas, e incurrir en los costos económicos y sociales de los necesarios ajustes a corto plazo, aunque están mejor capacitados para hacerlo tanto en términos de estabilidad política y social como de bienestar económico. Es probable que aumente el costo del ajuste si no se hace pronto, debido a la creciente competencia de parte de los sectores manufactureros en los países en desarrollo. El ajuste de las políticas que pueden enfrentarse al hecho de que la productividad marginal del trabajo y del capital es mayor en algunos países en desarrollo que en muchos ya desarrollados, y de que hay ya una "media docena de japoneses a la vuelta de la esquina", no puede concebirse meramente en términos de asistencia a un limitado número de empresas y de trabajadores. En la década de los años de 1970 los países desarrollados tendrán que reajustar sus prioridades económicas y sociales frente a una creciente competencia de los países en proceso de desarrollo, en términos que pueden significar sacrificios en el crecimiento de su bienestar, si se quiere evitar un regreso al proteccionismo. Es indudable que a largo plazo los costos de dicho retorno a la protección -tanto política como económica- serán muy altos.

La movilidad del capital, en contraste con la inmovilidad de la fuerza de trabajo, es un aspecto importante en el proceso de ajuste y un factor de creciente importancia política. Las corporaciones multinacionales son libres de dejar detrás de ellas una economía que esté estancada, así como en otro tiempo fueron libres para salirse de una región deprimida. Ellas pueden aprovecharse de la ventaja del bajo costo de la mano de obra en los países en desarrollo, pero, debido a su situación oligopolística, no tienen por qué pasar sus bajos costos a los consumidores en el país prestamista. Un país en estas condiciones puede a veces obtener algunos beneficios de las crecientes ganancias en términos de impuestos; pero en ocasiones ése no es precisamente el caso. De esta manera, no es solamente importante que los beneficios de las inversiones extranjeras excedan a los costos en el país anfitrión, si tales inversiones van a ser duraderas y tienen un positivo producto marginal tanto social como privado, sino ques es igualmente importante que los beneficios también excedan a los costos en

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el país prestamista. Lo anterior es un problema que requiere igualmente de atención mucho más cuidadosa en comparación a la que ha recibido hasta ahora.

De manera general, parece ser que los economistas han concentrado sus esfuerzos en persuadir a los países en desarrollo a exportar, desentendiéndose de la orientación comercial de los países desarrollados, que son los que requieren ahora la mayor atención. Por último, no todos los consejos dados sobre política a los países en desarrollo han sido adecuados. Darle un énfasis a los incentivos a las exportaciones para compensar el proteccionismo, sin hacer un esfuerzo conmensurado para mejorar la eficiencia interna mediante la rebaja de tarifas, particularmente contra otros países en desarrollo, no es a largo plazo una política sana, y la excesiva sustitución de las importaciones puede constituir un desperdicio de los recursos internos de un país.

## V. Perspectivas para la década de los años de 1970

El análisis presentado en este estudio sugiere, para la década de los años de 1970, un panorama comercial para las manufacturas mucho más toromentoso de lo que generalmente se vislumbra.

Al reducido número de países semiindustrializados que contribuyeron con la mayor parte de las exportaciones de productos manufacturados en la década de los años de 1960 se están uniendo otros varios a esta orientación exportadora, y las naciones menos industrializadas están poniendo mayor énfasis que en la década anterior a la importancia que tienen los mercados de exportación.

El rápido crecimiento, característico del regreso hacia la exportación de manufacturas por los países en desarrollo durante las décadas de los años 50 y los 60 sugiere que en el decenio de los 70 se podrá tener un potencial para la exportación de manufacturas considerablemente superior al 10 o al 15 % anual, por encima de la tasa de crecimiento que ha sido usada en la mayoría de las proyecciones de comercio para la década que apenas se inicia.

Con un esperado crecimiento anual del orden del 5.5 % en las importaciones de los países desarrollados, un aumento del 10 al 15 % de las exportaciones de manufacturas por los países en desarrollo hacia los del primer grupo tendría muy poco efecto general; aunque debe hacerse notar que la experiencia tenida durante los años de 1960 sugiere que inclusive un efecto general débil podría ser de significación marginal y producir así desempleo que, a su vez, precipitaría las restricciones cuantitativas al comercio y la erección de otras barreras.

Es indudable que si los países semiindustriales, y los que se están industrializando dentro del grupo de los menos desarrollados, logran alcanzar una tasa de crecimiento de 20 %, o más, en las exportaciones de sus manufacturas, su efecto sobre los países desarrollados podría ser de bastante consideración. Por otra parte, si los convenios comerciales internacionales son lo suficientemente flexibles, entonces los países desarrollados tendrían acceso a mercados proporcionalmente crecientes en los países en desarrollo, a medida que estos últimos generan más intercambio de divisas. Sin embargo, tal optimismo supone una restructuración de la producción de manufacturas en los países desarrollados, mucho más rápida de lo que ahora puede apreciarse.

La experiencia de la década de los 60 sugiere que los países semiindustrializados tienen una considerable ventaja comparativa en una amplia gama de productos en los cuales pueden combinar costos de mano de obra relativamente bajos —que en realidad son salarios bajos para trabajadores muy calificados—, con tecnología, administración y prácticas comerciales modernas. Los actuales niveles de las tarifas no pueden dejar fuera a los textiles, a la ropa hecha, al calzado, a productos eléctricos y al acero, sin olvidar que una gran variedad de nuevos productos, que van desde instrumentos ópticos hasta generadores hidroeléctricos, están entrando a la misma categoría. Es probable que los países desarrollados, actuando bajo la suposición de que las exportaciones de los países en desarrollo van a seguir siendo de productos sencillos, que consumen intensa mano de obra, se encuentren a sí mismos —si no es que ya se están encontrando desde ahora— totalmente impreparados ante esas nuevas directrices en el comercio internacional de manufacturas.

Es cierto que para los países menos industrializados es más difícil la orientación hacia las exportaciones que para los países ya semiindustrializados. Donde es fácil la producción de manufacturas y éstas tienen una clara ventaja comparativa —como en el campo de los textiles y de la ropa hecha—, los mercados ya están definidos, y es probable que se vean cada vez más limitados en cada país en particular, a medida que nuevos productores intenten entrar en escena. Existe entonces un peligro considerable de la sobreoferta de productos de mano de obra intensiva y de la resultante imposición de términos comerciales contra ellos.

A plazos corto y medio, la concentración de productos con fuerza intensiva de trabajo generalmente significa un aumento en los términos del

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ingreso comercial, aun cuando los términos del intercambio puedan estar en su contra. Sin embargo, a largo plazo las implicaciones amenazan con repetir el modelo de la división internacional de trabajo de principios del siglo xx, con un excedente de productos de mano de obra intensiva para mercados limitados, y una declinación de los términos del ingreso comercial.

Un enfoque serio para aumentar la división internacional de la mano de obra en manufacturas a través del comercio exterior tiene que adoptar un punto de vista más dinámico y a mayor plazo que el de las actuales ventajas comparativas si es que los países desarrollados no quieren verse acusados de una nueva ola de neocolonialismo.

Mientras la concentración en productos de mano de obra intensiva puede ser el único camino por medio del cual un país en desarrollo puede entrar al mercado de exportación, las ganancias que se obtienen al elevarse los ingresos deberían ser invertidas en un cambio de las estructuras de las exportaciones. A largo plazo, las industrias en las cuales son más rápidos el progreso tecnológico y su futuro crecimiento, necesitan estar ampliamente distribuidas entre todos los países, desarrollados o no, paralelamente a las nuevas líneas de ventaja comparativa —así como están distribuidas actualmente entre los países desarrollados. Si se va a efectuar tal cambio en los modelos comerciales, la estructura de las tarifas, las restricciones cuantitativas y los incentivos a las exportaciones en los países desarrollados requeirán de un examen más detallado y de una reforma radical. Desafortunadamente sólo una muy pequeña proporción de los esfuerzos de la comunidad económica mundial están orientadas hacia estos problemas.

El creciente comercio entre los países en desarrollo debe constituir una prioridad importante si ellos van a materializar la potencialidad comercial de sus manufacturas. Mientras aquí puede ser más difícil iniciar tal comercio que en los países desarrollados, la potencialidad de crecimiento puede ser mucho mayor si pueden superarse las barreras proteccionistas. En este caso, el crecimiento en la exportación de manufacturas estará más y más en manos de los propios países en desarrollo, aunque es probable que la década de los años de 1970 apenas si vea el comienzo de este cambio en los modelos comerciales.

Para los países más industrializados dentro del grupo de los menos desarrollados, las tendencias en su comercio ya son más importantes que la ayuda del extranjero, y lo seguirán siendo más y más en el transcurso de esta década. Sin embargo, la ayuda exterior es todavía de gran importancia para los países menos desarrollados, en los cuales el desenvolvimiento del potencial de sus exportaciones puede tomar varios lustros.

Si las esperanzas de los países en desarrollo para obtener ganancias de su comercio de manufacturas —hacia el cual se encaminan sus políticas— se ven frustradas por la negativa de los países desarrollados para cambiar sus políticas en dirección a una mayor especialización, entonces es probable que la década de los años de 1970 sea un decenio de confrontación más bien que de cooperación.

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CUADRO I. Algunas	características	de los	principales	"PDM"	en manufactur	ras y exportaciones
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		PNB/N	14.10		-		EM	% tasa	s de creci	miento	
	N Mill. 1969	(EU \$ 1964) 1969	Mv/Cv % 1968	Em/E EU \$ 1968	Em/N EU \$ 1968	Em/Mo % 1966	Mill. EU \$ 1968	Em 1958- 1968	Mv 1960- 1969	PNB/N 1960- 1969	Ep/N EU \$ 1968
Países grandes (12) <sup>n</sup>									÷.,		
Pakistán	126.7	89	19.2	50.5	3.0	8.0	363.5	30.0	7.6	2.9	2.9
India	526.0	91	20.7	51.7	1.8	2.5	935.8	6.6	2.5	1.1	1.9
República Árabe Unida	32.5	135	42.1	27.0	5.3	4.0	167.4	12.2		1.2	14.3
Tailandia	35.7	135	27.9	8.3	1.6	1.0	54.7	17.1	8.1	4.7	17.7
Filipinas	35.9	177	32.0	13.4	3.5	1.9	126.5	21.0	4.3	1.9	22.6
Corea (República)	31.1	181	33.8	74.3	11.1	9.0	338.2	61.4	14.2	6.4	3.8
Brasil	92.3	228	56.3	11.5	2.5	0.8	216.7	14.7	6.6	1.4	19.2
Colombia	20.5	245	44.4	9.6	2.7	1.4	53.3	25.0	4.5	1.5	25.4
Yugoslavia	20.4	488	60.6	69.4	43.4	11.4	876.4	16.2		4.6	19.1
México	48.9	495	61.2 <sup>b</sup>	19.4	5.2	0.9	244.4	8.4	10.0	3.5	21.6
España	32.9	697	56.8	57.7	28.1	3.4	917.2	21.0	7.4	6.5	20.6
Argentina	24.0	902	61.8	21.8	12.6	0.8	297.7	8.0	4.3	2.6	45.2
Pequeños con orientación primaria (11)								1			
Marruecos	15.0	158	23.4c	16.2 <sup>b</sup>	5.0 <sup>b</sup>	2.5	73.3 <sup>b</sup>	30.0	2.7	3.4	25.9
Costa de Marfil	4.9	210	19.1	12.3	11.1	20.2	52.3		11.2	4.7	79.1
Argelia	13.3	220	17.0 <sup>b</sup>	7.8	4.4	6.1	56.7	12.2	16.4	-2.8	52.0
El Salvador	3.4	250	38.7	34.2	21.9	8.6	72.3	35.0	9.0	1.9	21.9
Malava	10.6	291	19.1°	9.7	9.8	7.4	101.7	13.2	12.0°	3.8	91.2
Guatemala	5.0	300	35.4	20.6b	9.1 <sup>b</sup>	7.3	44.4 <sup>b</sup>	-	7.9	1.9	35.1b
Costa Rica	1.7	429	23.4	19.0	20.3	9.2	32.5			2.9	86.5
Jamaica	1.9	465	35.6	10.3	11.7	4.8	22.2	13.4	4.4	3.0	101.9
				C	2						

			Cuadro	I. [Q	Sinuaci	ón]					
Grecia	8.8	715	39.6	8.9	8.9	2.1	78.0	13.6	6.2	6.2	91.1
Trinidad y Tobago	1.0	752	30.9	12.8 <sup>b</sup>	48.2 <sup>b</sup>	8.6	48.2 <sup>b</sup>	26.0	10.1	3.8	328.4 <sup>b</sup>
Irlanda	2.9	940	40.0°	41.2	109.6	11.0	320.2	12.7	-	3.5	156.4
Pequeños con orientación industrial (7)											
Tunisia	4.9	193	38.0	23.0	7.6	4.9	36.3	-	6.2	2.1	25.4
Formosa	13.8	255	45.9	77.0	44.9	24.8	606.1	28.0	13.5	6.3	13.4
Portugal	9.6	430	61.6	71.7	57.5	11.8	546.1	12.4	7.9	4.9	22.7
Líbano	2.6	493	48.7 <sup>b</sup>	25.2	14.2	5.4	36.8	29.0	_	2.1	42.1
Singapore <sup>d</sup>	2.0	681	65.9	23.2	53.4	53.0	106.2	14.4 <sup>h</sup>	19.0	4.5	176.8
Hong-Kong	4.0	718	87.5	91.8	410.7	—	1 601.9	14.5	14.3	8.7	36.7
Israel	2.8	1 337	61.5	73.2	173.3	21.0	468.0	19.6	-	5.3	63.4
Otros países que se están industrializando											
Congo (República)	17.3	69	38.6	1.2 <sup>f</sup>	0.3 <sup>f</sup>	10.0	3.9 <sup>t</sup>		12.7	0.2	21.2 <sup>t</sup>
Indonesia	116.6	95	13.7	4.5 <sup>b</sup>	0.3 <sup>b</sup>	0.3	30.0 <sup>b</sup>	19.8	1.2	0.8	6.4 <sup>b</sup>
Ghana	8.3	160	23.5°	9.7	3.6	4.3	29.9	40.5	3.7°	0.0	33.5
Ecuador	5.9	202	32.3	4.6	1.7	0.4	9.5	19.5	5.4	1.2	35.2
Paraguay	2.3	202	32.6			0.0			4.0	1.0	$21.6^{1}$
Rodesia del Sur	5.1	205	42.0°	-	-	6.3	-		5.5	0.4	52.01
República Dominicana	4.0	235	38.4	3.0 <sup>b</sup>	1.3 <sup>b</sup>	1.4	5.1 <sup>b</sup>		3.6	0.4	38.6 <sup>b</sup>
Perú	13.2	281	33.9°		-	0.5			2.9°	1.4	67.71
Irán	28.5	290	37.0ª	0.8 <sup>b</sup>	0.5 <sup>b</sup>	2.4	14.8 <sup>b</sup>	31.0 <sup>b</sup>	11.0°	4.9	70.9 <sup>b</sup>
Turquía	34.5	294	30.9	3.9	0.6	0.3	19.2	17.3	8.6	3.4	14.8
Nicaragua	1.9	341	31.0	9.5	8.1	4.9	14.9	48.0	12.0	3.5	77.2
Chile	9.6	432	56.2	3.5	0.9 <sup>b</sup>	0.8	8.4 <sup>b</sup>		5.6	1.7	99.4 <sup>b</sup>
Uruguay	2.9	478	51.2°	5.0	3.2	1.4	8.9		-	-0.8	60.4
Panamá	1.4	562	37.2	2.0	1.4	0.3	2.0	-	10.7	4.8	69.2
Venezuela	10.0	852	29.7	1.2	3.4	0.6	33.3	81.7	7.0	2.5	279.9

<sup>a</sup> Más de 15 millones de habitantes en 1960.

b 1967.

e 1966.

<sup>d</sup> Solamente exportaciones producidas localmente; las cifras no incluyen re-exportaciones.

e 1968.

f 1965.

g 1969,

h 1962-1968.

<sup>1</sup> Posiblemente incluye también exportaciones de manufacturas.

FUENTE: U.N., Yearbook of National Accounts Statistics, 1969, vol. 1; U.N., Yearbook of International Trade Statistics, 1958, 1968; I.B.R.D., World Tables, enero de 1971; Dradft Statistics, 1971 World Bank Atlas, y sus hojas de trabajo, etcétera.

N Poblaciones en millones de habitantes a mediados de 1969.

PNB/B PNB per capita en EU\$ de 1964, 1969.

Mv/Cv Valor bruto añadido en la fabricación como porcentaje del valor bruto agregado en la producción de artículos, 1968. El valor agregado puede ser a costo factorial o a precios de mercado.

Em/E Exportación de manufacturas no basadas en recursos, en porcentaje de la exportación total de mercancías, 1968.

Em/N Exportaciones per capita de manufacturas no basadas en recursos, en EU\$, 1968.

Em/Mo Exportación de manufacturas no basadas en recursos, en porcentaje de toda la producción manufacturera, 1966.

EM Exportaciones de manufacturas no basadas en recursos, en millones de EU\$, 1968. Las exportaciones incluyen artículos clasificados bajo las claves 5, 7 y 8 del SITC; 6 excepto partes de la 68, y partes de la 0 para metales no ferrosos (clave 68) y productos alimenticios (clave 0), se ha seguido la definición de manufacturas sugerida por el UNCTAD.

Trade in Manufacturing of Developing Countries: 1970 Review, excepto para azúcar refinada (clave 061.2), la cual ha sido incluida por nosotros.

Em		( Tasa promedio de crecimiento anual de exportaciones de manufacturas no basadas en recursos, a precios actua-
	Porcentaje de la	les, 1958-1968.
MV	Tasa de	Tasa promedio de crecimiento anual del valor real agregado en el proceso de la manufactura, 1960-1969.
PNB/N	Crecimiento	Tasa promedio de crecimiento anual del PNB REAL per capita, 1960-1969.
$E_D/N$	Exportación de	productos primarios per capita en EU \$, 1

CUADRO II. Exportación de manufacturas<sup>a</sup> de los diez principales "PMD" exportadores de productos manufacturados, por categoría de producto, valor de la exportante por producto en millones de dólares de E.U.A.

		1050	1050	10/0	10(1	10/29	1062	1064	1065	1066	1067	1068
		1958	1959	1960	1901	1902	1905	190%	1900	1900	1701	
SITC	$N^{\rho}$											
	Argentina											
5	Productos químicos	36.5°	36.2	35.1	29.6	n.d.	32.4	41.4	40.0	41.4	44.3	49.9
6	Cuero, textiles, hule, productos de											
	madera y metal	6.4	6.2	5.7	4.5	n.d.	32.9	31.5	16.9	23.5	31.3	60.2
7	Maquinaria y equipo de transporte	2.5	2.2	2.0	3.4	n.d.	12.6	18.8	16.2	20.5	29.0	35.8
8	Diversos artículos manufacturados	1.6	1.3	1.5	1.7	n.d.	6.0	12.6	11.2	13.5	15.8	22.4
	Brasil											
5	Productos químicos	7.42	8.08	13.38	20.00	14.77	16.60	17.65	14.58	26.84	29.64	27.05
6	Cuero, textiles, hule, productos de											
	madera y metal	6.80	7.44	12.47	10.33	9.46	13.34	38.77	77.83	60.99	85.82	80.33
7	Maquinaria y equipo de transporte	1.86	2.15	2.00	11.26	12.02	10.63	18.27	28.88	33.31	43.63	41.10
8	Diversos artículos manufacturados	0.40	0.45	0.74	1.14	0.93	1.14	1.66	2.98	3.70	4.17	4.62
	México											
5	Productos químicos	18.49	16.49	20.24	26.82	32.05	35.66	34.46	56.29	63.76	67.24	68.57
6	Cuero, textiles, hule, productos de											
	madera y metal	131.01	144.62	138.92	144.16	146.77	190.67	154.32	155.02	181.36	160.72	208.49
7	Maquinaria y equipo de transporte	10.66	8.06	8.73	9.83	8.96	10.81	13.50	13.51	21.47	23.26	36.45
8	Diversos artículos manufacturados	12.37	15.35	14.32	13.85	14.65	18.76	20.72	19.67	23.21	30.20	37.33
	Yugoslavia											
5	Productos químicos	6.92	7.42	10.91	8.11	8.62	10.20	15.13	59.60	69.58	74.15	76.77
6	Cuero, textiles, hule, productos de											
	madera y metal	48.40	56.25	63.61	51.43	62.56	67.64	81.89	247.64	282.31	280.71	323.93
7	Maquinaria y equipo de transporte	22.34	39.26	40.18	37.74	62.92	61.59	60.64	256.74	299.43	254.66	275.49
8	Diversos artículos manufacturados	11.60	13.71	18.17	16.58	20.20	29.16	42.28	125.15	143.18	216.96	184.32

	Israel	Cu	ADRO II	[. [Con	tinuaci	ón]				1		
56	Productos químicos Cuero, textiles, hule, productos de	6.00	8.71	9.45	11.84	12.23	14.06	18.19	27.18	42.91	49.03	55.66
	madera y metal	52.28	71.55	92.65	117.77	147.66	182 88	206 91	226.08	271 36	974 55	205 20
7	Maquinaria y equipo de transporte	2.85	6.07	4.77	11.20	6.56	5.38	8.30	9.02	14.99	35.60	96.47
8	Diversos artículos manufacturados	11.64	16.84	25.11	20.62	20.09	21.68	24.50	24.18	27.20	34.10	48.26
	India											10120
5	Productos químicos	9.30	10.44	15.07	16.42	16.44	14.52	21.53	23.34	19.82	20.97	31.60
б	Cuero, textiles, hule, productos de								20101	17.04	20.71	01.00
	madera y metal	462.00	506.42	553.11	567.01	560.96	671.43	686.84	722.16	654.20	680.98	804.01
7	Maquinaria y equipo de transporte	3.57	5.07	7.74	8.23	9.07	12.48	18.08	22.02	20.53	25.52	58.17
8	Diversos artículos manufacturados	17.83	23.68	24.40	21.30	23.26	38.00	41.95	45.41	36.62	47.92	62.06
	Pakistán											
5	Productos químicos	n.d.	n.d.	n.d.	0.60	n.d.	1.91	7.87	3.97	7.81	5.75	9.02
б	Cuero, textiles, hule, productos de								0.2.1	1.01	0.10	2.02
	madera y metal	n.d.	n.d.	n.d.	97.29	n.d.	92.75	130.04	167.41	236.25	235.43	299.58
7	Maquinaria y equipo de transporte	n.d.	n.d.	n.d.	3.52	n.d.	4.31	2.66	4.56	9.04	38.95	26.64
8	Diversos artículos manufacturados	n.d.	n.d.	n.d.	6.06	n.d.	8.20	11.60	12.68	14.93	16.33	25.37
	Hong Kong											
5 6	Productos químicos Cuero, textiles, hule, productos de	40.93	31.79	31.77	40.82	40.93	46.23	39.80	51.07	53.95	61.73	74.90
	madera y metal	173.14	160.96	201.75	207.48	199.24	226.58	245.09	289.16	349.42	367.88	389.84
7	Maquinaria y equipo de transporte	22.07	23.53	25.07	29.37	37.71	44.01	52.20	72.87	109.48	134.62	168.37
8	Diversos artículos manufacturados	171.95	242.20	312.01	292.40	363.23	425.25	522.99	585.64	662.20	757.70	973.89
	Formosa											
5	Productos químicos	n.d.	n.d.	n.d.	n.d.	17.31	19.74	21.81	21.52	20.93	91 79	n d
6	Cuero, textiles, hule, productos de	n.d.	n.d.	n.d.	n.d.	66.77	90.13	109.33	112.22	160.18	192.13	n.d.
	madera y metal	n.đ.	n.đ.	n.d.	n.d.	n.d.	n.d.	10.30	19.64	39.66	57.92	n.d.
7 8	Maquinaria y equipo de transporte Diversos artículos manufacturados	n.d.	n.đ.	n.d.	n.d.	14.55	15.96	29.55	37.26	51.14	95.68	n.đ.

Cumpo	TT .	- 0	Justant	
UADRO	11.2	$\sim on$	CILISION	

		Concerner of the									
	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Corea								1			
Productos químicos	0.01	0.12	0.40	0.55	0.99	0.90	0.63	0.38	0.71	2.36	3.12
Cuero, textiles, hule, productos de											
madera y metal	2.41	2.14	3.94	4.00	6.18	28.12	42.31	66.41	84.18	101.38	143.60
Maquinaria y equipo de transporte		0.05	0.09	0.88	1.45	4.07	2.20	5.50	9.56	14.19	24.46
Diversos artículos manufacturados	0.15	0.09	0.09	0.79	1.95	6.40	13.20	34.49	59.20	97.24	167.01
	Corea Productos químicos Cuero, textiles, hule, productos de madera y metal Maquinaria y equipo de transporte Diversos artículos manufacturados	1958CoreaProductos químicos0.01Cuero, textiles, hule, productos de madera y metal2.41Maquinaria y equipo de transporteDiversos artículos manufacturados0.15	19581959Corea0.010.12Productos químicos0.010.12Cuero, textiles, hule, productos de madera y metal2.412.14Maquinaria y equipo de transporte0.05Diversos artículos manufacturados0.150.09	195819591960CoreaProductos químicos0.010.120.40Cuero, textiles, hule, productos de madera y metal2.412.143.94Maquinaria y equipo de transporte0.050.09Diversos artículos manufacturados0.150.090.09	1958         1959         1960         1961           Corea          0.01         0.12         0.40         0.55           Cuero, textiles, hule, productos de madera y metal         2.41         2.14         3.94         4.00           Maquinaria y equipo de transporte          0.05         0.09         0.88           Diversos artículos manufacturados         0.15         0.09         0.09         0.79	1958         1959         1960         1961         1962           Corea         Productos químicos         0.01         0.12         0.40         0.55         0.99           Cuero, textiles, hule, productos de madera y metal         2.41         2.14         3.94         4.00         6.18           Maquinaria y equipo de transporte          0.05         0.09         0.88         1.45           Diversos artículos manufacturados         0.15         0.09         0.09         0.79         1.95	1958         1959         1960         1961         1962         1963           Corea         Productos químicos         0.01         0.12         0.40         0.55         0.99         0.90           Cuero, textiles, hule, productos de madera y metal         2.41         2.14         3.94         4.00         6.18         28.12           Maquinaria y equipo de transporte          0.05         0.09         0.88         1.45         4.07           Diversos artículos manufacturados         0.15         0.09         0.09         0.79         1.95         6.40	1958         1959         1960         1961         1962         1963         1964           Corea         Productos químicos         0.01         0.12         0.40         0.55         0.99         0.90         0.63           Cuero, textiles, hule, productos de madera y metal         2.41         2.14         3.94         4.00         6.18         28.12         42.31           Maquinaria y equipo de transporte          0.05         0.09         0.88         1.45         4.07         2.20           Diversos artículos manufacturados         0.15         0.09         0.09         0.79         1.95         6.40         13.20	1958         1959         1960         1961         1962         1963         1964         1965           Corea         Productos químicos         0.01         0.12         0.40         0.55         0.99         0.90         0.63         0.38           Cuero, textiles, hule, productos de madera y metal         2.41         2.14         3.94         4.00         6.18         28.12         42.31         66.41           Maquinaria y equipo de transporte          0.05         0.09         0.88         1.45         4.07         2.20         5.50           Diversos artículos manufacturados         0.15         0.09         0.09         0.79         1.95         6.40         13.20         34.49	1958         1959         1960         1961         1962         1963         1964         1965         1966           Corea         Productos químicos         0.01         0.12         0.40         0.55         0.99         0.90         0.63         0.38         0.71           Cuero, textiles, hule, productos de madera y metal         2.41         2.14         3.94         4.00         6.18         28.12         42.31         66.41         84.18           Maquinaria y equipo de transporte          0.05         0.09         0.88         1.45         4.07         2.20         5.50         9.56           Diversos artículos manufacturados         0.15         0.09         0.09         0.79         1.95         6.40         13.20         34.49         59.20	1958         1959         1960         1961         1962         1963         1964         1965         1966         1967           Corea         Productos químicos         0.01         0.12         0.40         0.55         0.99         0.90         0.63         0.38         0.71         2.36           Cuero, textiles, hule, productos de madera y metal         2.41         2.14         3.94         4.00         6.18         28.12         42.31         66.41         84.18         101.38           Maquinaria y equipo de transporte          0.05         0.09         0.88         1.45         4.07         2.20         5.50         9.56         14.19           Diversos artículos manufacturados         0.15         0.09         0.09         0.79         1.95         6.40         13.20         34.49         59.20         97.24

NOTA:

Elementos químicos y compuestos.

Alquitrán mineral y derivados crudos químicos de carbón, petróleo y gas natural.

Colorantes, curtientes y tintas. Productos medicinales y farmacéuticos. Aceites esenciales y material de perfumeria. Fertilizantes fabricados. Explosivos y productos politécnicos. Materiales y productos químicos.

Maquinaria y equipo de transporte (SITC Clave 7).

Maquinaria no eléctrica. Maquinaria, aparatos y dispositivos eléctricos. Equipo de transporte.

Cuero, manufacturas de cuero y pieles curtidas con pelo.

Manufacturas de hule.

Manufacturas de madera y corcho (excepto muebles).

Papel, cartón y manufacturas derivadas.

- Hilos textiles, telas, productos acabados y conexos.
- Manufacturas de minerales no metálicos.
- Hierro y acero.

Metales no ferrosos. Manufacturas de metal.

Diversos artículos manufacturados (SITC Clave 8).

Plomería sanitaria, aparatos y accesorios de calefacción e iluminación. Muebles,

Artículos para viaje, maletas y artículos similares. Ropa.

Zapatos.

Instrumentos profesionales, científicos y de control; artículos fotográficos y ópticos, relojes de toda categoría.

<sup>a</sup> Total de manufacturas excepto productos alimenticios procesados.

<sup>b</sup> Convertidos a los tipos actuales de cambio para cada periodo, tal como se publica en las "International Financial Statistics".

<sup>c</sup> No se dispone de cifras para antes de 1961 de acuerdo con las claves SITC.
<sup>d</sup> No se dispone de cifras para antes de 1961 de acuerdo con las claves SITC.

FUENTE: United Nations, Yearbooks of International Trade Statistics.

Productos químicos (SITC Clave 5).

Materiales manufacturados clasificados principalmente por materiales (SITC Clave 6).

Artículos manufacturados diversos, no incluidos en ninguna otra categoría.

DESTINO						PD		
Exportaciones PD	Mundial	DMEC	SCEEA	Total	América Latina	Africa	Asia Occiden- tal	Otra Asia
Todos los PD								1
Valor de las exportaciones (millones de dólares)								
1960	2540	1 365	75	1 079	121	224	115	592
1967	5 720	3 370	268	2 065	407	381	226	971
Porcentaje del total								
1960	100	54	3	42	5	9	5	23
1967	100	59	5	36	7	7	4.	17
Tasa de crecimiento 1960-67 (%)	12	14	20	10	19	8	10	+ 7
América Latina								
Valor de las exportaciones (millones de dólares)								
1960	269	187	4.	68	58	1		7
1967	760	365	29	364	343	4.	1	7
Porcentaje del total								
1960	100	70	1	25	22	0		3
1967	100	48	4.	48	45	1	0	1
Tasa de crecimiento 1960-67 (%)	16	10	33	27	29	22	-	0
África								
Valor de las exportaciones (millones de dólares)		1	2					

CUADRO III. Exportaciones de manufacturas (SITC 5-8 menos la 68) de los "PD", 1960 y 1967

	0							
	Cu	ADRO 111.	Conclus	ión]				
1960	348	220	17	115	3	80	25 -	8
1967	683	377	88	206	5	160	26	12
Porcentaje del total								
1960	100	63	5	.3.3	1	23	7	2
1967	100	55	13	.30	1	23	4	2
Tasa de crecimiento 1960-67 (%)	10	8	26	9	8	10	1	6
Asia Occidental								
Valor de las exportaciones (millones de dólares)								
1960	224	129	3	78	2	21	43	10
1967	558	365	14	164	5	29	90	37
Porcentaie del total	000	000		101		20		
1960	100	58	1	35	1	9	19	4
1967	100	65	3	29	1	5	16	7
Tasa de crecimiento 1960-67 (%)	14	16	25	11	14	5	11	21
Otra Asia								
Valor de las exportaciones (millones de dólares)								
1960	1 620	776	52	798	54	117	46	565
1967	3 465	2 059	134	1 285	39	181	106	915
Porcentaje del total								
1960	100	48	3	49	3	7	3	35
1967	100	59	4	.37	1	5-	3	26
Tasa de crecimiento 1960-67 (%)	11	15	14	7	5	7	13	7

FUENTE: Naciones Unidas, Trade in Manufactures of Developing Countries, 1969 Review, 1970 CUADRO IV. Importaciones de manufacturas a por los países desarrollados de los países en desarrollo

	Población (millones \$)	PNB (billones)	PNB Per capita \$	Importa- ciones totales (millones)	Importa- ciones de países en desarrollo (millo- nes \$)	Importacio- nes per capita \$	Total de importa- ciones como % del PNB	Importacio- nes de los países en desarrollo, como % del PNB	Relación de las importa- ciones de los países en desarrollo con las im- portaciones totales. %
Estados Unidos	201.2	800.8	3 980	20 776	2 236	11.10	2.6	.28	10.8
Comunidad Económica Europea	185.2	321.2	1 734	34 773	1 343	7.25	10.8	.42	3.9
Bélgica-Luxemburgo	9.6	9.4	980	4 728	56	5.83	50.0	.60	1.2
Rep. Fed. Alemana	60.9	120.0	1 970	10 657	604	9.92	8.9	.50	5.6
Francia	49.9	106.3	2 130	8 415	348	6.97	7.9	.33	* 4.2
Italia	52.8	64.9	1 230	4 754	180	3.41	7.3	.28	3.8
Holanda	12.7	20.6	1 620	6 208	155	12.20	30.1	.75	2.5
Reino Unido	55.3	99.0	1 790	9 524	875	15.82	9.6	.88	9.2
Japón	101.1	120.3	1 190	3 303	267	2.64	2.7	.22	8.1
Suecia	7.9	20.7	2 620	3 521	107	13.54	17.0	.52	3.1
Noruega	3.8	7.6	2 000	1 622	66	17.36	21.3	.87	4.1
Dinamarca	4.9	10.1	2 070	2 245	45	9.18	22.2	.45	2.0
Total	559.4	1 379.7	2 466	75 764	4.939	8.83	5.5	.36	6.5

a Excluyendo petróleo y metales no ferrosos en bruto.

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CUADRO V. Importaciones de grupos selectos de margacturas, por los mercados de economías desarrolladas procedentes de los países en desarrollo, el resto del mundo, 1964, 1967 y 1968.

Grupo de productos	Importa 1964	CIONES DE LOS DESARROLLO 1967	5 PAÍSES EN 1968	Porcentaje a de los aumer taciones d en des	nual promedia atos de impor- le los países sarrollo	0	Participación de los países en desarrollo en las importacio- nes totales de los países desarrollados		
	(n	nillones de doi	ares)	1964-19	68 1967-19	968	1964	1967	1968
Productos alimenticios	480	678	755	12.0	11.3		16.9	19.1	19.9
Bebidas y productos del tabaco	261	145	130	—16.0			20.8	10.1	8.1
Productos de madera y muebles	366	434	562	11.3	29.5		12.6	13.2	14.2
Cuero y calzado	135	194	259	17.8	33.5	*	13.3	14.2	15.0
Textiles	712	828	899	6.0	8.5		14.8	15.3	14.6
Ropa	374	597	795	21.0	33.3		20.9	23.4	25.5
Productos químicos	273	427	460	13.9	7.8		4.2	4.7	4.4
Hierro y acero	94	153	175	16.8	14.3		1.9	2.5	2.5
Productos de ingeniería	164	347	494	32.0	42.3		0.6	1.0	1.2
Otros productos	418	639	896	21.0	40.2		5.2	4.3	5.2
Total A	3 276	4 441	5 4 2 5	13.5	22.2		5.4	5.4	5.7
Productos del petróleo	1 669	1 691	1 769	1.5	4.6		48.1	41.4	39.3
Metales no ferrosos en bruto	1 416	2 098	2 448	14.7	16.7		46.1	47.4	48.4
Total B	6 261	8 230	9 642	11.0	17.2		9.3	9.1	9.2

FUENTE: Naciones Unidas: Trade in Manufactures of Developing Countries, 1969 Review. TD/B/C.2/90/Rev. 1.

CUADRO VI. Producción, comercio y consumo aparente en los Estados Unidos de artículos selectos de ropa de algodón y de fibras artificiales, 1962 y 1966 ª

	1962							
	Producción	Importaciones	Exportaciones	Consumo aparente	Importaciones como porcentaje del consumo			
	('000 docenas)		('000 do	('000 docenas) 👌				
Ropa interior, algodón y manufacturas <sup>b</sup>	211 770	385	3 588	208 567	0.2			
Camisas de algodón, tejidas, para hom-								
bres y jóvenes	12 839	2 276	44	15 071	15.1			
Manufacturas	1 093	6	n.d.	1 099°	0.5 <sup>d</sup>			
Camisas de vestir, no tejidas, para hom-								
bres y jóvenes, de algodón	9 333	856	117	10 072	8.5			
Manufacturas	814	112	n.d.	926e	12.1 <sup>d</sup>			
Camisas sport, no tejidas, para hombres								
y jóvenes, de algodón	19 367	1 876	85	21 158	8.9			
Manufacturas	n.d.	59	n.d.	n.d.	n.d.			
Blusas de algodón, no tejidas, para mu-								
jeres y jovencitas	14 832	3 332	47	18 117	18.4			
Manufacturas	3 070	51	n.d.	3 121°	1.6 <sup>d</sup>			
Pantalones largos y cortos de algodón								
para hombres y jóvenes	8 300	1 729	n.d.	10 029°	17.2			
Manufacturas	5 580	151	n.d.	5 731°	2.6			
Pantalones largos y cortos de algodón								
para mujeres y jovencitas	11 095	2 589	13	13 671	18.9			
Manufacturas	n.d.	63	n.d.	n.d.	n.d.			
Trajes y sacos para hombres y jóvenes								
(toda clase de fibras)	8 066	102	n.d.	8 168 <sup>e</sup>	1.2 <sup>d</sup>			
Vestidos para mujeres y jovencitas (toda clase de fibras)	31 826	0662	n.d.	32 488°	2.0 <sup>d</sup>			

CUADRO VI. Ontinuación]

	Producción	Importaciones	Exportaciones	Consumo aparente	Importaciones como porcentaje del consumo
	('000 docenas)		(`000 do	cenas)	aparente %
Ropa interior, algodón y manufacturas b	226 992	1 043	3 102	224 933	0.5
Camisas de algodón, tejidas, para hom-					
bres y jóvenes	15 791	2114	171	•17 734	11.9
Manufacturas	2 137	1 243	31	3 349	37.1
Camisas de vestir, no tejidas, para hom-					
bres y jóvenes, de algodón	6 001	1 278	160	7 119	17.9
Manufacturas	6 529	998	54	7 473	13.3
Camisas sport, no tejidas, para hombres					
y jóvenes, de algodón	15 494	2 516	188	17 822	14.1
Manufacturas	6 562°	515	62	7 015	7.3
Blusas de algodón, no tejidas, para mu-					
jeres y jovencitas	12 761	3 486	85	16 162	21.5
Manufacturas	5 350	708	48	6 010	11.8
Pantalones largos y cortos de algodón					
para hombres y jóvenes	9 750	1 598	998	10 350	15.4
Manufacturas	7 917	347	61	8 203	4.2

## CUADRO VI. [Conclusión]

Pantalones largos y cortos de algodón para mujeres y jovencitas Manufacturas	13 242 n.d.	3 566 401	65 n.d.	16 743 n.d.	21.3 n.d.
Trajes y sacos para hombres y jóvenes (toda clase de fibras)	98 027	360	52	98 335	0.4
Vestidos para mujeres y jovencitas (toda clase de fibras)	33 842	655	349	34 148	1.9

a Las cifras cuantitativas sobre exportaciones de los Estados Unidos después de 1966 están dadas en libras, lo cual no permite comparaciones de confianza con las cifras de producción y de importación para los años siguientes.

<sup>b</sup> Cantidades en 1 000 libras.

e Producción más importaciones.

d Importaciones en porcentajes de la producción interna más las importaciones.

· 1967.

FUENTE: L. Keough, "Export of Cotton and Cotton-Type textiles from Developing Countries to the United States", I.B.R.D. Economic Staff Working Paper, 1971.

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CUADRO VII. Importaciones de manufacturas (excluyendo petróleo y metales no ferrosos en bruto), por los principales mercados de econor desarrolladas, 1964 y 1968

País o área importadora	Importaci todo el m (millon dólare	aciones de De país 1 mundo desarrolla lones de (millones lares) dólares		ses ados es de s)	Promedio porciento a de aumen 1964-196	Promedio de porciento anual de aumento 1964-1968		Promedio de participación de los países en desarrollo	
-	1964	1968	1964	1968	Mundia	P.D.	1964	1968	
Comunidad Económica Europea		and the		and the second of					
Total	23 341	34 773	1 033	1 343	10.4	6.8	4.4	3.9	
Bélgica-Luxemburgo	3 330	4 728	44	56	9.2	6.3	1.3	1.2	
República Federal Alemana	6 859	10 657	355	604	11.7	14.2	5.2	5.7	
Francia	5 246	8 4 1 5	428	348	12.6	-5.0	8.1	4.1	
Italia	3 411	4 754	124	180	8.6	9.8	3.6	3.8	
Holanda	4 465	6 208	82	155	8.6	17.3	1.8	2.5	
EFTA									
Total	17 894	23 889	918	1 236	7.5	7.7	5.1	5.2	
Austria	1 263	1 835	25	41	10.2	13.6	2.0	2.2	
Dinamarca	1 774	2 245	34	45	6.5	6.9	2.0	2.0	
Finlandia	1 0 27	1 077	7	10	1.2	10.8	0.7	0.9	
Noruega	1 1 29	1 622	37	66	9.5	15.7	3.3	4.1	
Portugal	430	692	5	10	12.6	21.0	1.1	1.5	
Suecia	2 566	3 521	55	107	8.2	18.2	2.1	3.0	
Suiza	2 584	3 368	52	81	6.8	11.7	2.0	2.4	
Reino Unido	7 146	9 524	703	875	7.4	5.6	9.8	9.2	
Australia	2 181	2 926	89	129	7.6	9.8	4.1	4.4	
Canadá	4 881	8717	90	185	15.6	19.8	1.9	2.1	
Japón	1 969	3 303	103	267	13.8	26.9	5.2	8.1	
Nueva Zelanda	758	699	28	30	-2.0	2.5	3.8	4.5	
Estados Unidos	9 615	20 776	1 014	2 236	21.2	21.9	10.6	10.8	
Total 18 DMEC	60 641	95 081	3 276	5 425	11.9	13.5	- 5.4	5.7	

FUENTE: Naciones Unidas: Trade in Manufacturing of Developing Countries, 1969, review. TD/B/C.2/90/Rev.1.

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# FOREIGN ASSISTANCE AND DEVELOPMENT PERFORMANCE, 1960-1970

By HOLLIS B. CHENERY AND NICHOLAS G. CARTER

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# FOREIGN AFFAIRS

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# RESTRUCTURING THE WORLD ECONOMY

#### By Hollis B. Chenery\*

THE world economy is currently in a state of disequilibrium of a magnitude not seen since the aftermath of World War II. The symptoms of underlying stress have been manifested over the past two years in the form of raw-material shortages, a food and fertilizer crisis, a dramatic rise in petroleum prices, and finally, worldwide inflation and threats of impending financial disaster.

The immediate cause of most of these problems was the rapid growth of almost all parts of the world economy in the previous decade, culminating in a strong cyclical upswing in the industrial countries. In 1972–73 the economies of the advanced countries as a group were growing at an unsustainable rate of over six percent, pushing against existing productive capacity and outstripping the potential rate of expansion of world supplies of many raw materials. This spurt in demand provided the opportunity for primary producers in both developed and developing countries to raise their prices, with or without collusive action among producers.

Some of the symptoms of commodity shortages and high prices are purely cyclical and are already disappearing as a result of the current stagnation in world incomes. Others, however, reflect long-term shifts in demand and supply that were merely accelerated by the recent period of rapid growth. This is notably true of the supply of energy and foodstuffs, where the evidence of shifts in the balance of supply and demand was apparent before these markets were disrupted by booming demand, crop failures, and the behavior of the Organization of the Petroleum Exporting Countries (OPEC). Before the world economy can return to a condition of orderly development, substantial redirection of investment and production in these and related sectors is imperative.

While the present dimensions of the oil, food, raw materials

• I am indebted for advice and comment to Bela Balassa, John Foster, Robert Mc-Namara, Joseph Pechman, Jo Saxe, Ernest Stern, Wouter Tims and Elinor Yudin. However, neither they nor the World Bank with which I am associated bear any responsibility for the opinions expressed.

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and balance-of-payments problems are by now well-known,<sup>1</sup> international attention has centered on their immediate impacts on different groups of countries and on the interim measures needed to offset them. There has been little analysis of the adjustment mechanisms that are available to restore the world economy to a condition of orderly development. Yet, since all of these problems are connected through the international system of trade and capital movements, to prescribe separate cures for each of them is hardly desirable. And for poor countries that are importers of both oil and food, the problems must be considered together because their combined impact threatens to be disastrous.

In trying to provide a longer term perspective on the present disequilibrium in the world economy and to outline adjustment processes through which equilibrium can be restored, my analysis is couched in terms of the economic and political relations among three groups of countries: the older industrialized countries, which are members of the Organization for Economic Cooperation and Development (OECD), the newly rich but still developing oil producers (OPEC), and the other developing countries (LDCs). Only passing attention is given to the fourth major group—the Socialist countries—which has a limited impact on the problems considered here.

#### II

To define the dimensions of the structural changes that are needed in the world economy, we must first separate out the cyclical effects of the recent boom that are likely to be corrected by market forces over the next several years. The coincidence of shortages and price rises for most commodities during 1972-73 has left the impression of a general "commodity problem" and led to a number of false analogies between petroleum and other commodities. Price reductions since the ending of the boom nearly a year ago confirm the diagnosis that most of these were cyclical phenomena: hence, we can now identify more clearly areas in which longer term adjustments are needed.

The interpretation of movements in international prices is also complicated by the persistence of inflation on a worldwide basis. While the sharp rise in commodity prices in 1972-73 was a sig-

<sup>1</sup> See, for example, in *Foreign Affairs*: Gerald A. Pollack, "The Economic Consequences of the Energy Crisis," Lyle P. Schertz, "World Food: Prices and the Poor," Bension Varon and Kenji Takeuchi, "Developing Countries and Non-Fuel Minerals," April 1974; Walter J. Levy, "World Cooperation or International Chaos," July 1974. FOREIGN AFFAIRS

nificant factor in causing inflation to accelerate, this is no longer the case; the overall effect of trends in commodity prices—including oil—is now deflationary.

The fact is that the commodity boom itself varied greatly among different types of commodities. A good way to measure its scale is in terms of the ratio of prices of primary commodities to those of manufactured goods for a recent period of stable prices, e.g., 1968 to 1970. Compared with this benchmark level, at the peak of the boom in early 1974 basic foodstuffs were up by 100 percent, fertilizer by 170 percent, and petroleum by more than 350 percent; however, other primary commodities averaged only 25 percent higher. With several important exceptions, relative prices of most commodities have already started to fall, and supply and demand conditions are such that a return to the earlier levels of relative prices is likely to take place within the next year or two.

Now that the normal cyclical adjustment is under way, there are only a few commodities whose high prices (or short supplies) are likely to have an important continuing effect on the economic welfare of large numbers of people. These are primarily petroleum, some of the major foodstuffs (grains, oilseeds, beef, sugar), and fertilizer. While there is some dispute as to the ability of producers of other minerals to follow the OPEC example and keep prices higher by restricting production,<sup>2</sup> the value of exports of the leading candidates (bauxite, tin, copper) is relatively small, and the range of possible prices is so limited that successful action would not disrupt world trade and development. In short, the world commodity problem focuses on petroleum and foodstuffs—primarily grains—and the fertilizer needed to produce the latter.

Although recent events have shown that relatively small changes in the supplies of petroleum and foodstuffs can have a very disruptive effect on world trade and development, in most other respects these two commodities are very different. Petroleum has a dominant impact on world trade because it supplies nearly half of world energy consumption, and resources are concentrated in a small number of countries. Consequently, twothirds of all petroleum produced moves in international trade. The present and prospective value of petroleum exports (even if present prices were somewhat reduced) roughly equals the value

<sup>2</sup> See Varon and Takeuchi, op. cit.

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of all other mineral and agricultural exports combined. For this reason the position of the petroleum exporters is unique; it is hard to conceive of any combination of producer cartels that would have as much effect on world trade in the next few years as an increase of even one dollar in the price of oil.

As is now well-known, the actions of the OPEC countries in late 1973 raised the average price of oil in the Persian Gulf from about \$2.40 per barrel in the early part of 1973 to about \$9.60 per barrel in 1974. (This and all subsequent figures in this article are in 1974 dollars except as specifically noted.) The short-run effect has been to increase the value of OPEC exports in 1974 by over \$80 billion, about 10 percent of the value of world exports in that year. Only a fraction of this increase has so far been absorbed by increased OPEC imports, and the resulting surplus of some \$60 billion is a measure of the present disequilibrium in world trade.

At first glance the effects of rising food and fertilizer prices on the world economy appear to be of quite a different order of magnitude from the oil impact. Even though the total value of grain produced in the world is considerably greater than that of petroleum, most countries are relatively self-sufficient in grain, and only marginal quantities are traded. While the position of the United States and Canada as grain exporters is as dominant as that of the Persian Gulf countries in oil, the total value of world grain exports is only one-fourth that of petroleum.

Yet the disruptive effect of the rise in food and fertilizer prices on world development is much greater than this comparison would suggest. As in the case of petroleum, the developing countries had come to depend on cheap grain imports to supplement their own production, and implicitly on grain stocks in the exporting countries. With hindsight it is now clear that they overestimated the increased productivity stemming from the "green revolution," relied too heavily on continued availability of cheap imports, and devoted insufficient resources to agricultural development. Although the shortfall in LDC production of foodstuffs in the past several years has been relatively small, the rise in import requirements combined with large price rises have had as damaging an effect on the growth prospects of many developing countries as have rising oil prices. The current shortage of fertilizer, while primarily a cyclical phenomenon of lagging capacity, seriously limits the speed with which devel246

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oping countries can increase agricultural output unless they are given some priority in competing for available supplies.

Although the longer term solutions to the oil and food problems will be very different, in the short run they have a similar effect on the prospects for the developing countries. Increased petroleum prices have added \$10 billion to the import bill of the LDCs while the increases in prices of food and fertilizer have added another \$6 billion. For the poorest people in these countries the impact of high food prices and shortages is much more serious, since most of their income is spent on food. Even allowing for gains from other commodity exports, such increases in import costs have reduced the external purchasing power of the developing countries by approximately the amount of the total foreign assistance that they receive. The number of countries seriously affected is also likely to increase over the next several years, since the prices of other primary exports are likely to fall more than those of petroleum and foodstuffs. This impact affects disproportionately the poorest countries of South Asia and Africa, which contain about half the population of the Third World.

III

The nature of the present world economic crisis has been aptly characterized by Helmut Schmidt as "The Struggle for the World Product."<sup>3</sup> When viewed in these terms, the rise in oil prices is only the most dramatic of a series of events—some deliberate and some resulting from market forces—that have been operating to change the distribution of world income through the system of international trade and capital flows.

Although the changes in relative prices described above will have a substantial effect on the distribution of the world's income and wealth, their direct impact can easily be exaggerated. To measure this, assume that the OECD countries and the non-OPEC members of the Third World had been able to pay for the increase in the cost of imported oil by shifting \$80 billion worth of commodities per year from domestic use to increased exports to OPEC. The result of this one-time cost increase would have been to reduce total national income in the OECD countries by two percent and in the non-OPEC Third World by three percent, while nearly doubling the total income of the OPEC <sup>3</sup> See Foreign Affairs, April 1974.

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countries. Although these are large amounts, the direct losses would amount to giving up six months' worth of growth—with the lively hope of then resuming the pattern of four to six percent average growth thereafter.

In reality the threat to the world economy from the rise in oil prices comes not so much from the need to transfer two percent of world income to the oil-exporting countries as from the uncertainties that are inherent in the policies adopted to effect this transfer. If there were in fact a market for their exports, the oil importers-both developed and underdeveloped-could achieve the required 11 percent increase in export quantities over a period of three or four years without much strain on their economies, which are already developing excess capacity as a result of the current recession. However, it will take the several OPEC countries from 5 to 20 years to develop their economies sufficiently to absorb their increased foreign-exchange earnings in the form of imports. In the meantime, if they export oil at the levels and prices now predicted, they will have to accumulate large surpluses in the form of loans or direct investments in the importing countries. For their part, the principal customers, the OECD countries, will have to accept the corresponding deficits in their balance of payments and arrange to reallocate (or compensate for) the flow of OPEC funds through the process now known as "recycling."

To put the point differently, the major consequences of the change in OPEC price policy stem more from its suddenness than from its magnitude. If the price of oil had reached its present level by a three percent annual increase in its relative price over the past 25 years, the adjustments needed to accommodate this increase would have had little effect on world growth and indeed some benefit in directing behavior patterns and technological efforts toward more efficient use of energy. Instead, the progressive cheapening of oil for 20 years led to its wasteful use -particularly in the United States-and postponed the development of other energy sources. We are now faced with accelerated changes in consumption patterns and large investments for the development of non-OPEC sources of supply, in addition to financing the cost of the imports that will still be required. And the danger is that in adjusting to these changes the OECD countries may adopt policies that will operate to freeze or reduce their growth so that it does not move back soon to the past pattern of

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four to six percent growth.

While the food aspect of the world restructuring problem does not loom so large as the oil aspect in global terms, it raises issues that are just as acute for the LDC countries involved. On optimistic assumptions, it will take at least five years to make up for the lags in fertilizer capacity and in agricultural investment in the developing countries so as to balance supply and demand, restore stocks, and bring food prices down to more normal levels. In the meantime, some restraint will be needed in the highincome countries of the OECD to avoid bidding away the limited supplies of foodstuffs and fertilizer from the poorest countries, whose consumption cannot be compressed further.<sup>4</sup>

For the past year we have watched these adjustment processes begin to unfold with relatively little assistance from governments. Under the circumstances the international banking system has functioned with considerable efficiency to initiate the recycling process. However, existing financial arrangements will soon prove quite inadequate to the magnitude of the problem, particularly for the weaker economies. The laissez-faire approach has already had very harsh consequences for the distribution of food and fertilizer, where the lack of foreign exchange to pay prices that have been bid up by the richer countries has brought several of the weakest economies to the brink of disaster.

There are two great dangers in the present situation, the first involving the relations between the OECD and OPEC countries, and the second involving their common relationship to the LDCs. At present individual OECD nations are acting on their own to protect their balance of payments in ways that are inimical to their collective interest in increasing their trade and their GNP. Moreover, given their uncertainty as to future OPEC oil price policies, OECD governments are also taking steps both to limit oil imports and to invest in high-cost substitute energy sources to an excessive extent that affects their future growth. Thus, the continuation of uncoordinated responses to the oil problem will almost certainly result in a lower rate of OECD growth and make the transition much more costly in the end.

Such an outcome is clearly not in the interests of the OPEC

<sup>4</sup> More complete statements of the nature of these transitional problems and the changes in agricultural production that are needed are given in the United Nations World Food Conference, Assessment of the World Food Situation. See also, Lyle P. Schertz, "World Food: Prices and the Poor," op. cit.; and Lester Brown, By Bread Alone, New York: Praeger, 1974.

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countries, whose oil markets and investment returns would suffer in the process. However, it can only be avoided if both the OPEC and OECD countries achieve a better understanding and acceptance of less disruptive adjustment processes.

Secondly, the future of the LDCs—and particularly the poorest among them—depends on the ability of the OPEC and OECD countries to work out some agreed basis for financing the 100-percent increase in LDC balance-of-payments deficits that has resulted from the higher prices of oil and food. Although the problem of the most seriously affected is only five percent of a \$60 billion global disequilibrium, existing mechanisms for balance-of-payments adjustment and capital transfers are clearly unable to cope with it.

Moreover, there is a direct connection between these two dangers. It seems most unlikely that the more fortunate countries of the OECD and OPEC groups will do a great deal about the poorest nations until they reach some understanding on the evolving patterns of trade and capital movements among themselves. So long as the present atmosphere of mutual recrimination continues among the more affluent, the poorest countries will remain their unwilling hostages.

#### IV

To analyze the possible adjustments to the oil problem more concretely, let us first examine the varying positions of the principal oil exporters. The members of OPEC are all developing countries for whom petroleum is the principal source of foreign exchange and the key to their further development. They differ greatly, however, in their current needs for imports and in the volume of their oil reserves in relation to present levels of production. Assuming that OPEC will continue to set prices cooperatively, countries in different resource positions will have different views as to the best price and output policy for the group.

To indicate the effects of differences in resource positions on the production and price policies that might be followed, the 11 principal oil exporters are grouped in Table I below into three categories having the following characteristics:

-Group I (Saudi Arabia, Kuwait, Libya, Abu Dhabi, Qatar) has 65 percent of proven reserves and 48 percent of current output, but only 12 million population and limited levels of absorption for economic development. The five countries in this group 250

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must take a long-term view of petroleum policy; their reserves have a potential life of 50 years or more, and they have few other natural resources.

-Group II contains four countries (Venezuela, Iran, Algeria, Iraq) that have already achieved considerable economic development and are depleting their petroleum reserves at higher rates

TABLE I

OPEC COUNT	RIES: 1975 OIL	, PRODUCTI	ON AND RESER	VES -
	Population (millions)	Proven Reserves (billion tons)	Output (million barrels per day)	Reserves Years of (at 1973 output rate
Group I				
Saudi Arabia	8.1	19.3	7.5	51
Libya	2.I	3.4	2.1	32
Kuwait .	.9	10.1	3.0	66
Qatar	.2	.9	.5	31
Abu Dhabi	.I	2.9	I.2	45
Subtotal	11.5	36.4	14.3	50
Share of OPEC		65%	48%	
Group II				
Iran	31.9	8.2	5.9	28
Venezuela	11.3	2.0	3.5	II
Iraq	10.4	4.3	2.0	44
Algeria	14.7	I.0	I.0	20
Subtotal	68.3	15.5	12.4	25
Share of OPEC		28%	41%	
Group III				
Nigeria	73.4	2.7	2.0	27
Indonesia	125.0	I.4	1.3	22
Subtotal	198.4	4.2	3.3	25
Share of OPEC		7%	11%	
TOTAL	278.2	56.1	30.2	

\* Sources: Oil and Gas Journal (Reserves), World Bank

than Group I. They contain 70 million inhabitants and are in a position to make effective use of most of their increased oil revenues for internal development within the next decade, although they will accumulate substantial surpluses for the next several years. This group is more likely to try to secure maximum revenues in the short run because of the greater opportunities for productive investments within their own economies.

-Group III consists of two large countries (Indonesia and Nigeria) that have only a limited share of OPEC resources and

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little problem of absorbing all their oil revenues in the near future. They will not accumulate significant financial surpluses.

While maintaining or even increasing the 1974 Persian Gulf price level of approximately \$9.60 per barrel (in 1974 prices) might seem to be in the interest of countries in the second and third groups, this price is well above the long-term costs of major alternative energy sources. Accordingly, such a policy could be expected to induce a maximum effort by the OECD countries to cut back on consumption and to develop alternative energy sources (such as North Sea and Alaskan oil, coal, oil shale, tar sands, and of course nuclear energy). Studies by the OECD, the Federal Energy Administration and the World Bank suggest that such a maximum effort, although involving a considerable amount of investment that would be uneconomical at somewhat lower prices, could have the effect of leveling off the demand of the OECD countries for OPEC oil.<sup>5</sup> By 1980 OECD imports from OPEC would be no greater than at present and would be likely to decline thereafter.

However, if the Persian Gulf price were reduced to \$7 or \$8 per barrel (in 1974 prices), with some assurance that supplies would be forthcoming at this level, the OECD countries would probably forgo the uneconomical forms of investment in higher cost energy sources and would be less likely to limit growth of consumption. Thus, OPEC exports of oil to the OECD countries would continue to rise in 1980 and beyond. The total revenues available to OPEC for the next decade would probably be as great as through maintaining higher prices, and total OPEC production in 1980 and 1985 would correspond roughly to the productive capacity now planned by the OPEC countries.

In this situation the OPEC countries are faced with the classical monopolist's dilemma of trying to estimate the speed with which alternative supplies will be developed and whether the gains of maximizing short-run profits will exceed the losses from lower volumes (and perhaps lower prices) in the future. Unless a high discount is applied to the future, the OPEC countries and particularly the Group I countries with large reserves would benefit in the long run from reducing the price of oil to the cost of major alternative sources in order to maintain their share of future market growth.

<sup>5</sup> OECD, Long Term Energy Assessment (forthcoming); Federal Energy Administration, Project Independence Report, November 1974. 252

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This conclusion is illustrated in more concrete terms in Table II below. Case I assumes that the price is maintained at \$9.60 (in 1974 dollars) by upward adjustments to offset inflation. Case II assumes that the price declines gradually by some 30 percent to \$7.00 (again in 1974 dollars). In both cases, it is assumed that total energy demand in OECD countries would continue to grow, but at a rate of only 3.8 percent in Case I as compared to 4.3 percent in Case II (both, of course, reduced from the recent 5 percent rate for OECD as a whole). As to investment in alternative sources, the underlying assumptions are conservative, not assuming development of domestic or other energy sources that will cost more than imports.

Even so, the table indicates that after 1985 total OPEC revenues would be considerably greater under Case II. Moreover, if the higher prices assumed in Case I should lead to even stronger OECD efforts to reduce imports—as seems quite likely —the lower price policy might well be more profitable to OPEC beginning as early as 1980.

#### TABLE II

PROJECTIONS OF OPEC REVENUES AND CAPACITY\* (in billions of 1974 dollars and millions of barrels per day)

	Group I	Group II	Group III	Total Revenue	Production Total
Case I:					
Price Remains at \$9.60	D				
1980	\$49	\$47	\$13	\$109	33
1985	51	54	16	121	36
1990				88	26
Case II:					
Price Declines to \$7.00	by 1980				
1980	\$52	\$41	\$11	\$103	42
1985	58	52	12	122	49
1990				135	55
Planned Productive Ca	apacity				
1980	27.8	16.3	4.5		49
* Based on estimates of the	OECD and the Wo	rld Bank			

Although the elements underlying this calculation are subject to considerable technological and political uncertainties, the main conclusion that in the longer term OPEC would benefit from somewhat lower prices remains valid under a considerable range of assumptions. From the standpoint of both the OECD and OPEC countries, the difference between Case I and Case II

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is particularly great in terms of the decisions on investment in alternative energy sources. In round numbers, if the OECD countries felt compelled to reduce their demand for OPEC oil by 1985 by the 13 million barrels a day difference between Case I and Case II, they would need to make *additional* investments on the order of \$100 billion in this period. The expansion of OPEC capacity, on the other hand, would involve much less cost. In short, since decisions on tens of billions of dollars of investment in both OECD and OPEC over the next several years will hinge on the assessment that is made of future OPEC price and production policy, this becomes one of the most critical determinants of the future pattern of world trade and capital flows.

In order to maintain any given price, the oil exporters need to have some form of agreement as to how any needed reduction below capacity production will be allocated. Then, in deciding on its preferred production level, each country must estimate two elements: its current need for foreign exchange for internal development, and the prospective return on its investment of any surplus revenues in comparison to the prospective appreciation in value of oil reserves. At current prices there is only a limited prospect for a further increase in value of oil relative to other commodities over the next ten years and a greater probability of decline. Even if the real return on their investment of surplus funds is negligible and only offsets the effects of inflation, exporting countries are better off producing than keeping their oil in the ground. Countries with growing needs for foreign exchange for internal development will have a stronger incentive to increase output than those producing in excess of current needs.

Weighing the several factors that affect these decisions, it seems to me likely that oil prices will come down by 1980 to a level approximating the long-term cost of non-OPEC sources of energy, which is currently estimated to be the equivalent of \$7.00 to \$8.00 per barrel (in 1974 prices) in the Persian Gulf. This reduction would make possible relatively full use of the presently planned expansion of OPEC capacity to 49 million barrels per day by 1980. On this assumption oil prices would still be three times as high as their relative level in 1970 and twice as high as the peak period of the early 1950s.

The main threat the oil crisis poses to the OECD countries, as

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I have said above, lies in the possibility of a serious reduction in their growth rates rather than in the need to transfer two percent of their national incomes to the OPEC countries. The question of growth rates hinges on the policies followed by the OECD group, and particularly the degree of their willingness to accept the accumulation of major claims on assets (borrowing in the broad sense) from the OPEC countries.

The preceding discussion has already considered three of the actions the OECD countries are taking in the face of the oil crisis, namely, the reduction of nonessential energy needs, the development of their own energy sources and those of other non-OPEC countries, and trying to persuade the OPEC producers to lower the price of oil. Even with some success in each of these efforts, the OECD countries confront a substantial financial problem of, in effect, borrowing from OPEC to finance continuing balance-of-payments deficits with those same countries. Because of the limited absorptive capacity of the OPEC countries, the OECD countries-even under the Case II assumption of gradually lowered prices-would have to finance aggregate annual deficits of \$30 to \$40 billion (in 1974 prices) until the early 1980s. (Imports would be lower and the deficits slightly higher under Case I.) Unless the OECD countries further reduce their oil demand through rationing and economic stagnation, they will have to accept a growth in OPEC claims on their assets (debt plus direct investment) that will cumulate to a total of up to \$300 billion by 1980 (in constant 1974 dollars).

There is an inclination in many quarters to regard the task of financing any such amount as both unmanageable and unsound in the light of traditional principles of financial management. But it is hard to sustain either of these conclusions on economic grounds. Both the postwar experience of the European Recovery Program and the current management of capital flows to developing countries demonstrate the adjustment mechanisms that are needed. The economic desirability of borrowing from the OPEC countries should be judged on the basis of the cost—in terms of lower incomes and higher unemployment—of *not* borrowing. The feasibility of borrowing in the amounts indicated depends on the burden of debt service and future repayment over the next several decades. Because of the large sums involved, there is a tendency to exaggerate these prospective burdens and to ignore the cost of lower rates of growth.

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In many respects the economic adjustment now required of the OECD in relation to OPEC is similar to the typical problem of developing countries that have increased their capital inflow in order to accelerate their rates of growth. It is quite normal for them to finance 20 to 30 percent of import requirements through external borrowing for periods of 10 or 20 years while new exports are being developed. The service on this external debt often rises to as much as 20 or 25 percent of export earnings (or three to four percent of GNP) without jeopardizing the country's economic prospects or its future ability to repay. The desirability of incurring external debt depends on the additional growth that can be secured from greater imports and investment in relation to the real cost of borrowing.

The OECD oil deficit differs from the normal trade gap of less developed countries in one significant respect: its current magnitude is determined primarily by the ability of the lending countries to utilize imports from the borrower rather than by the latter's ability to supply them. This fact does not create any added problems for the OECD as a whole unless the OPEC countries decide not to continue to supply oil in the quantities indicated in Table II. On the contrary, having to borrow to pay for oil instead of suddenly increasing exports cushions the immediate impact of the rise in prices and supplies additional resources to offset the large investments needed for alternative energy sources.

Another way to judge whether this process of adjustment is feasible is, however, to compare it to the last major adjustment involving the European members of what is now OECD. In the wake of World War II, these countries engaged in a program of reconstruction that lasted through the period of the Marshall Plan and extended to about 1955. During this period there was, in effect, a massive transfer of resources from the United States to Europe, while Europe developed the productive capacity to meet what was then called the "dollar gap"—that is, to export sufficient goods and services to pay for their import requirements from the United States. In a very real sense, the position of the United States at that time corresponded to the position of the OPEC oil countries today.

The main interest in this comparison is in the relative magnitudes of the "structural" deficits in the balance of payments in the two periods, the time needed to eliminate this deficit, and the capital inflow required during the period of adjustment. The

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main difference of course was that during the earlier period the United States itself financed a large share of the transfers through grant aid. This difference must be allowed for in making the evaluation. Similarly, while the United States and Canada should be omitted from the "debtor" group in both periods (since they can finance their future oil needs without great difficulty), Japan and the Oceania members of OECD must be included in the second, or OPEC, period.

To make the comparison real, let us assume that in both periods the "debtor" group of nations was required to repay the principal of the total "debt" over a period of six years, beginning in 1952 and 1974 respectively, and that the "interest" (actual interest on debts, plus dividends on investment) was at identical rates of five percent. On this basis, Table III below shows (in 1974 dollars for both cases) the growth of GNP, international trade levels, capital inflows, and debt service requirements for 1947 to 1955, and projections of the same magnitudes for 1974 to 1985.

When put in these terms, the adjustment to higher oil prices

#### TABLE III

# COMPARISON OF ADJUSTMENT PROCESSES: 1947-55 AND 1974-85 (billions of dollars in 1974 prices)

A. 1947 Adjustment (OECD Europe)

	1947	1950	1955
Gross National Product	350	435	578
Exports	51	94	134
Imports	75	90	116*
Net Capital Inflow	31	II	2
Total Debt	31	74	92
Hypothetical Debt Service <sup>b</sup>	I.4	3.6	17.9
Debt Service/GNP	0.4%	0.8%	3.1%
Debt Service/Exports	2.8%	4.0%	13.0%
B. 1074 Adjustment (OECD	Europe and	Japan-Oceania	1)
	1974	1980	1985
Gross National Product	1,921	2,695	3,082
Exports	361	524	776
Imports	329	460	710
Net Capital Inflow	40	45	34
Total Debt	40	285	500
Hypothetical Debt Service <sup>b</sup>	8	48	51
Debt Service/GNP	0.4%	I.8°2	1.6%
Debt Service/Exports	2.2%	9.2%	6.6%
	Gross National Product Exports Imports Net Capital Inflow Total Debt Hypothetical Debt Service <sup>b</sup> Debt Service/GNP Debt Service/Exports B. 1974 Adjustment (OECD Gross National Product Exports Imports Net Capital Inflow Total Debt Hypothetical Debt Service <sup>b</sup> Debt Service/GNP Debt Service/Exports	1947Gross National Product350Exports51Imports75Net Capital Inflow31Total Debt31Hypothetical Debt Service*1.4Debt Service/GNP0.4%Debt Service/Exports2.8%B. 1974 Adjustment (OECD Europe and 1974Gross National Product1,921Exports361Imports329Net Capital Inflow40Total Debt40Hypothetical Debt Service*8Debt Service/GNP0.4%Debt Service/GNP0.4%Debt Service/Exports2.2%	IP47IP50Gross National Product $350$ $435$ Exports $51$ $94$ Imports $75$ $90$ Net Capital Inflow $31$ $11$ Total Debt $31$ $74$ Hypothetical Debt Service* $1.4$ $3.6$ Debt Service/GNP $0.4\%$ $0.8\%$ Debt Service/Exports $2.8\%$ $4.0\%$ B. 1974 Adjustment (OECD Europe and Japan-Oceania1974 $1980$ Gross National Product $1,921$ $2,695$ Exports $361$ $524$ Imports $329$ $460$ Net Capital Inflow $40$ $45$ Total Debt $40$ $285$ Hypothetical Debt Service* $8$ $48$ Debt Service/GNP $0.4\%$ $1.8\%$ Debt Service/GNP $0.4\%$ $1.8\%$ Debt Service/Exports $2.2\%$ $9.2\%$

Actual imports were reduced to take account of the need to service hypothetical debts.
 b Hypothetical debt service calculated at 5% interest, repayment of each year's borrowing over six years beginning in 1952 or 1974.

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that is now required is shown to be of somewhat lesser magnitude than the postwar adjustment process. The proportion of imports to be financed by external capital in the first five years is only half as great, and it will not be necessary to limit the growth of non-oil imports in order to close the trade gap with OPEC. Although there was little repayment of the actual postwar debt, the growth of exports and GNP after 1950 was rapid enough to have permitted such repayment with little effect on continued growth. The important lesson of the postwar period is that such a large restructuring was accomplished with relative ease because economic growth was sustained at a high rate.

Even without much fall in OPEC oil prices between now and 1980 the OECD countries of Europe and Japan will reach a maximum indebtedness to OPEC in the early 1980s. At its peak, the service on this debt will be less than two percent of their GNP. Table III shows that borrowing to pay for part of the increased oil costs has the advantage of spreading out the diversion of exports needed to offset the worsening of the OECD terms of trade; even if interest on the debt reaches five percent in real terms (much more than is now being paid), the total burden of debt service will be less than 10 percent of projected exports.

By 1990 almost all of the OPEC countries are likely to have reduced their outstanding investments in the OECD very substantially as their internal absorptive capacity continues to grow. While capital may then flow in the opposite direction to support the continued growth of the oil producers as their oil revenues stagnate or decline, the magnitudes will not be so large as to interfere with the growth of the OECD countries. Therefore, it is difficult to argue on economic grounds that the world economy cannot sustain capital flows of the required magnitude, or that the OECD countries need to suffer heavily in the process.

The other major obstacle to acceptance of borrowing from OPEC countries as a desirable solution to the oil problem is the fear that they will acquire excessive ownership and control of OECD assets. The magnitudes involved—up to \$300 billion (in 1974 prices) by 1980—must be judged in relation to the total assets of the OECD countries including the United States. The figure of \$300 billion would be perhaps five percent of the value of all stocks and bonds in the major OECD countries in 1980 or two percent of their fixed assets. These are considerably smaller proportions of foreign ownership than those experienced by

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many countries in the past. Moreover, it is clearly within the power of the recipient countries to limit the forms of assets that are held so as to avoid any undesirable forms of external control.

Thus, instead of worrying about foreign control of existing assets, we should be more concerned with the loss of income and wealth that is likely to occur through misguided efforts to limit the oil deficits. A reduction of OECD growth from its normal five percent to 3.5 percent would wipe out some \$300 billion in potential asset formation by 1980 and cause considerable unemployment, which is a much greater cause for concern than the risks of OPEC control.

In sum, there do appear to be reasonable ways by which the adjustment process between the OECD and OPEC countries can be eased and made bearable. If the analysis in Table II were accepted, some reduction in the oil price would be a part of the overall answer. But even if this were not done, a better coordinated international system should be capable of handling the required transfers through the transition period. In economic terms, the problems between the OECD and OPEC countries *are* soluble.

VI

Let us return now to the problem of the LDCs.

The events of the past several years have had very diverse effects on the two billion people who constitute the Third World. Although the commodity boom of 1972–74 improved the terms of trade of most primary exporters, this trend has now been reversed, with the exceptions noted above of petroleum and some minerals and foodstuffs. The impact of oil and food prices on the non-OPEC members of the Third World has been to double their balance-of-payments deficits—from \$10 billion in 1973 to \$20 billion in 1974—offsetting the effects of the present flows of concessionary loans and grants.

These developments have initiated a process of fragmentation of the Third World that is likely to continue. The beneficiaries of these changes comprise some 400 million people living in countries exporting oil and minerals, whose development prospects have greatly improved. A second group consists of some 600 million people in the upper income tier of the developing countries—Brazil, Turkey, Korea, Thailand, etc.—many of which have suffered losses similar to those of the OECD. Al-

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though they will have to borrow large amounts to offset their oil deficits, most of them have sufficiently flexible and diversified economies to adjust to the increased exports and changed internal allocation of resources. This group will experience a temporary slowdown in growth, but their long-term prospects need not be seriously affected, providing they continue to have access to capital markets and other recycling facilities.

For the billion people in the lower tier of less developed countries the situation is quite different. For most of the poorest countries—mainly in South Asia and East and Central Africa export prices have lagged behind the general inflation while import costs have risen sharply. As a result, their terms of trade have worsened by 20 percent in the past two years, twice as much as the fall for the OECD countries. For many of these countries and notably India and Bangladesh, which comprise two-thirds of the population—development prospects have been set back ten years or more. In many cases, food shortages and high prices are as important as the rise in oil costs in preempting the available foreign exchange and stopping the import of other goods needed for development. It is in this "Fourth World" that the oil and food crises come together and require a joint solution.

In general, the ability to adjust to changes in external economic conditions diminishes at lower levels of development. The margins for reduction in consumption of oil or food become narrower, and there is a more limited range of potential exports that can be increased in the near future. For many of the poorest countries, the possibilities of internal adjustment are rapidly being exhausted. While some of them accumulated foreign-exchange reserves during the commodity boom, these reserves will not long offset the increased cost of imports. Since it will take several years to develop new exports, growth can only be sustained even at reduced levels by an increase in concessional lending of three to four billion dollars per year (in constant prices) over the next few years.<sup>5</sup>

Since India makes up more than half the population of the lower tier of developing countries and has somewhat greater opportunities to adjust, it deserves separate comment. Although India has had considerable success in developing an industrial base and a supply of human skills over the past two decades, it has

<sup>5</sup> Robert McNamara, Address to the Board of Governors of the World Bank Group, September 1974.

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been one of the last countries to maintain the inward orientation of its development effort instead of following Korea, Brazil, Mexico and most other industrializing countries in shifting into manufactured exports. It was thus in a very poor position to meet the impact of higher oil, food and fertilizer prices, which added two billion dollars to its existing import bill of three billion dollars between 1972 and 1974. Unlike the other very poor countries, however, India has an industrial structure that could provide a basis for rapid export growth if it were to give the priority to this effort that has proved necessary for other successful exporters.

In summary, it is worth stressing the basic differences between the more limited adjustment mechanisms available to the less developed countries and those that can be employed by the advanced countries.

- -OPEC surpluses will be automatically invested in the capital markets of the advanced countries; special efforts (such as guarantees or subsidies) will be needed to redirect some of these funds to the developing countries or to have the OECD countries re-lend them.
- -Energy conservation provides a large element of the adjustment for the rich countries, but there is much less scope for it in the less developed ones.
- -Since three-quarters of the OPEC surplus is with the OECD, the latter countries cannot reduce it by expanding exports to one another. However, the OECD countries should accept a continued expansion of exports from the developing countries, since this latter group can only depend on recycling to a limited extent.

VII

Despite widespread predictions of impending economic disasters, these events are no more inevitable now than were similar predictions in 1946 and 1947. The basic problem we face is to adjust to the claims for a relatively small redistribution of world income among countries without incurring any greater loss of welfare than is necessary. While one solution to the problem would be for the producers of petroleum and foodstuffs to moderate their claims, a return to previous price relations can be virtually ruled out, and some degree of structural readjustment must be pursued.

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The policy conclusions to this analysis can be summed up in three propositions: (a) once the dimensions of the basic problem are accepted, it should be quite feasible to devise a set of policies to enable the several parts of the world economy to resume satisfactory rates of development; (b) the various elements of the solution are highly interdependent and require a quality and sincerity of international cooperation that has been lacking since the early 1950s; (c) the effects of a failure to make the adjustments in the international system would be considerably more costly to most of the participants than the gains that each country can hope to achieve by acting independently, and the burden of such a failure would fall disproportionately on the poorest countries.

Although it is not my purpose to analyze the various institutional changes that are needed to bring about these results, the principal elements in a cooperative approach to a solution can be sketched out:

I. Reduction of Uncertainty in Oil Marketing

Uncertainty as to OPEC oil policies and the desirable responses to them is the main obstacle to the acceptance of the problem of higher prices by the importing countries. Reduction of this source of uncertainty would greatly aid the adoption of other measures to restore equilibrium in the world economy.

2. Financing Oil Deficits

It is generally agreed that the existing recycling mechanisms —OPEC loans to preferred governments, limited use of the international institutions, direct OPEC investments, and the private banking system—will become increasingly inadequate to the magnitude of the OPEC surplus in the course of 1975. Although a more satisfactory system would expand use of all of these routes, it should also guarantee a volume of lending adequate to finance the oil deficits of the OECD countries and the upper tier of those developing countries which are able to assume additional debt. Such guarantees are needed to avoid "beggar thy neighbor" policies through which importing countries attempt to reduce their individual oil deficits at each other's expense. However, the poorest countries are not able to assume much additional debt other than on concessional terms.

3. Support for OPEC Development

Since the main object of the OPEC governments is the rapid and secure development of their economies, their willingness to 262

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cooperate in solving the problems of the rest of the world is likely to be increased by measures that would enable them to reach that goal. Such measures should include a secure return on external investment and assistance in their internal development. In return they might be willing to forgo high short-run profits in favor of a larger and more secure future market for their oil.

4. OECD Growth

Even with adequate recycling mechanisms, some short-term reduction in the growth of the industrial countries is virtually inevitable as part of the worldwide effort to control inflation. However, a restoration of the trend rate of five-percent growth of GNP for the OECD countries by 1976 is quite feasible and would make an important contribution to the solution of the problems of the developing countries.

5. Restoration of LDC Growth

In the present atmosphere of inflation, payments deficits and economic recession, it seems politically impossible for the industrial countries to give adequate attention and support to the developing countries. This condition is unlikely to be reversed until the OECD countries are on the way to solving their own problems. Until that is achieved, the erosion of aid by inflation is not likely to be offset, and the tendency to restrict LDC imports will be hard to resist.

In quantitative terms, the needs per year of the developing countries for additional support to restore reasonable rates of growth are modest: three to four billion dollars (in 1974 prices) for the rest of this decade. Depending on the rates of growth of the OECD countries, this would bring total concessional lending back to between 0.3 and 0.4 percent of the gross national products of the OECD and OPEC countries. These were the levels that were maintained by the OECD until recently, when they were reduced by the effects of the inflation. But to achieve them will require substantial increases in current appropriations, in order to offset higher prices.

Without some expansion of aid, restoration of growth in the rest of the world will do relatively little for the most seriously affected countries because they cannot readily shift their exports to take advantage of it. Nor can they make extensive use of recycling facilities on conventional terms. Thus there is no shortrun adjustment mechanism available to them except to reduce their growth. Some special assistance—either in the form of re-

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duced prices for oil and food or increases in concessional lending—is needed to avoid inflicting on them the main burden of both the oil and the food adjustments.

### VIII

Since the series of negotiations and institutional changes required to bring about this rather optimistic scenario will require an appreciable period of time, we will have to improvise temporary solutions. In the short run, there is no alternative to the use of existing institutions for recycling, the reallocation of aid budgets and food stocks to the most affected countries, and an ad hoc sharing among the stronger OECD and OPEC countries of the burdens of adjustment and risks of lending.

In the longer run, the world does have a choice. It lies between mounting a cooperative effort on the model of the postwar period or accepting the much higher costs of an uncoordinated readjustment in which all parties are likely to suffer.

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# Foreign Assistance and Development Performance, 1960-1970

#### By Hollis B. Chenery and Nicholas G. Carter\*

The analytical and philosophical basis for the aid and development programs of the past decade was formulated in the early 1960's. In outline form it asserts that:

- (a) external resources can be used by underdeveloped countries as a basis for a significant acceleration of investment and growth;
- (b) the maintenance of higher growth rates requires substantial changes in the structure of production and trade;
- (c) external capital can perform a critical role in both resource mobilization and structural transformation; and
- the need for concessionary aid declines once these structural changes are well under way (although further capital inflow may be productive).

This rather optimistic diagnosis of the possibilities for achieving self-sustaining growth and of the potential value of welltimed capital transfers has had widespread effects on the plans of both aid donors and developing countries.

More recently there has been a variety of criticisms of both the performance of countries receiving aid and of the basic ideas on which aid programs have been conceived. It is asserted that aid is often offset by increased consumption, that aid donors interfere with national priorities, and that aid permits countries to defer difficult policy changes that otherwise would have been taken. (See K. B. Griffin and J. L. Enos and T. E. Weisskopf.)

The policies of the aid donors have been mixed. While aid as a share of GNP has declined continuously in the United States since 1963, this decline has been somewhat offset by increases in the European contributions. Official Development Assistance (ODA) from the DAC countries as a group now approximates 0.35 percent of their GNP, and total public and private flows amount to \$18 billion or 0.8 percent of their GNP—considerably short of the United Nations targets of 0.7 percent and 1.0 percent, respectively.

Despite this shortfall in aid, the overall performance of the developing countries has generally lived up to the expectations of the early 1960's. For the decade as a whole, the net amounts of external capital supplied were not far short of the more conservative estimates of the amounts needed for accelerated growth, and market access for less developed country (LDC) exports has improved. Growth rates have accelerated in most countries. Over the decade a number of aid recipients have gone through the anticipated sequence of increased investment rates, structural transformation, and declining aid requirements. On the other hand, several countries have confirmed the suspicions of the aid skeptics and show little benefit from the assistance received.

In this paper we present a summary evaluation of the interrelations between internal and external policies and the role of foreign assistance in the development experience of the past decade. The problem is complicated by the lack of any

<sup>\*</sup> Development Policy Staff, International Bank for Reconstruction and Development. We would like to acknowledge the help of Lance Taylor, M. Agarwal, and Hazel Elkington. Statistical assistance was provided by F. F. Jen and R. Bhakta.

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## failures of resource mobilization played a smaller role than failures of allocation, with too much reliance put on import substitution and little attention to export promotion or diversification.

# II. The Allocation of Aid

The allocation of external resources is the result of the set of policies followed by the recipients as well as the allocation criteria of the donors. In the aid planning of the 1960's, the donors were primarily concerned with (a) the efficiency of use of capital, (b) the risk of loss, and (c) intercountry equity. In recent years a fourth criterion, the effect on income distribution within countries, has been increasingly stressed, although it has not yet had much effect on the results.

The Chenery-Strout projections provide the only known "plan" for aid allocation among countries based on a consistent set of criteria. Comparing the actual growth projections and corresponding aid allocations to the projections therefore reveals something about the working of the mechanism through which external resources are allocated.

# A. Recipient Policy

The choices facing recipients of external capital vary considerably according to their past success in development. Countries that are seen to be effective users of external resources are favored by both private suppliers and aid donors. The most successful countries have therefore had the choice of (a) accelerating growth further on the basis of additional external capital; (b) reducing their capital inflow, as envisioned in the prototype of the two-gap sequence.

The high growth countries have responded differently to these alternatives: Greece, Korea, Iran, Mexico, Costa Rica, and Thailand have chosen to increase both *GNP* growth and capital inflow, while Taiwan, Turkey and Malaysia have reduced their external capital requirements from the plan levels through improved export performance.

The less successful countries have a more limited choice. In several cases they have tried to increase the inflow of capital to offset slow export growth with only limited success. Of the "poor" performers, only Indonesia, Tunisia, Sudan, and Burma received amounts of external capital as great as—or even close to—the projected decade totals. While the reduction was usually justified by poor internal performance of the recipient, this was not always the case.

# B. The Distribution of Benefits

The dozen or so agencies that provide the bulk of official assistance operate on different sets of criteria and with differing geographical and political preferences. Although there are some common elements such as favoring countries that make effect tive use of aid—it is impossible to construct a general rationale for donor policy over the decade. We can, however, derive some conclusions as to the distribution of benefits by comparing the overall results to those projected.

On the benefit side, the decade growth of GNP for the whole group was from \$153 billion to \$251 billion, compared to a projected total of \$263 billion. Most of the shortfall is in India. On the external cost side, the shortfall in capital inflow (from \$66 billion projected to \$40 billion actual) can be allocated in part (perhaps 30 percent) to the substitution of manufactured and service exports for aid in countries such as Brazil, Taiwan, and Turkey. Most of the remainder is the result of a shift away from the less successful countries as measured by their growth performance-Argentina, Chile, India, Colombia, Egypt, Nigeria, Ghana.

The relations of growth and aid to the

# EXPERIENCE OF DEVELOPMENT

initial level of per capita income is shown in Table 3, in which countries are grouped by income level. The principal distributional effect is brought out more clearly by treating India separately.

The shift in distribution is striking. The higher income group as a whole fell short of its target growth by only 7 percent even though the capital inflow was only 43 percent of that planned. Within this group, success varied largely with the ability to expand exports in substitution for external capital.

The second group of poor countries received 80 percent of the inflows expected and achieved growth rates 10 percent above those planned. India, in contrast, received only 55 percent of her estimated need, and this shortfall was probably the main single factor in her inability to grow more rapidly. In this case there is a clear failure of the system of international distribution of assistance, which is heavily need toward smaller countries.

Since India constitutes almost half the population of the poorest group of countries, its performance deserves some further comment. The shortfall of aid to India in 1962-70 was on the order of \$6 billion. In addition, exports fell slightly short (about \$500 million) of the amount projected. We can use the Chenery-Strout framework to predict what might have happened had India received the aid and the exports that were anticipated, using observed performance parameters. The actual import ratio was reduced following the 1967 devaluation and the imposition of strict import controls. While savings were not as high as predicted, this reflects the ex post fall that accompanies a dominant trade gap. However, it is likely that had all the projected aid been forthcoming, India might have run into a capacity constraint.

To evaluate these several effects, we ran simulation experiments using an extended

version of the Chenery-Strout model. The addition of the lost exports adds only about 0.5 percent per annum to the 3.5 percent growth achieved, but the projected amount of aid would have brought the growth rate up to 6.8 percent per annum. In other words, India might well have achieved the target rate of 5.3 percent if aid had been allocated on a basis comparable to other countries.

# III. Efficiency of the Aid Process

The negative association between capital inflow and savings has led some authors to question the efficiency of the aid process. The proper test of the effectiveness of aid, however, is its effect on growth or other social objectives rather than on savings as conventionally measured.<sup>4</sup> The two-gap model demonstrates that with a trade constraint it is optimal policy to increase the capital inflow even though the effect will be to raise consumption as well as investment, and in this case the productivity of external capital is very high.<sup>5</sup>

We have conducted several tests to try to determine whether the observed negative effect of capital inflow on savings can be explained as largely a two-gap phenomenon, as suggested by L. Landau. There are only a few countries-Thailand, Venezuela, Jordan-in which a trade constraint can be ruled out; here the negative coefficients in a regression of savings on capital inflow can be taken as indications of inefficiency in transforming the capital inflow into increased investment. In the vast majority of cases, where there is a constraint other than savings (or where the constraints are mixed over the period), the negative association is to be expected as a result of ex post savings falling below ex

<sup>4</sup> G. F. Papanek has demonstrated that much of the apparent association is explainable on purely statistical grounds.

<sup>5</sup> This result is demonstrated in the optimizing version of the model used in Chenery and A. MacEwan.

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# tive export earnings noted above.

Considering total savings and investment for the thirty-seven country sample. we find both appreciably above the predicted totals. In the fast growing countries the higher than predicted growth rates have led to substantially larger amounts of savings and investment, even though marginal savings rates were not generally higher than predicted. In countries of retarded growth, on the other hand, there has been less of a shortfall in savings and investment rates than in growth of GNP. As discussed below, poor savings performance does not seem to have been a major factor in the failure to meet plan objectives.

We have also computed an approximate rate of growth in the capital stock of each country. There are a number of countries (Iran, Korea, Tanzania, Malaysia, Pakistan, Kenya) in which the rate of *GNP* growth is substantially higher than the rate of capital growth. These cases suggest that fuller use is being made of the existing stock of capital to secure an acceleration of growth over a limited period. In contrast, where growth has been rapid for a longer period—as in Israel, Taiwan, Mexico, Greece, and Thailand—the capital stock has had to grow at about the same rate as the *GNP*.

#### B. The Constraints to Growth

The Chenery-Strout projections were derived from a simplified two-gap model which exaggerates the likelihood of disequilibrium between internal and external constraints to growth, since normally one or the other constitutes the dominant limit. Although we and others have tested various methods of determining the relative importance of these constraints in actual cases, we have found none that is entirely satisfactory. Despite these difficulties, we cannot fall back on the methodology of general equilibrium analysis, which assumes that capital and labor are fully utilized and gives no role to external factors.

In the cases where a "pure" savings or trade constraint can be identified, the analysis can be based entirely on the corresponding disequilibrium submodel and is relatively straightforward. Our main difficulty lies in interpreting the experience of countries that are partially trade constrained. In this survey, we will try to indicate the relative importance of internal and external factors in the countries having large deviations from the original projections: five cases of accelerated growth-Taiwan, Korea, Iran, Thailand, Kenvaand six cases of retarded growth-India. Colombia, Ghana, Tunisia, Ceylon, and Chile.

#### Cases of Accelerated Growth

When there are multiple constraints on growth and limited opportunities for medium-term substitution, an accural assessment of the sources of improved performance can in principle be determined only from a solution to a planning model with alternative sets of assumptions. However, when the deviations from the plan assumptions are concentrated in two or three parameters, we can give an approximate evaluation of their importance by less formal methods. We would assess their relative importance in the five cases of accelerated growth as shown in Table 4.

	External	Factors	Internal	Factors
		Capital		Excess
Countries	Exports	Inflow	Savings	Capacity
Taiwan	50	mb-lefm	50	menes
Thailand	50	50	11-	
Korea	40	20	20	20
Iran	20	on withe	40	40
Kenva	O R + wins	40	thurt-	60

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The most significant difference is between Taiwan and Thailand on the one hand-where rapid growth was established in the 1950's-and the other three, where there was substantial acceleration in the 1960's. Taiwan had a very large increase in both export growth and savings, permitting both an acceleration of growth and a reduction in capital inflow, whereas Thailand required large additions of external capital. In Korea the substantial increase in external capital made possible a fuller mobilization of the economy's resources. The existence of excess capacity is indicated by a substantial fall in the capitaloutput ratio from its previous levels.

In Korea and Thailand it is impossible to separate the effects of the added growth of exports from the additional external resources, since both were substantial. In Kenya, the problem is simplified since neither savings nor exports were higher han projected; capital inflow and better internal management were the principal sources of improvements over the plan.<sup>3</sup>

# Cases of Retarded Growth

Analysis of the causes of the serious shortfalls from planned performance is complicated by the extensive interaction between external and internal factors. The two-gap model predicts that, when there is a shortage of foreign exchange relative to minimum import requirements, there will be a fall in the savings rate and—unless increased external capital is forthcoming—a reduction in growth and underutilization of capacity. These symptoms were present to a greater or lesser degree in Ceylon, Ghana, India, and Colombia.

Internal factors provide the primary explanation of slow growth in Tunisia and

<sup>\*</sup> In countries where the economy had previously been growing slowly, the *ICOR* based on this experience overstates the capital requirement. A fall in the *ICOR* reflects both use of excess capacity and other aspects of internal management.

Chile. In Tunisia, both exports and aid were above plan levels. Tunisia has deliberately allocated a large share of investment to less immediately productive uses over much of the decade, which caused a slowdown in growth even though the plan level of investment was maintained. Chile also showed little evidence of a trade limit, due to favorable copper prices during most of the period. The capital-output ratio rose as a result of excessive import substitution, while the savings rate fell below the plan level as a result of failure to control inflation.

In Ceylon and Ghana, the retardation of growth can be largely attributed to market conditions for their major primary exports—tea and cocoa, respectively—which account for over 50 percent of total exports in each country. In Ghana, the problem was compounded by misallocation of investment and the consequent reduction of the inflow of external capital. Failure to anticipate and adjust to the slow growth of their principal export commodity must be considered the primary cause of retardation in both countries.

In India and, to a lesser extent, Colombia, the reduction in external assistance played a major role in retarding growth. In both cases the resulting shortage of imports was more serious than the shortage of finance for investment. The foreign trade bottleneck was made worse in both countries by trade policies that discriminate against exports of manufactured goods, which their degree of industrial development would otherwise have supported.

In retrospect, the plan growth rates for these six countries (which are a close reflection of their own plans) seem entirely reasonable. Among the several elements causing the shortfalls, a reduction in the expected capital inflow was a major element in India and to a lesser extent in Colombia, Chile, and Ghana. Internally,

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TABLE 1-PARAMETERS OF DEVELOPMENT 1960-1970

	Walka son pia	Growth of GDP			man weeks to	and drop	14.1
Country	Historical Rate (1957–62)	Plan Rate* (1962-70)	Actual Rate (1960-70)	- Growth of Exports (1960-70)	Growth of Imports	Margin Saving Rate	al s
I. High Growth	epicard avera	incount-	Section -	(1200 10)	(1900-70)	(1960-7(	0)
(Actual greater than 6%)						level de 1	6.8
A. Planned							
Israel	9.0	0.0					
Greece	6.0	6.5	1.9	15.4	12.5	00	
Mexico	5.0	6.0	1.3	8.6	6.7	.00	
Costa Rica	5.5	6.0	1.2	4.7	5.5	22	
Jordan	5.6	5.6	0.5	9.7	11.4	15	
1 urkey Molecci	5.3	6.0	0.4	8.3	7.5	.03	
Tonas	4.0	5.0	0.4	7.7	6.3	23	
B Accelerate 1	4.2	5.0	0.2	5.4	5.7	.22	
D. Accelerated		0.0	0.1	5.6	6.4	.22	
(Actual—Plan ≥ 1.5%)						01100.000	
Koraa	6.0	7.0	10.0				
Iran	4.3	5.0	0.0	20.7	15.5	.35	
Thailand	4.4	5.5	83	27.1	17.8	.29	
Kenva	5.0	6.0	8.0	10.7	13.3	.30	
II. Normal Crowth	1.7	3.5	67	1.9	9.9	.24	
(Actual 4.0 to 5.007)			0.7	2.4	6.7	.15	
A. Planned							
Philippines							
Venezuela	5.0	5.5	5.9	0.2	ave michage g		
El Salvador	4.5	6.0	5.8	9.2	9.9	.20	
Brazil	5.0	6.0	5.4	4.0	8.6	.31	
Ecuador	5.5	5.5	5.3	6.2	7.9	.06	
Guatemala	4.2	5.0	5.1	2.0	3.8	.13	
Jamaica	4.0	5.0	5.1	10.4	4.8	.07	
Pakistan	4.0	4.5	5.1	5 4	9.2	.25	
Uganda	4.5	5.3	5.1	27	0.7	.24	
Ethiopia	1.7	4.0	5.1	4 5	5.2	.14	
Colombia	4.5	4.5	5.0	5.6	0.0	.22	
III. Low Growth	5.0	6.1	4.9	3.8	0.5	.13	
(Less than 4.8%)				il ilnaya	5.9	.21	
A. Planned							
Peru	5 5						
Argentina	3 1	5.5	4.5	2.2	16	00	
Ceylon	4.2	4.3	4.0	2.6	0.3	.00	
Morocco	28	5.0	3.9	-0.7	0.7	.21	
Chile	3.5	4.0	3.9	2.7	2.8	. 22	
Indonesia	1.0	3.0	3.9	6.2	2.5	.21	
B. Retarded	a di la	3.0	3.0	5.0	10.1	.30	
(Plan−Actual≥1.2%)						.02	
Egypt	4.5	5 5					
Sudan	5.1	5.5	4.2	0.2	1.9	01	
India	4.3	53	3.9	2.6	3.4	.00	
Tunisia	4.1	5.0	0.0	2.0	-0.4	10	
Nigeria	4.0	4 5	3.5	5.5	3.4	38	
Burma	3.2	4.0	3.0	7.6	3.6	38	
TOTAL SAME	4.5	5.5	2.1 -	-11.7	-7.6	.11	
TOTAL SAMPLE		5.4	5 A	-1.3	-4.2	.09	
A Median Derit	Ref. 1-1-1-1-1		0.1	5.1	5.8	0.18	

\* Median Projections of Chenery-Strout

TABLE 2-PLANNED AND ACTUAL PARAMETERS OF GROWTH

the second s	FIDE	Group I High Growth		Group II	Group III Low Growth	
	1655 Bb	A	B	Growth	A	В
Growth of GDP (%):	Planned	6.2	5.4	4.2	4.2	5.2
Glowin of GD1 (70).	Actual	6.7	8.0	4.9	3.6	3.2
Crowth of Exports (%).	Planned	6.71	6.59	3.63	3.58	4.16
Growin of Exports (70).	Actual	7.34	12.63	5.38	3.36	1.88
Growth of Primary Exports (%):		5.89	7.33	4.04	1.33	-0.51
Growth of Manufacturing		16.24	25.89	18.39	10.60	6.21
Growth of Imports (%):	Planned	6.49	7.23	4.74	4.61	5.40
Giowen or Importo (707.	Actual	7.36	13.13	6.52	3.86	0.48
Caribal Tr flow 1062-70.	Planned	12.4	4.5	16.6	12.9	19.8
(a Lilliana)	Actual	13.4	5.5	5.8	4.1	11.0
() Dimons)	Planned	150	.138	.184	.227	.108
Marginal Savings Rate:	Actual	.185	.272	.200	.177	.131

TABLE 3-DISTRIBUTION OF AID AND GROWTH\*

similar Greeth	Population (millions)	Total GNP (\$ billions)			GNP Growth		Capital	
		1960	1970 Proj.	Act.	(In Percent) Proj. Act.		(\$ billions) Proj. Act.	
A. 16 Countries over \$190 per capita	321	74	135	129	6.1	5.7	30	13
B. 20 Countries under \$190 per capita	606 538	43 35	69 59	72 50	4.8 5.3	5.3 3.5	24 12	20 6
Totals	1,465	153	263	251	5.6	5.1	66	40

• Totals may not add because of rounding.

terms—whereas unsuccessful development has usually led to a reduction in the aid supplied. Therefore, although the total supply of public funds for external assistance can be taken as given, its distribution depends both on donor policy and on the performance of the recipients.

# Internal Aspects

The savings and investment performance of the sample group was somewhat more favorable than the parameters projected. The mean value of the incremental capital-output ratio (*ICOR*) was about 3.3 in both cases, but the effect of accelerated growth in lowering this value in the fastgrowing countries—analysed in Chenery and P. Eckstein—was underestimated.

Interpretation of the savings results is complicated by the existence of disequilibrium in the *ex ante* trade and savings gaps. The Chenery-Strout projections assumed a median value of the *potential* marginal propensity to save (*MPS*) of .24, but because of the trade limits the projections resulted in a median *realized* value of .15. The median *actual MPS* was .21, which is consistent with the somewhat less restric-
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tested empirical methodology for determining the sources of growth in developing countries. The factor productivity approach focuses entirely on internal factors and does not readily accommodate trade bottlenecks and other disequilibrium conditions common to developing countries. At the other extreme, approaches that center on a comparison of trade performance tend to exaggerate the importance of aid and exports.

In order to include both internal and external aspects of performance, we will base our evaluation on the projections of growth and aid made by Chenery and A. M. Strout for the period 1962-1970. We have discussed elsewhere the improvements that have been made in this model (Chenery and Carter). In the present paper we use it as a convenient framework for measuring the past performance of the developing world against projections made at the beginning of the decade as a basis for establishing aid requirements. While today countries give greater weight to other objectives such as employment and income distribution, we will examine the performance of the 1960's in the terms of the overall growth objectives that were commonly accepted at the beginning of that decade.

# I. Development Performance in the 1960's

While we cannot estimate the structural relations in the aid-development model with any accuracy because of the periodic existence of disequilibrium in most countries, there are several aspects of the Chenery-Strout analysis that can be evaluated:

(1) the extent to which growth has been accelerated, and the relative importance of internal and external factors in this result;

(2) the extent to which each economy has been able to absorb external resources for productive uses;

(3) the extent to which the inability to

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adjust the trade and savings limits has produced disequilibrium conditions; and (4) the extent to which the insufficient external capital has been provided to sus-

tain minimum rates of growth; and(5) the effects of the allocation mechanism on the distribution of benefits.

For this purpose, we utilize two sets of estimates: the projections of feasible growth and aid requirements compiled by Chenery and Strout for a sample of fifty countries for the period 1962–1975, and estimates of the actual values of the parameters in this model for the period 1960–1970, covering thirty-seven of the principal countries in this sample.<sup>1</sup> The omission of thirteen countries (mainly small) does not materially affect our findings.

# A. Overall Comparisons The Projections

The Chenery-Strout projections were made to determine the needs of developing countries for external capital under various assumptions as to external trade and aid policies and internal resource mobilization. They were based on four analytical elements:

- (a) past performance of each country, particularly in the preceding five-year period (1957-1962);
- (b) development programs of all countries for which they were available;
- (c) intercountry econometric studies of the principal parameters of the system (capital-output ratios, import ratios, savings parameters); and
- (d) independent estimates of export prospects for the principal commodities, which were used to modify individual country forecasts.

Since the primary purpose was to deter-

<sup>1</sup> A description of the sample and a full set of statistical comparisons is given in Chenery and Carter.

mine aid requirements as a function of growth objectives and domestic performance, alternative assumptions were made for each set of policy variables, reflecting a subjective judgment as to the likelihood of their achievement. We will use the central set of "plan" targets and "plan" performance as a basis for the present evaluation, since they were then considered to be the most probable outcome.<sup>2</sup>

# GNP Growth Rates

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Almost all countries that had not already achieved growth rates of more than 5 percent in the 1950's planned for accelerated growth in the 1960's. Even after the downward revisions by Chenery and Strout to make the plan targets more realistic, a significant acceleration in the rate of growth was projected for forty of the fifty countries; in thirty-five of these cases some acceleration was achieved. The unweighted average for the thirty-seven countries in our sample was raised from historical rates of 4.4 percent in 1957–62 to 5.25 percent in 1960–70.

A comparison of actual to projected growth is given in Table 1. In 25 of the cases, actual growth was within  $\pm 1.2$  percent of the plan rate. The other twelve countries are fairly evenly divided, with five growing significantly faster than projected and seven significantly slower. The average planned growth for the whole sample was about the same as that which took place.

# External Aspects

The projections of GNP growth and required capital inflow started from an

<sup>1</sup>These estimates were adjusted from the original plans of the countries according to the authors' judgment to make them more "realistic"—i.e., with a probability of achievement of .5. Other projections based on historical performance and an "upper limit" estimate defined by a probability of .2—were also made, giving a total of 18 projections for each country.

analysis of export growth that was then taken as exogenously given for each country. These are summarized in Table 2. The export forecast, which was made on a commodity basis for developing countries as a whole, accurately predicted the slow increase in primary nonfuel exports of about 3 percent. The main difference is in the growth of manufactured exports and services, which have grown at 15 percent compared to the anticipated rate of 6 percent. Total exports for the sample group have therefore grown at 5.9 percent compared to the projected rate of 5.1 percent. The more rapid growth of exports has

largely offset the slower growth of external capital. Annual requirements for external capital for the thirty-seven countries were predicted to double with a total net inflow between 1962 and 1970 of \$66 billion. As shown in Table 3, the actual inflow was about 40 percent less. Although the total flow of imports was approximately what was estimated to be necessary to support realistic plans of these developing countries, the aid component was financed on considerably harder terms than was anticipated, thus biasing the distribution of growth in favor of countries that were able to expand primary exports or borrow on hard terms.

Since the overall supply of foreign exchange, which constitutes the principal exogenous element in these projections, has been roughly as predicted, our analysis can concentrate on the factors affecting its distribution among countries. The higher growth of mineral and nonprimary exports has been of considerable benefit to six of the countries in our sample, while shortfalls in primary exports have hampered another six.

The distribution of external capital is a complex phenomenon which is examined in detail below. In general, successful development has led to increased supplies of external capital—usually on harder ante as the system is constrained elsewhere. The association between aid and savings in these cases is therefore not direct. If we were to reduce F, the savings rate would rise, but output, investment, and consumption would fall. In general, the countries that have raised their savings rates as a result of the aid-supported growth process greatly outweigh the cases in which an unnecessary diversion to consumption can be demonstrated. (See supporting statistical analysis in Chenery and Carter.)

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# Restructuring the World Economy



# RESTRUCTURING THE WORLD ECONOMY

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# FOREIGN AFFAIRS

AN AMERICAN QUARTERLY REVIEW



JANUARY 1975

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duced prices for oil and food or increases in concessional lending—is needed to avoid inflicting on them the main burden of both the oil and the food adjustments.

## VIII

Since the series of negotiations and institutional changes required to bring about this rather optimistic scenario will require an appreciable period of time, we will have to improvise temporary solutions. In the short run, there is no alternative to the use of existing institutions for recycling, the reallocation of aid budgets and food stocks to the most affected countries, and an ad hoc sharing among the stronger OECD and OPEC countries of the burdens of adjustment and risks of lending.

In the longer run, the world does have a choice. It lies between mounting a cooperative effort on the model of the postwar period or accepting the much higher costs of an uncoordinated readjustment in which all parties are likely to suffer.

# WORLD PRESS REVIEW

TOKYO: Asahi Shimbun today published an interview with visiting World Bank Vice President Hollis Chenery.

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The Japanese-language paper said the interview was given at a Tokyo hotel yesterday. Mr. Chenery was quoted as saying, in a Question and Answer interview: "The world economy for the time being depends upon anti-inflation measures of the United States. But the measures have not been proven successful so far. The World Bank sees recovery of economy will be delayed. But advanced nations will regain by 1977 their growth rates in the past. An average growth rate for the U.S. and European nations will be around five per cent while Japan's growth rate will be seven or eight per cent or higher. There is oil in abundance. Oil producing nations are considering it better to sell it than keeping it to boost prices.

"Prices of raw materials other than oil which went up two years ago have declined except for those of food and their supplies are not insufficient. And the inflation rate will decline up to eight to 10 per cent if increases in wages come to level off in two or three years. Such an inflation rate will be accepted by people if growth rates are increased."

Q What do you think of oil dollars?

A The surplus balance of oil producing nations will reach its peak by 1980. In that year the aggregate total of oil dollars will reach 300,000 million dollars and a deficit balance for the OECD nations excluding the U.S. will be 285,000 million dollars. Imports by oil producing and exporting countries are increasing at a higher rate than expected. Their annual growth rate is expected to be 12 per cent. Those problems which looked difficult a half year ago now look easy to solve.

Q Do you think oil dollars can be recycled satisfactorily?

A IMF's oil facility and financial support arrangement will probably go well. But a real solution depends whether other countries can follow Japan's example in reducing their deficit balance without reducing imports of necessaries and earning foreign currencies at the sacrifice of other countries. It is technically easy to consider measures, but international cooperation is necessary for deficit-hit nations to continue borrowing oil dollars until they can offset their deficit balances by exports.

How strong do you think OPEC's cartel is?

A It has been extremely strong so far. But as oil exports do not grow with the present prices 25 to 30 percent of the oil producing capacity is standing idle. Furthermore, surplus capacity will further increase as more oil producing facilities are under construction. Therefore there is a limit to the cartel. In my view real oil prices will begin to decline in a year or two. Oil producing countries will continue to raise nominal prices, but if commodity prices increase by 10 to 15 per cent next year they will not raise oil prices by the same rate. If they maintain 9.60 dollars per barrel, development of alternative energies will make progress in the U.S. and other countries, and floor prices of domestic oil may be raised, and these will narrow market for the OPEC. In the event the OPEC will lose after 1980 more than what they have gained up to then.

Q If the oil floor price proposed by U.S. State Secretary Henry Kissinger is adopted prices of the OPEC oil will not decline, Japan, which depends upon oil for most of her energy needs, is worried about this.

A It is the same as for other commodity price stability agreements. To increase stability of prices will benefit both oil producing and consuming nations. It will also benefit Japan, too.

Q What aid is the World Bank making to non-oil producing developing countries?

A It is more difficult to solve the question of developing nations hit hard by the oil price increase. But there are three ways. One way is that oil producing nations will take care of the deficit payment balances of them. The OPEC have so far promised easy-term assistance totalling 10,000 million dollars, and 2,000 million dollars of which has been already extended. Secondly OECD countries should extend aid. But it is difficult to cover the whole deficits resulting from the oil price increase which will reach 15,000 dollars in 1975. And thirdly mid-developing nations should make efforts to increase their exports to battle their deficits.

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The Japan Times today carried a new agency dispatch from Bangkok which said that Thailand will seek a 140-million Bhat loan from the World Bank to develop its livestock industry.

The Japan Times also quoted the Bangkok Post newspaper as saying that Thailand's Deputy Agriculture Minister, Mr. Thalerng Thamrong Navasawasdi hoped the loan agreement would be signed in April.

The Minister said the Thai Government had decided to seek the World Bank loan to back its policy of developing livestock breeding on a large scale in the Northeast of the country

The Minister was also reported as saying that, under a five-year development project, Thailand expected to raise meat production to satisfy local demand, as well as to attain a surplus for export.

LONDON: Food shortages in Africa have nearly reached crisis point, according to a special feature article in the Guardian newspaper today.

The full-page feature reviewed the progress of agricultural reform in Tanzania, Nigeria, Sierra Leone and Zambia to meet the problem of hunger in the African continent.

The article said: "Large areas of the African Continent, including many food-producing districts in East Africa, are suffering from seven successive years of drought, the last three very severe. The resultant food shortage has begun to raise questions regarding Tanzania's social, and economic policies.

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APPROACHES TO DEVELOPMENT FINANCE\*



Hollis B. Chenery

The United Nations Declaration on the Establishment of a New International Economic Order (NIEO) lists a number of measures that might increase the flow of resources to developing countries or otherwise improve their balance of payments. To assess these proposals it is necessary to consider them in the context of the existing disequilibrium in the international economic system as well as of the constraints of the suppliers of development finance. International discussion of the NIEO has so far been almost devoid of any quantitative analytical framework, which makes it difficult to assess either the benefits or costs of a given set of measures among country groups.

The international economic system is very different today than it was a few years ago, when most of the current proposals for changing the system were formulated. The success of the oil producing countries in raising the relative price of petroleum has both doubled the trade deficit of the other developing countries and created a net deficit on current account between OECD and OPEC of some \$40 billion in 1974. The subsequent recession in the industrial countries, accentuated by measures to control their oil deficits, is now having an equally serious effect in depressing primary product prices, and the demand for all imports, thus further increasing the LDC requirements for external finance. These phenomena reflect an underlying disequilibrium in the international economy that is likely to persist for at least the remainder of this decade. It is unrealistic to consider changes in the international economic order without reference to this disequilibrium and the measures required to cope with it.

Over the past several years the World Bank has developed an integrated set of projections of the prospects for growth, trade and capital flows among the major groups of developed and developing countries. This system is designed

I am indebted to J. Voorhoeve, N. Hicks and N.Carter for assistance and to E. Stern, W. Tims and H. Hughes for helpful comments. The conclusions reached are my own and not necessarily those of the World Bank.

to test the effects of alternative sets of policies to promote both balance of payments adjustments and long-term growth. The present paper draws on recent results of these studies to outline alternative approaches to development finance that might be considered by the OECD countries, taking into account the major constraints on the world economic system.<sup>1</sup>

## I. THE NEEDS FOR DEVELOPMENT FINANCE

### The Dual Role of External Capital

Under normal circumstances there is some validity to the conventional separation between long-term capital flows, whose main function is to finance additional investment, and short-term flows, which are designed to offset fluctuations in export earnings and other cyclical phenomena. However, this distinction tends to break down in the presence of structural disequilibria, which may require the reallocation of resources over several years for their solution. Given the present disequilibrium in world trade, excess capacity is developing in many sectors because of lack of imported inputs, and growth in many countries is limited more by inability to purchase imports than by needed increases in the capital stock. So long as this "trade limit" to growth persists, all means of financing the payments deficit have a similar effect on growth.

This situation was much less prevalent in the decade prior to 1973, when external finance was provided largely as a supplement to domestic saving. The net capital inflow was equal to some 10 to 15 percent of the investment of the recipients. Variations in these magnitudes since 1960 are shown separately for the poorest countries and for the middle income developing countries in the attached charts.<sup>2</sup>

 The most recent IBRD analysis, <u>Capital Requirements of</u> <u>Developing Countries</u>, (April, 1975), provides the basis for most of the quantitative results cited here. An earlier treatment of the adjustment problem is given in H.B.Chenery, "Restructuring the World Economy," <u>Foreign Affairs</u>, January, 1975.

2. The analysis is based on a panel of 40 non-OPEC developing countries that contain 85 percent of the total population of this group. The poorest countries in the sample (per capita GNP under \$200) are Ethiopia, Kenya, Sudan, Tanzania, Uganda, Mali, Zaire, India, Pakistan, Bangladesh and Sri Lanka.

Since 1973 this relation has changed drastically. The large increase in external finance needed to offset the worsened terms of trade in 1974 and 1975 did not lead to an increase in investment in the recipient countries, and therefore led to a reduction in saving to below normal levels (as shown in the charts). In this situation the increased external borrowing needed to pay for more expensive oil and capital goods imports (or to offset a fall in the price of primary exports) can be replaced in the future on a one to one basis by an increase in the volume of exports - at least up to the point at which savings return to normal levels. Therefore, although capital flows to developing countries rose to over 3 percent of their GNP in 1974, this should be regarded as a trade phenomenon that can be reduced by expanding the volume of exports rather than as reflecting a need for a continuing flow of external investment of this magnitude. This situation implies an abnormally high trade-off between trade and aid during the transitional period over which this adjustment takes place, which may extend to 1980 or beyond.

# Import Requirements

The preceding discussion shows that in order to evaluate the needs for development finance it is necessary first to determine (a) the levels of imports needed to sustain future growth and (b) the extent to which the needed foreign exchange can be obtained by the expansion of exports. The import requirements associated with alternative growth rates have been analyzed in some detail by the IBRD staff and are summarized in Table 1.

In periods of normal development, imports increase somewhat more rapidly than GNP in most countries because the income elasticity of demand for investment and other imported manufactured goods is higher than the average for domestic products. Although this import demand can be temporarily limited by import substitution and demand restrictions, past experience suggests that in the long run a minimum ratio of import growth to GNP growth of 1.0 to 1.2 is required for sustained development.

In 1974 the developing countries were able to finance a continued growth of imports of 2 percent by increasing their net external borrowing by some \$8.0 billion, mainly from OPEC and from private sources. Even with the same high level of borrowing in 1975, import volumes of LDCs will decline by about 6 percent as terms of trade worsen further and OECD TABLE 1: Growth Alternatives 1974-80 (in billions 1967-69 US\$)

1.	Low Income Countries			Growth Rate 1975-80
	A. Projections of Present Trends			1. A A A A A A A A A A A A A A A A A A A
		1974	1980	
	Gross Domestic Product	85.4	103.6	3.3
	Required Imports Financed by:	7.7	9.6	3.8
	Exports	5.5	7.8	6.1
	Capital, Net Transfer	2.2	1.8	-3.4
	Interest	.2	.5	
	Capital, Net Disbursements	2.4	2.3	7
	B. Restoration of DD-2 Targets	-1.		
	Gross Domestic Product	85.4	112.3	4.7
	Required Imports	7.7	10.4	5.1
	Financed by:			
	Exports	5.5	7.8	6.1
	Capital, Net Transfer	2.2	2.6	2.8
	Interest	.2	.7	
	Capital, Net Disbursement	2.4	3.3	5.5
11.	Middle/High Income Countries:			
	A. Projections of Present Trends			
	Gross Domestic Product	253.7	341.7	5.1
	Required Imports	41.7	59.0	6.0
	Financed by:			
	Exports	33.9	54.5	8.2
	Capital, Net Transfer	7.8	4.5	-9.6
	Interest	1.4	4.0	
	Capital, Net Disbursements	9.2	8.5	5
	B. Restoration of DD-2 Targets			
	Gross Domestic Product	253.7	366.4	6.3
	Required Imports	41.7	61.8	6.8
	Financed by:			
	Exports	33.9	54.5	8.2
	Capital, Net Transfer	7.8	7.4	9
	Interest	1.4	6.6	
	Capital, Net Disbursement	9.2	14.0	7.2
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Note: These projections are slightly revised but basically similar to those contained with more detail in <u>Capital Requirements</u>, Annex Table 3 and 4

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demand stagnates or declines. It is unrealistic to imagine that the developing countries could be entirely insulated from the effects of a recession of the present magnitude, but their situation in 1975 leaves no room to manoeuvre except by adjusting growth downwards.

For the remainder of the decade, however, there is a good possibility that the OECD countries will recover rapidly from the recession and achieve rates of growth at or above the 5 percent trend of the previous decade. Since import demand from the OPEC countries will be growing even more rapidly, market conditions will favor a resumption of rapid export growth by the other developing countries. On these optimistic assumptions, it should be possible to restore the overall growth targets of the second development decade, at least for the period 1976-1980.

Although this sounds like a plausible objective in a period of rapid growth, the non-OPEC developing countries will be handicapped by the existence of a much larger resource gap in 1976 due to the combination of worsened terms of trade and the loss of export growth during the OECD recession. To finance the growth of imports required by a return to overall growth of 6 percent or more will therefore require a combination of proportionately higher capital inflows and more rapid export growth than was needed in the past. If previous trends in aid and exports continue, as projected in Table 1, growth of the developing countries is likely to be considerably below these targets.

Table 1 and the charts illustrate the magnitude of this problem by projecting the growth of the developing countries from 1975 to 1980 under two rather extreme assumptions. In the first case it is assumed that flows of public capital from both OECD and OPEC increase only slightly faster than the anticipated rate of inflation, while private capital does not increase because of the limited creditworthiness of the borrowing countries. Under these assumptions the increase in the net flow of capital is considerably less than the increase in debt servicing requirements, and the contribution of external capital to the financing of imports declines by 30 percent from the level of 1974. For this reason the growth of exports from 1975-1980 at 8 percent per year only finances import growth of 5.6 percent and GDP growth on the order of 3.3 percent in the low income developing countries and 5.1 percent in the middle income group.

The second set of projections in Table 1 indicates the increase in external capital that would be required to restore the DD-2 target of 6 percent growth for the developing countries (assumed here to be 6.3 percent for the middle income group and 4.7 percent for the lower group, which is consistent with a plausible improvement over recent performance). If there were no further increase in projected exports, this objective is shown in Table 1 to require an additional capital flow by 1980 of \$18 billion for this group of countries (or \$30 billion in 1974 dollars). While this amount is consistent with the DAC target for ODA of 0.7 percent of the GNP of the OECD countries, it is quite unrealistic in political terms.

Unless there is a sudden improvement in the terms of trade, additional borrowing is the only way for developing countries to finance the imports needed for continued growth for the next year or two. However, borrowing--even when available on somewhat concessional terms--puts an added burden on the future balance of payments and should be replaced by additional exports as rapidly as the expansion of OPEC and OECD markets permit. It îs therefore desirable to distinguish between two types of "requirements" for development finance: (i) traditional development loans, whose purpose is to augment both domestic savings and investment; (ii) a transitional requirement for additional loans over the period needed to enable exports to expand at least enough to offset the long-term worsening in terms of trade.

# II. TRADE AND AID MEASURES

The previous section has shown that since trade and capital flows are highly interrelated in the present period of disequilibrium, they must be examined together in the design of policy. Furthermore, it is necessary to bear in mind the other aspect of the adjustment process--that between the OPEC countries and the OECD--where a rapid return to equilibrium is likely to be partly at the expense of exports from the other LDCs to either OECD or OPEC.

Since the purpose of this seminar is to suggest new approaches rather than detailed blueprints for action, I will first suggest a possible set of objectives to guide development finance during the transitional period. These objectives imply a cooperative effort among the three main groups of participants --the OECD, the OPEC and the other developing countries--and would have to be significantly modified if cooperation is replaced by confrontation. Some of the principal measures that can be taken by the three groups of participants to meet these objectives will then be illustrated, along with rough estimates of their possible contribution to the elimination of the requirement for transitional finance.

At the present time almost all non-communist, non-OPEC countries are suffering to some extent from the combined effects of the rise in oil prices, the world recession, and the aftermath of the world food shortage. However, it is clear that the growth prospects of the poorest countries--containing a billion people--have been much more seriously affected by these events than those of the rest of the world. Their needs should be given priority in any set of measures to reorder the world economy -- a fact that is lost sight of in many of the NIEO proposals. The present disequilibrium in world trade also increases the priority attaching to measures that will hasten the adjustment process, since the prevalence of trade constraints lowers the efficiency of the world economy. This is particularly true of the developing countries that have had the most serious deterioriation in their terms of trade.

The following objectives are suggested as means of eliminating the effects of structural disequilibrium and restoring the DD-2 development targets between now and 1980:

(1) The terms of trade loss experienced by the LDCs in 1974-75 should be offset as rapidly as possible by expansion of exports to the OECD and OPEC. As a corollary, the OECD should not try to reduce its own deficit with OPEC at the expense of LDC exports to that area--or restrict imports from LDCs--since the OECD countries can better afford the alternative of continued borrowing from OPEC.

(2) OECD and OPEC should share the additional finance required during the transitional period from now to 1980, since each has been partly responsible for the worsening of the LDC terms of trade that has caused this additional requirement. New criteria of burden sharing--or a willingness to proceed without formal criteria--are needed to secure the amounts needed. In devising these criteria, aid and trade measures should be considered together, since both contribute to the objective of increasing the supply of foreign exchange to the developing countries.

(3) Long-term development finance on ODA terms beyond the transitional period should continue to be provided by OECD and OPEC countries in relation to their wealth and per capita incomes.

Although projections in Table 1 of the possibilities of achieving satisfactory growth through increased capital alone produced implausible results, the combination of increased exports with modest increases in capital flows is much more promising. Some of these possibilities are indicated below and their effects summarized in Table 2.

Α.	Base Case	GDP	Imports	Exports
	Low Income	3.3	3.8	5.4
	Middle/High	5.1	6.0	8.4
	Total:	.4.6	5.6	8.0
в.	Higher Capital Flows			
	· · · · ·			
	Low Income	4.1	5.1	5.4
	Middle/High	6.3	6.8	8.4
	lotal:	6.0	6.5	8.0
c.	Increased Manufactured Exports (from 15%	0		
	to 20% growth)			
	Low Income	3.6	4.1	5.8
	Middle/High	5.8	7.2	9.9
	Total:	5.3	6.7	9.3
D.	Increased OPEC Imports from LDCs (from			
	Low Income	4.2	4.7	6.5
	Middle/High	5.3	6.3	8.8
	Total:	5.0	6.1	8.4
Е.	Combination of C and D			
	Low Income	4.5	5.0	6.9
	Middle/High	6.0	7.5	10.3
	Total:	5.7	7.1	9.8

All growth rates based on values in constant 1967-69 prices. Exports are Note: volume, uncorrected for terms of trade, which differs from exports shown in Table 1 which are corrected for terms of trade movements (i.e. reflect import purchasing power)

# TABLE 2: Alternative Growth Scenarios (growth rates 1975-80)

Table 2 gives preliminary estimates of the effects on exports, imports and growth that would result from illustrative increases in selected groups of exports. No attempt is made to arrive at an optimum combination of the several possibilities, which would require additional analysis of the political and economic constraints.

### A. Increased Exports

The projections in Table 1 (repeated as Case A in Table 2) are based on historical relations between the growth of exports and the growth of income in the principal markets, with explicit allowance for changing prices of primary products. There are three areas in which one could envision a substantial improvement over these historical relations within the time frame of the next five years if action were taken by both importing and exporting countries:

(1) Exports of Primary Products. Although the NIEO proposals tend to focus on restricting markets and raising prices, analysis of the possibilities for this type of action show that the possible gains are quite limited--at least in the next few years--and the benefits would go largely to the middle income countries.<sup>1</sup> More promising in the near future is the liberalization of primary trade by OECD countries, which might yield an additional \$6-12 billion in LDC earnings by 1980, mainly by expanding volume rather than increasing prices.<sup>2</sup>

(2) Exports of Manufactured Goods. A rapid growth of manufactured exports has already been incorporated in the projections of Table 1, based on past relations to the growth of OECD and OPEC markets. They assume continuing efforts in this direction by the developing countries. However, the OECD countries' general preferences favoring imports from developing countries have thus far had a limited effect; their impact could be usefully extended by supplementary reductions of non-tariff barriers.

A similar effort could be made by OPEC, which is potentially an important market for the developing countries although at present they supply only 6 percent of OPEC imports. Even a small increase in this share would make a significant contribution to reducing the trade deficit of non-OPEC LDCs.

- E. Stern and W. Tims, "The Relative Bargaining Strengths of The Developing Countries", paper presented to the American Economic Association, December, 1974.
- W. Tims, "Possible Effects of Trade Liberalization on Trade in Primary Commodities", World Bank Working Paper No.193, January 1975.

Cases C and D of Table 2 illustrate the effects on exports and GDP growth of increasing manufactured exports to OECD and of increasing exports to OPEC--each by about a third. The latter possibility is particularly attractive, since it would have proportionately more effect on the poorest countries because of their proximity to the main oil producers.

# B. Capital Flows

Although measures to increase the volume of exports might in the aggregate offset the effects of recent price changes, trade cannot fully offset the continued decline in the share of OECD capital flows in GNP that seems likely to occur under present policies. To have a chance of restoring the DD-2 growth objectives by the end of the decade, my own estimate is that at least a return to the DAC average of about 0.35 percent for ODA (plus 0.07 to 0.10 percent for "Other Official Flows") would be necessary. Since this is only half the original DAC target of 0.7 percent for ODA, it can only be made to support a moderately acceptable development effort if it is concentrated much more than at present on the poorest countries which benefit less from measures to expand exports. Because the distribution of bilateral concessional aid is politically motivated in most countries, there is considerable scope for increasing its efficiency in reaching the poorest countries by a reallocation away from the less needy recipients which have access to other sources of capital.

# III. CONCLUSIONS: THE ROLE OF THE OECD

The original NIEO declaration consists of a set of demands on the industrial countries to accept changes in the system of trade and capital movements that would benefit some of the developing countries. The relation of these changes to world development objectives, the extent to which they constitute alternatives, and the costs to the OECD and other countries of accepting them were scarcely considered.

The preceding discussion suggests the type of analysis needed to evaluate these questions and to devise a set of proposals that has some possibility of political acceptance by the advanced countries. In my view action may be possible in three areas that would in combination resolve the dilemma posed in Table 1 of either stagnation in the poorest countries or unrealistic levels of aid. In summary, I propose:

--a target for increased imports from developing countries;

--a revised aid objective, relating aid levels to each donor country's acceptance of increased LDC exports;

--acceptance of continued OECD borrowing from OPEC to the extent needed to permit the LDCs to reduce or eliminate their deficits.

### Trade Targets

While the NIEO is full of proposals for expanding the export earnings of LDCs, it does not focus on the countries which have been hurt by recent changes in terms of trade nor on the cost of their acceptance to the industrial countries. The main approach suggested is action on a commodity by commodity basis, which-as Weintraub shows--benefits mainly the middle income countries and at best will take a long time to negotiate.

Action to increase LDC exports might be more effective if it were combined with action on the aid front. Although the \$30 billion increase (in 1974 prices) shown in Table 1 is unrealistic as an aid target, it would be plausible as a combined 1980 target for increased lending plus imports from developing countries along the levels implied by the projections. The imports eligible for inclusion in this target should include largely those that are excluded by quantitative restrictions--textiles, sugar, etc.--and hence that do not respond to action by the exporters.

## Aid Targets

The worsening performance of the OECD countries in providing development assistance is well known. Despite the notable efforts of eight of the smaller countries to achieve the 0.7 percent target for ODA (Australia, Belgium, Canada, Denmark, Netherlands, New Zealand, Norway, and Sweden), their increases have been overshadowed by the fall in aid from the traditional donors--most notably the United States, but also Germany, the United Kingdom and France. As a result the ODA share of GNP has fallen from 0.44 percent in 1965 to about 0.30 percent in 1975, and the decline is likely to continue as a result of inflation and lags in increasing appropriations. Although trade liberalization is no more popular in the midst of a recession than increased aid, as the OECD economies recover the traditional donors may well find it easier to accept further trade liberalization--particularly for the poorer countries--than increased concessional lending. At least the combination of the two would offer greater negotiating possibilities than the now traditional aid target by itself.

# The OPEC Adjustment

It is generally recognized that the oil importing countries can only reduce their collective deficit as the absorptive capacity of the OPEC countries expands; in the interval, the OPEC surpluses must be accumulated as debts of the importers. The flow of resources to the middle income countries is likely to decline by 1980 under the projections in Table 1 because of the limited creditworthiness of the borrowers in conventional terms.

This problem is accentuated if some of the OECD countries reduce their deficits too rapidly and in effect worsen those of the developing countries. This seems to be happening to some extent at the present time, thereby adding unnecessarily to the needs for development finance in the future.







HOLLIS B. CHENERY

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# Restructuración de la economía mundial



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# • REESTRUCTURACIÓN DE LA ECONOMÍA MUNDIAL\*

# Hollis B. Chenery\*\*

I

En la actualidad, la economía mundial se encuentra en un estado de desequilibrio sin precedente desde la segunda Guerra Mundial. Los síntomas de la tensión subyacente se han manifestado durante los dos años últimos en forma de escasez de materias primas, crisis de alimentos y fertilizantes, alza dramática de los precios del petróleo y, por último, inflación mundial y amenazas de inminente desastre financiero.

La causa inmediata de la mayor parte de estos problemas fue el crecimiento acelerado de casi todos los campos de la economía mundial en el decenio pasado, que culminó con un fuerte ascenso cíclico de los países industriales. En 1972-73, las economías de los países avanzados estaban creciendo en conjunto a una tasa insostenible de más de 6 % que presionaba la capacidad productiva existente y superaba la tasa potencial de expansión de la producción mundial de muchas materias primas. Este auge de la demanda permitió a los productores de materias primas de los países desarrollados y en desarrollo por igual aumentar sus precios, con o sin colusión entre los productores.

Algunos de los síntomas de la escasez de bienes y los precios altos son puramente cíclicos y ya están desapareciendo como resultado del estancamiento actual de los ingresos mundiales. Pero otros reflejan cambios a largo plazo de la demanda y la oferta que sólo se aceleraron en el periodo reciente de crecimiento rápido. Esto se aplica en especial a la oferta de energéticos y alimentos, donde la existencia de cambios en el equilibrio de la oferta y la demanda era evidente antes de que estos mercados fuesen perturbados por el auge de la demanda, las malas cosechas y la actitud de la Organización de Países Exportadores de Petróleo (OPEP). Antes de que la economía mundial pueda volver a un estado de desarrollo

<sup>\*</sup> El profesor Chenery nos envió driectamente su trabajo sobre la economía mundial para su publicación en EL TRIMESTRE ECONÓMICO. Esta revista lo edita tanto con el permiso del autor como de *Foreign Affairs Quarterly*, en donde fue publicado en el número de enero de este año. [Versión al castellano de Eduardo L. Suárez.]

<sup>\*\*</sup> Agradezco los consejos y comentarios de Bela Balassa, John Foster, Robert McNamara, Joseph Pechman, Jo Saxe, Ernest Stern, Wouter Tims y Linor Yudin. Sin embargo, ni ellos ni el Banco Mundial, en donde presto mis servicios, son responsables de las opiniones aquí expresadas.

#### REESTRUCTURACIÓN DE LA ECONOMÍA

#### EL TRIMESTRE ECONÓMICO

ordenado es imperativa una corrección sustancial de la inversión y la producción en estos sectores y en otros relacionados con ellos.

Son conocidas las dimensiones actuales de los problemas del petróleo, los alimentos, las materias primas y las balanzas de pagos<sup>1</sup> pero la atención internacional se ha concentrado en sus efectos inmediatos en los diversos grupos de países y en las medidas provisionales que se requieren para contrarrestarlos. Se han analizado poco los mecanismos de ajuste de que se dispone para restaurar la economía mundial a una condición de desarrollo ordenado. Y sin embargo, dado que todos estos problemas están relacionados a través del sistema internacional de comercio y movimientos de capital, no resulta conveniente prescribir soluciones separadas para cada uno de ellos. Y en el caso de los países pobres que son importadores de petróleo y alimentos a la vez, los problemas deben considerarse juntos porque su efecto combinado amenaza con alcanzar proporciones desastrosas.

Al tratar de ofrecer una perspectiva a más largo plazo del desequilibrio actual de la economía mundial y de bosquejar procesos de ajuste por los cuales pueda restablecerse el equilibrio, formulo mi análisis en términos de las relaciones económicas y políticas existentes entre tres grupos de países: los países industrializados más antiguos, miembros de la Organización de Cooperación y Desarrollo Económicos (OCDE), los ahora ricos pero todavía en desarrollo productores de petróleo (OPEP), y los otros países en desarrollo [países menos desarrollados (PMD)]. Sólo se menciona de pasada el cuarto grupo importante —el de los países socialistas—, que tiene un efecto insignificante sobre los problemas aquí considerados.

### II

Para definir las dimensiones de los cambios estructurales que se requieren en la economía mundial, debemos separar primero los efectos cíclicos del auge reciente que tenderán a ser corregidos por las fuerzas del mercado en los próximos años. La coincidencia de escaseces e incrementos de precios de la mayor parte de los productos en 1972-73 ha dejado la impresión de un "problema de bienes" general y ha producido muchas analogías falsas entre el petróleo y otros bienes. Las reducciones de precios ocurridas desde la terminación del auge hace casi un año confirman

<sup>1</sup> Véase, por ejemplo, en *Foreign Affairs*: Gerald A. Pollack, "The Economic Consequences of the Energy Crisis"; Lyle P. Schertz, "World Food: Prices and the Poor"; Bension Varon y Kenjy Takeuchi, "Developing Countries and Non-Fuel Minerals", abril de 1974; Walter J. Levy, "World Cooperation or International Chaos", julio de 1974.

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el diagnóstico de que la mayor parte de los incrementos de precios fueron fenómenos cíclicos; en consecuencia, ahora podemos identificar con mayor claridad las áreas donde se requieren ajustes a más largo plazo.

La interpretación de los movimientos de los precios internacionales se complica también por la persistencia de la inflación a nivel mundial. La gran alza de precios de los bienes ocurrida en 1972-73 fue un factor importante en la aceleración de la inflación, pero en la actualidad ya no lo es; el efecto general de las tendencias de los precios de los bienes —incluyendo el petróleo— es ahora deflacionario.

El hecho es que el propio auge de los bienes varió grandemente entre diversos tipos de bienes. Su escala puede medirse convenientemente en términos de la razón de precios de los bienes primarios y los manufacturados en un periodo reciente de precios estables, por ejemplo de 1968 a 1970. Comparados con este nivel de referencia, en la cima del auge, a principios de 1974, los alimentos básicos habían aumentado 100 %, los fertilizantes 170 %, y el petróleo más de 350 %; pero otros productos primarios sólo habían aumentado en promedio un 25 %. Con varias excepciones importantes, los precios relativos de la mayoría de los bienes ya han empezado a bajar, y las condiciones de la oferta y la demanda son tales que en el curso de un año o dos es probable que regresen los niveles anteriores de precios relativos.

Ahora que está en proceso el ajuste cíclico normal, sólo hay pocos bienes cuyos precios elevados (u ofertas escasas) tenderán a ejercer una influencia importante y continua sobre el bienestar económico de gran número de personas. Tales bienes son fundamentamente el petróleo, algunos alimentos importantes (granos, oleaginosas, carne de res, azúcar) y los fertilizantes. Hay cierta controversia sobre la capacidad de los productores de otros minerales para seguir el ejemplo de la OPEP y mantener elevados los precios restringiendo la producción,<sup>2</sup> pero el valor de las exportaciones de los candidatos principales (bauxita, estaño, cobre) es relativamente pequeño, y el intervalo de precios posible es tan pequeño que la acción eficaz no perturbará el comercio y el desarrollo mundiales. En suma, el problema mundial de los bienes se centra en el petróleo y los alimentos —primordialmente granos— y en el fertilizante necesario para producir estos últimos.

Los acontecimientos recientes han demostrado que cambios relativamente pequeños de las ofertas de petróleo y alimentos pueden tener un efecto muy perturbador en el comercio y desarrollo mundiales, pero

<sup>2</sup> Véase a Varon y Takeuchi, op. cit.,

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estos dos bienes son muy diferentes en la mayor parte de los otros aspectos. El petróleo tiene una repercusión predominante sobre el comercio mundial porque satisface casi la mitad del consumo mundial de energía, y los recursos se concentran en un número pequeño de países. En consecuencia, dos tercios de la producción total de petróleo participan en el comercio internacional. El valor actual y probable de las exportaciones de petróleo (aun en el caso de que bajaran un poco los precios actuales) es aproximadamente igual al valor de todas las demás exportaciones minerales y agrícolas juntas. Por esta razón es singular la posición de los exportadores de petróleo; es difícil concebir alguna combinación de cárteles de productores que afecte en los próximos años el comercio mundial en la misma forma que un incremento de un dólar en el precio del petróleo.

Como bien se sabe, las acciones de los países miembros de la OPEP a fines de 1973 incrementaron el precio medio del petróleo del Golfo Pérsico de cerca de 2.40 dólares por barril a principios de 1973 hasta cerca de 9.60 dólares por barril en 1974 (estas cifras, y las subsiguientes que aparecen en este artículo, son en dólares de 1974 excepto cuando se exprese otra cosa). El efecto a corto plazo ha sido el incremento del valor de las exportaciones de la OPEP en 1974 en más de 80 000 millones de dólares, cerca del 10 % del valor de las exportaciones mundiales de ese año. Sólo una fracción de este incremento ha sido absorbida hasta ahora por un aumento en las importaciones de la OPEP, y el superávit resultante, de unos 60 000 millones de dólares, es una medida del desequilibrio existente actualmente en el comercio mundial.

A primera vista, los efectos del incremento de los precios de los alimentos y fertilizantes sobre la economía mundial parecen ser de un orden de magnitud diferente al del efecto del petróleo. Aunque el valor total del grano producido en el mundo es considerablemente mayor que el del petróleo, la mayoría de los países son relativamente autosuficientes en granos, y sólo se comercian cantidades marginales. La posición de los Estados Unidos y Canadá como exportadores de granos es tan dominante como la de los países del Golfo Pérsico en el petróleo, pero el valor total de las exportaciones mundiales de granos es sólo una cuarta parte del correspondiente al petróleo.

Pero el efecto destructor del incremento de los precios de los alimentos y los fertilizantes sobre el desarrollo mundial es mucho mayor que lo sugerido por esta comparación. Al igual que en el caso del petróleo, los países en desarrollo han llegado a depender de las importaciones de granos baratos para complementar su propia producción y, en forma implícita, de las reservas de granos en los países exportadores. Ahora ha quedado fuera de duda que los países en desarrollo sobreestimaron el incremento de productividad derivado de la "revolución verde", confiaron demasiado en la disponibilidad continua de importaciones baratas, y destinaron recursos insuficientes al desarrollo agrícola. La deficiencia en la producción de alimentos en los países menos desarrollados ha sido relativamente pequeña en los últimos años, pero el aumento de los requerimientos de importaciones, combinado con grandes aumentos de precios, ha tenido un efecto tan negativo sobre las perspectivas de crecimiento de muchos países en desarrollo como el aumento de los precios del petróleo. La escasez actual de fertilizantes es primordialmente un fenómeno cíclico de capacidad demorada, pero limita gravemente la velocidad con que los países en desarrollo pueden incrementar su producción agrícola, a menos que se les conceda cierta prioridad en la competencia por las existencias disponibles.

Aunque las soluciones a largo plazo a los problemas del petróleo y los alimentos serán muy diferentes, a corto plazo tienen un efecto similar sobre las perspectivas de los países en desarrollo. Los incrementos de los precios del petróleo han añadido 10 000 millones de dólares al valor de las importaciones de los países menos desarrollados, mientras que los incrementos de los precios de los alimentos y fertilizantes han agregado otros 6 000 millones de dólares. Para los habitantes más pobres de estos países, la repercusión de los altos precios de los alimentos y las escaseces es mucho más grave, porque gastan en alimentos la mayor parte de su ingreso. Aun considerando las ganancias de otras exportaciones de bienes, tales aumentos de los costos de las importaciones han disminuido el poder de compra de los países en desarrollo en el exterior en una cantidad aproximadamente igual al total de la existencia externa que reciben. Es probable también que aumente el número de países afectados gravemente en los años por venir, ya que los precios de otras exportaciones de bienes primarios tenderán a bajar más que los del petróleo y los alimentos. Este efecto daña de modo desproporcionado a los países más pobres del sur de Asia y de África, donde vive cerca de la mitad de la población del Tercer Mundo.

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Helmut Schmidt ha calificado acertadamente el carácter de la actual crisis económica como "la lucha por el producto mundial".<sup>3</sup> Visto desde este ángulo, el aumento de los precios del petróleo es sólo el más dramático de una serie de acontecimientos —algunos deliberados y otros resultantes de las fuerzas del mercado— efectuados para cambiar la distribución del ingreso mundial a través del sistema de comercio internacional y corrientes de capital.

Los cambios de los precios relativos antes descritos tendrán un efecto sustancial sobre la distribución del ingreso y la riqueza mundiales, pero es fácil exagerar su consecuencia directa. Para medir tal efecto, supongamos que los países de la OCDE y los países del Tercer Mundo no miembros de la OPEP han podido pagar el aumento del costo del petróleo importado trasladando bienes por valor de 80 000 millones de dólares del uso interno a las mayores exportaciones a la OPEP. El resultado de este incremento único de costos hubiera sido la reducción del ingreso nacional total de los países de la OCDE en 2 %, y de los países del Tercer Mundo no miembros de la OPEP en 3 % al tiempo que se duplica el ingreso total de los miembros de la OPEP. Aunque éstas son grandes cantidades, las pérdidas directas equivaldrían a ceder el equivalente a seis meses de crecimiento, con la viva esperanza de resumir luego el patrón de 4 a 6 % de crecimiento en promedio.

En realidad, la amenaza para la economía mundial proveniente del incremento de los precios del petróleo no deriva tanto de la necesidad de transferir 2 % del ingreso mundial a los países exportadores de petróleo como de las incertidumbres inherentes a las políticas adoptadas para efectuar esta transferencia. Si hubiese realmente un mercado para sus exportaciones, los importadores de petróleo —tanto desarrollados como subdesarrollados— podrían lograr el incremento requerido de 11 % en la cantidad de sus exportaciones en un periodo de tres o cuatro años sin demasiada tensión para sus economías, que ya están desarrollando capacidad excedente como resultado de la recesión actual. Pero los países de la OPEP tardarían de 5 a 20 años para desarrollar sus economías en magnitud suficiente para absorber en forma de importaciones el aumento de sus percepciones de divisas. Mientras tanto, si exportan petróleo a los niveles y precios que ahora se predicen, tendrán que acumular grandes superávit en forma de préstamos o inversiones directas en los

<sup>3</sup> Véase Foreign Affairs, abril de 1974.

países importadores. Por su parte, los clientes principales, los países de la OCDE, tendrán que aceptar los déficit correspondientes en sus balanzas de pagos y prepararse para reasignar (o compensar) la corriente de los fondos de la OPEP a través del proceso conocido ahora como "reciclaje".

En otras palabras, las consecuencias más importantes del cambio de la política de precios de la OPEP derivan más de su carácter repentino que de su magnitud. Si el precio del petróleo hubiese llegado a su nivel actual mediante un incremento anual de 3 % en su precio relativo durante los últimos 25 años, los ajustes necesarios para absorber este incremento habrían tenido escaso efecto sobre el crecimiento mundial y aun ciertos beneficios al canalizar los patrones de comportamiento y los esfuerzos tecnológicos hacia un uso más eficiente de la energía. En cambio, el abaratamiento progresivo del petróleo durante 20 años condujo al despilfarro -particularmente en los Estados Unidos- y pospuso el desarrollo de otras fuentes de energía. Ahora afrontamos cambios acelerados de los patrones de consumo y grandes inversiones para el desarrollo de fuentes de abastecimiento fuera de la OPEF, además de financiar el costo de las importaciones que todavía habrán de requerirse. Y el peligro estriba en que al ajustarse a estos cambios los países de la OCDE adopten políticas que ayuden a congelar o reducir su crecimiento de modo que éste no vuelva pronto a su tendencia anterior de 4 a 6 % anual.

El aspecto alimenticio del problema de la reestructuración mundial no es tan grave como el petrolero en términos mundiales, pero plantea cuestiones igualmente graves para los países menos desarrollados que intervienen en el problema. De acuerdo con supuestos optimistas, se necesitarán por lo menos cinco años para superar los atrasos de la capacidad productiva de fertilizantes y de la inversión agrícola en los países en desarrollo para equilibrar la oferta y la demanda, reponer los inventarios, y bajar los precios de los alimentos a niveles más normales. Mientras tanto, será necesario que los países de ingresos altos de la OCDE ejerzan cierta restricción para no privar de las existencias limitadas de alimentos y fertilizantes a los países más pobres, cuyo consumo ya no puede reducirse.<sup>4</sup>

Durante el año pasado hemos visto el principio de estos procesos de ajuste con intervención relativamente escasa de los gobiernos. Dadas las

<sup>&</sup>lt;sup>4</sup> En la publicación de la Conferencia Mundial de las Naciones Unidas sobre Alimentación, Assessment of the World Food Situation, se encuentran descripciones más completas del carácter de estos problemas de transición y de los cambios de la producción agrícola que se requieren. Véase también a Lyle P. Schertz, op. cit., y Lestern Brown, By Bread Alone, Nueva York: Praeger, 1974.

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circunstancias, el sistema bancario internacional ha funcionado con eficiencia considerable para iniciar el proceso de reciclaje. Pero los arreglos financieros resultarán pronto enteramente inadecuados dada la magnitud del problema, en particular para las economías más débiles. Este enfoque de *laissez faire* ya ha tenido consecuencias muy lamentables en la distribución de alimentos y fertilizantes, pues la carencia de divisas para pagar los precios incrementados por la demanda de los países ricos ha llevado al borde del desastre a varias de las economías más pobres.

La situación actual alberga dos grandes peligros, el primero de ellos relativo a las relaciones existentes entre los países de la OCDE y la OPEP, y el segundo relativo a su relación común con los países menos desarrollados. Ahora los países de la OCDE están actuando individualmente para proteger sus balanzas de pagos en formas que resultan perjudiciales para el interés colectivo en el incremento de su comercio internacional y su PNB. Además, dada la incertidumbre en cuanto a las políticas futuras de los precios del petróleo de la OPEP, los gobiernos de la OCDE están tomando medidas tendientes también a limitar las importaciones de petróleo y a invertir en fuentes de energía sustitutivas de alto costo en un volumen excesivo que afecta su crecimiento futuro. En consecuencia, la continuación de respuestas no coordinadas al problema del petróleo generará casi seguramente una tasa menor de crecimiento de la OCDE y al final hará mucho más costosa la transición.

Es claro que tal resultado no beneficia a los países de la OPEP, cuyos mercados petroleros y rendimientos de las inversiones sufrirán en el proceso. Pero esto no puede evitarse a menos que los países de la OPEP y la OCDE logren entender y aceptar procesos de ajuste menos destructivos.

En segundo lugar, el futuro de los países menos desarrollados —y en particular los más pobres de ellos— depende de la capacidad de la OPEP y la OCDE para elaborar de común acuerdo algunas bases para el financiamiento del incremento de 100 % de los déficit de las balanzas de pagos de los países menos desarrollados, resultantes del aumento de precios del petróleo y los alimentos. El problema de los países más gravemente afectados sólo representa el 5 % del desequilibrio mundial de 60 000 millones de dólares, pero los mecanismos existentes para el ajuste de las balanzas de pagos y las transferencias de capital son claramente incapaces de resolverlo.

Además, hay una conexión directa entre estos dos peligros. Parece muy improbable que los países más afortunados de la OCDE y la OPEP hagan gran cosa en favor de los países más pobres mientras no se pongan de acuerdo en alguna medida sobre la evolución de los patrones de comercio y movimientos de capital internacionales entre ellos mismos. Mientras continúe la actual atmósfera de recriminación recíproca entre los más ricos, los países más pobres seguirán siendo sus involuntarios "rehenes".

IV

Para analizar de modo más concreto los posibles ajustes al problema petrolero, examinemos en primer término las diversas posiciones de los principales exportadores de petróleo. Todos los miembros de la OPEP son países en desarrollo para quienes el petróleo constituye la fuente principal de divisas y la clave de su desarrollo futuro. Sin embargo, difieren grandemente en sus necesidades actuales de importaciones y en el volumen de sus reservas de petróleo en relación con los niveles de producción actuales. Suponiendo que la OPEP continúe fijando los precios en forma conjunta, los países en diferentes posiciones de recursos tendrán opiniones distintas en cuanto a la política de precios y de producción más conveniente para el grupo.

Para indicar los efectos de las diferencias de las posiciones de recursos sobre las políticas de producción y precios que podrían seguirse, en el cuadro 1 hemos agrupado a los 11 exportadores principales de petróleo en tres grupos con las características siguientes:

Grupo I (Arabia Saudita, Kuwait, Libia, Abu Dhabi, Qatar) que tiene el 65 % de las reservas probadas y el 48 % de la producción actual, pero sólo 12 millones de habitantes y niveles limitados de absorción para el desarrollo económico. Los cinco países de este grupo deben adoptar una visión a largo plazo de la política petrolera; sus reservas tienen una vida potencial de 50 años o más, y disponen de pocos recursos naturales aparte del petróleo.

Grupo II, formado por cuatro países (Venezuela, Irán, Argelia, Irak) que ya han alcanzado un desarrollo económico considerable y están agotando sus reservas petroleras a tasas mayores que los del grupo I. Tienen 70 millones de habitantes y se encuentran en posición de utilizar efectivamente una gran parte de sus mayores ingresos petroleros en el desarrollo interno durante el decenio próximo, aunque acumularán superávit considerables durante los años próximos. Este grupo tenderá más a tratar de obtener ingresos máximos a corto plazo a causa de las mayores oportunidades de inversiones productivas existentes dentro de sus propias economías.

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Grupo III, formado por dos grandes países (Indonesia y Nigeria), que poseen una porción pequeña de los recursos de la OPEP, con escasos problemas para absorber la totalidad de sus ingresos petroleros en el futuro cercano. Estos países no acumularán superávit financieros importantes.

CUADRO 1. Países de la OPEP: Producción y reservas de petróleo, 1973\*

Comercia	Población (millones)	Reservas probadas (miles de millones de toneladas)	Producción (millones de barriles diarios)	Años de reserva (al ritmo de producción de 1072)
Grupo I	and the state of the			ae 1973)
Arabia Saudita Libia Kuwait Qatar	8.1 2.1 .9	19.3 3.4 10.1	7.5 2.1 3.0	51 32 66
Abu Dhabi	.1	.9 2.9	.5 1.2	31
Subtota Participación de la	l 11.5	36.4	14.3	43 50
Grupo II		65 %	48 %	
Irán Iraq Venezuela Argelia	31.9 10.4 11.3 14.7	8.2 4.3 2.0 1.0	5.9 2.0 3.5 1.0	28 44 11 20
Participación de la	68.3	15.5	12.4	25
rupo III		28 %	41 %	
Nigeria Indonesia	73.4 125.0	2.7 1.4	2.0 1.3	27
Subtotal	198.4	4.2	2.0	44
Participación de la OPEP			3.3	25
<b>Fotal</b>	278 2	7%	11 %	
		50.1	30.2	

\* FUENTES: Oil and Gas Journal (Reservas), Banco Mundial.

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El mantenimiento, o aun el incremento, del nivel de precios del Golfo Pérsico en 1974, de 9.60 dólares por barril, aproximadamente (a precios de 1974), podría parecer benéfico para los países del segundo y tercer grupos, pero este precio se encuentra muy por encima de los costos a largo plazo de las principales fuentes alternativas de energía. En consecuencia, podría esperarse que tal política provocase un esfuerzo máximo de los países de la OCDE para reducir el consumo y desarrollar esas fuentes alternativas (tales como el petróleo del Mar del Norte y de Alaska, el carbón, las arcillas aceitosas, las arenas de alquitrán, y por supuesto la energía nuclear). Algunos estudios de la OCDE, de la Administración Federal de Energía y del Banco Mundial sugieren que tal esfuerzo máximo, si bien supone una inversión considerable que resultaría antieconómica a precios menores, podría tener el efecto de nivelar la demanda de los países de la OCDE del petróleo de la OPEP.<sup>5</sup> Para 1980, las importaciones de la OCDE provenientes de la OPEP no serían mayores que las actuales, y posteriormente quizá disminuirían.

En cambio, si el precio del Golfo Pérsico bajara a 7 u 8 dólares por barril (a precios de 1974), con alguna seguridad de que a ese nivel no faltaría el abastecimiento, es probable que los países de la OCDE se olvidarán de formas antieconómicas de inversión en fuentes de energía más caras y de limitar el crecimiento de su consumo. En esta forma, las exportaciones de petróleo de la OPEP a los países de la OCDE continuarían aumentando hasta 1980 y más allá. Es probable que los ingresos totales que la OPEP podría obtener con esta política en el decenio próximo no fuesen menores que los obtenibles mediante precios mayores, y la producción total de la OPEP en 1980 y 1985 correspondería aproximadamente a la capacidad productiva planeada ahora por sus países miembros.

En esta situación, los países de la OPEP afrontan el dilema clásico del monopolista, de tratar de estimar la velocidad con que se desarrollarán abastecimientos alternativos, y de determinar si las ganancias derivadas de la elevación al máximo de los beneficios a corto plazo serán mayores que las pérdidas derivadas de volúmenes menores (y quizá de precio menor) en el futuro. A menos que se aplique en el futuro un descuento elevado, los países de la OPEP —y en particular los del grupo I, que cuentan con grandes reservas— se beneficiarían a largo plazo si redujeran el precio del petróleo al nivel del costo de las principales fuentes alternativas para mantener su participación en el crecimiento futuro del mercado.

<sup>5</sup> OCDE, Long Term Energy Assessment (próxima publicación); Oficina Federal Energética, Project Independence Report, noviembre de 1974.

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En el cuadro 2 ilustramos esta conclusión en términos más concretos. En el caso I se supone que el precio se mantiene a 9.60 dólares (de 1974) mediante ajustes hacia arriba para contrarrestar la inflación. En el caso II se supone que el precio baja gradualmente en cerca de 30 % hasta 7 dólares (también de 1974). En ambos casos se supone que la demanda total de energía de los países de la OCDE seguirá creciendo, pero a una tasa de sólo 3.8 % en el caso I comparada con la de 4.3 % en el caso II (por supuesto, en ambos casos menor que la reciente tasa de 5 % experimentada por la OCDE en su conjunto). En cuanto a la inversión en fuentes alternativas, los supuestos básicos son conservadores, sin considerar el desarrollo de fuentes de energía internas o de otra clase que costarían más que las importaciones.

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of the second stars	Grupo I	Grupo II	Grupo III	Ingreso total	Produc- ción total
Caso I	and made	Sec. 1	In this way	Net Ser	No.
El precio permanece a 9.60 dólares					
1980	49	47	13	109	33
1985	51	54	16	121	36
1990				88	26
Caso II					
El precio baja a 7 dó lares para 1980					
1980	52	41	11	103	42
1985	58	52	12	122	49
1990				135	55
Capacidad productiva planeada	1 1 1 100				
1980	27.8	16.3	4.5		49

CUADRO 2. Proyecciones de los ingresos y la capacidad de la OPEP\* (en miles de millones de dólares de 1974 y millones de barriles diarios)

\* Basado en estimaciones de la OCDE y el Banco Mundial.

Aun así, el cuadro indica que después de 1985 los ingresos totales de la OPEP serían considerablemente mayores en el caso II. Además, si los precios mayores supuestos en el caso I generaran esfuerzos mayores de la

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OCDE por reducir las importaciones —lo que parece muy probable—, la política de precios más bajos podría ser más rentable para la OPEP a partir de 1980.

Los elementos básicos de este cálculo están sujetos a muchas incertidumbres tecnológicas y políticas, pero la conclusión principal en el sentido de que a largo plazo la OPEP se beneficiaría con precios más bajos sigue siendo válida para un conjunto considerable de supuestos. Desde el punto de vista de los países de la OCDE y de la OPEP por igual, la diferencia entre el caso I y el caso II es particularmente grande en términos de decisiones relativas a la inversión en fuentes alternativas de energía. En números redondos, si los países de la OCDE se viesen forzados a disminuir su demanda de petróleo de la OPEP en los 13 millones de barriles diarios que constituyen la diferencia entre el caso I y el caso II, tendrían que hacer inversiones adicionales del orden de 100 000 millones de dólares en este periodo. En cambio, la expansión de la capacidad de la OPEP implicaría un costo mucho menor. En suma, dado que las decisiones sobre decenas de miles de millones de dólares de inversión en la OCDE y en la OPEP dependerán en los próximos años de la evaluación que se haga de la política futura de precios y producción de la OPEP, tal evaluación se convierte en uno de los determinantes más decisivos en el patrón futuro del comercio mundial y las corrientes de capital.

Para mantener un precio dado, los exportadores de petróleo necesitan ponerse de acuerdo sobre la forma en que se asignará toda reducción de la producción que se requiera por debajo de la capacidad total. Luego, al decidir sobre el nivel de producción más conveniente, cada país deberá estimar dos elementos: su necesidad actual de divisas para el desarrollo interno y el rendimiento probable de su inversión de cualesquier ingresos excedentes en comparación con la apreciación probable del valor de sus reservas de petróleo. A los precios actuales es poco probable que aumente aún más el valor del petróleo en relación con el de otros bienes durante los próximos diez años; por el contrario, es más probable que baje. Aun en el caso de que el rendimiento real de su inversión de fondos excedentes fuese insignificante y sólo contrarrestase los efectos de la inflación, los países exportadores se beneficiarían más si producen petróleo que si dejan de hacerlo. Los países con crecientes necesidades de divisas para su desarrollo interno tendrán un incentivo mayor para incrementar su producción que quienes produzcan por arriba de sus necesidades corrientes.

Habida cuenta de los diversos factores que afectan estas decisiones, me parece probable que para 1980 bajarán los precios del petróleo hasta

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un nivel próximo al del costo a largo plazo de las fuentes de energía distintas de la OPEP, que actualmente se estima, para el Golfo Pérsico, en el equivalente de 7 a 8 dólares por barril (a precios de 1974). Esta reducción permitiría utilizar relativamente, a su máxima capacidad, la expansión ahora planeada por la OPEP, de 49 millones de barriles diarios para 1980. Según este supuesto, los precios del petróleo serían todavía tres veces mayores que en 1970, en términos relativos, y dos veces mayores que en el periodo de abundancia de principios de los años cincuenta.

### V

La amenaza más grave que plantea la crisis petrolera a los países de la OCDE, como antes vimos, reside en la posibilidad de una reducción drástica de sus tasas de crecimiento, antes que en la necesidad de transferir 2 % de sus ingresos nacionales a los países de la OPEP. La cuestión de las tasas de crecimiento depende de las políticas seguidas por el grupo de la OCDE, y en particular de su inclinación a aceptar la acumulación de grandes activos (préstamos, en sentido amplio) en manos de los países de la OPEP.

Ya hemos considerado líneas arriba tres de las acciones que pueden ejecutar los países de la OCDE frente a la crisis petrolera, a saber: la reducción de necesidades de energía no esenciales, el desarrollo de sus propias fuentes de energía y las de otros países no miembros de la OPEP, y el intento de persuadir a los productores de la OPEP para que bajen el precio del petróleo. Aun en el caso de que tuviesen cierto éxito en cada uno de estos esfuerzos, los países de la OCDE afrontan un problema financiero sustancial: el de tomar prestado de la OPEP para financiar déficit continuos de balanza de pagos con estos mismos países. A causa de la limitación de la capacidad de absorción de los países de la OPEP, los países de la OCDE -aun bajo el supuesto del caso II de precios gradualmente rebajados- tendrían que financiar déficit anuales totales de 30 000 a 40 000 millones de dólares (a precios de 1974) hasta principios del decenio de 1980 (en el caso I las importaciones serían menores y los déficit ligeramente mayores). A menos que los países de la OCDE disminuyan aún más su demanda de petróleo mediante el racionamiento y el estancamiento económico, tendrán que aceptar el incremento de los activos de la OPEP dentro de ellos mismos (deuda e inversión directa) hasta llegar a sumar para 1980 un total de 300 000 millones de dólares (a precios de 1974).

En muchos sectores se tiende a considerar la tarea del financiamiento

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de tal cantidad como algo imposible e inconveniente a la luz de los principios tradicionales de la administración de las finanzas. Pero resulta difícil sostener cualquiera de estas conclusiones con argumentos económicos. Tanto la experiencia de posguerra del Programa de Recuperación Europea como la administración actual de los flujos de capital a los países en desarrollo demuestran los mecanismos de ajuste que se requieren. La conveniencia económica de tomar prestado de los países de la OPEP debe juzgarse sobre la base del costo —en términos de ingresos menores y desempleo mayor— de *no* endeudarse. La posibilidad de endeudarse en las cantidades indicadas depende de la carga del servicio de la deuda y de los pagos futuros en los decenios próximos. A causa de las grandes sumas supuestas, existe la tendencia a exagerar estas cargas probables y a desentenderse del costo de tasas menores de crecimiento.

En muchos sentidos, el ajuste económico que ahora requiere la OCDE en relación con la OPEP es similar al problema típico de los países en desarrollo que han incrementado sus entradas de capital para acelerar sus tasas de crecimiento. Para estos países es enteramente normal el financiamiento del 20 al 30 % de sus necesidades de importaciones mediante préstamos externos por periodos de 10 a 20 años mientras desarrollan nuevas exportaciones. El servicio de esta deuda externa llega a menudo hasta el 20 o 25 % de los ingresos por exportaciones (o al 3 o 4 % del PNB) sin poner en peligro las perspectivas económicas del país o su capacidad de pago futura. La conveniencia de la contratación de deuda externa depende del crecimiento adicional que pueda lograrse mediante importaciones e inversiones mayores en relación con el costo real de la deuda.

El déficit petrolero de la oCDE difiere del déficit comercial normal de los países menos desarrollados en un aspecto importante: su magnitud actual está determinada primordialmente por la capacidad de los países prestamistas para utilizar importaciones procedentes del prestatario, antes que por la capacidad de éstos para abastecerlas. Este hecho no crea problemas adicionales para la oCDE en conjunto, a menos que los países de la OPEP decidan no continuar abasteciendo petróleo en las cantidades indicadas en el cuadro 2. Por el contrario, el hecho de tener que endeudarse para pagar por el petróleo en lugar de aumentar rápidamente las exportaciones amortigua el efecto inmediato del aumento de precios y provee recursos adicionales para contrarrestar las grandes inversiones necesarias para el desarrollo de fuentes alternativas de energía.

Sin embargo, también podemos juzgar la viabilidad de este proceso de ajuste si se compara con el último gran ajuste en que participaron los

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miembros europeos de lo que ahora es la OCDE. Al término de la segunda Guerra Mundial, estos países participaron en un programa de reconstrucción, que duró todo el periodo del Plan Marshall y se extendió hasta cerca de 1955. Durante este periodo hubo, de hecho, una transferencia masiva de recursos de los Estados Unidos a Europa, mientras que Europa desarrollaba la capacidad productiva para afrontar lo que entonces se llamó la "brecha del dólar", es decir, mientras se ponía en condiciones de exportar bienes y servicios en cantidades suficientes para pagar las importaciones que necesitaba de los Estados Unidos. En un sentido muy real, la posición de los Estados Unidos en esa época correspondía a la actual de los países petroleros de la OPEP.

Con esta comparación queremos poner de relieve sobre todo las magnitudes relativas de los déficit "estructurales" de la balanza de pagos en los dos periodos, y el tiempo necesario para eliminarlos, así como las entradas de capital requeridas durante la época de ajuste. Por supuesto, la diferencia principal radica en el hecho de que en el periodo anterior los propios Estados Unidos financiaron una gran parte de las transferencias mediante donativos. Esta diferencia debe tenerse presente al hacer la evaluación. De igual modo, mientras que los Estados Unidos y el Canadá deben omitirse del grupo "deudor" en ambos periodos (ya que los dos pueden financiar sus necesidades futuras de petróleo sin gran dificultad), el Japón y los países de Oceanía miembros de la OCDE deben incluirse en el segundo periodo, el de la OPEP.

Para volver real la comparación supongamos que en ambos periodos el grupo de países "deudores" debía pagar la mayor parte de la "deuda" total en un periodo de seis años, principiando en 1952 y 1974, respectivamente, y que el "interés (interés propiamente dicho sobre los préstamos, más dividendos de las inversiones) era de 5 % en ambos periodos. Con estos supuestos, el cuadro 3 muestra (en dólares de 1974 en ambos casos) el crecimiento del PNB, los niveles del comercio internacional, las entradas de capital y requerimientos del servicio de la deuda para el periodo de 1947 a 1955 y las proyecciones de las mismas magnitudes para el de 1974 a 1985.

Planteado en estos términos, el ajuste a los precios mayores del petróleo que ahora se requiere es de menor magnitud que el proceso de ajuste de posguerra. La proporción de las importaciones que debe financiarse con capital externo en los primeros cinco años sólo llega a la mitad del nivel anterior, y no será necesario limitar el crecimiento de las importaciones distintas del petróleo para cerrar la brecha comercial con la

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OPEP. Aunque hubo pocos pagos de la deuda efectiva de posguerra, el orecimiento de las exportaciones y del PNB después de 1950 fue suficientemente rápido para haber permitido tal pago con escaso efecto sobre la continuación del crecimiento. La lección importante del periodo de posguerra es que tan gran regeneración se logró con relativa facilidad porque el crecimiento económico se mantuvo a una tasa elevada.

# CUADRO 3. Comparación de los procesos de ajuste: 1947-55 y 1974-85 (miles de millones de dólares a precios de 1974)

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and in the resultation of any set one	1947	1950	1955	
1. Producto nacional bruto	350	435	578	
2. Exportaciones	51	94	134	
3. Importaciones	75	90	116ª	
4. Entrada neta de capital	31	11	2	
5. Deuda total	31	74	92	
6. Servicio hipotético de la deuda <sup>b</sup>	1.4	3.6	17.9	
7. Servicio de la deuda/PNB	0.4 %	0.8 %	3.1 %	
8. Servicio de la deuda/exportaciones	2.8%	4.0 %	13.0 %	

A. Ajuste de 1947 (OCDE, Europa)

### B. Ajuste de 1974 (OCDE, Europa y Japón-Oceanía)

		1974	1980	1985
1.	Producto nacional bruto	1 921	2 695	3 082
2.	Exportaciones	361	524	776
3.	Importaciones	329	460	710
4.	Entrada neta de capital	40	45	34
5.	Deuda total	40	285	500
6.	Servicio hipotético de la deudab	8	48	51
7.	Servicio de la deuda/PNB	0.4 %	1.8 %	1.6 %
8.	Servicio de la deuda/exportaciones	2.2 %	9.2 %	6.6 %

<sup>a</sup> Se redujeron las importaciones efectivas para tomar en cuenta la necesidad del servicio de las deudas hipotéticas.

<sup>b</sup> Servicio hipotético de la deuda calculado al 5 % de interés; pago de los préstamos de cada año en el término de seis años a partir de 1952 o 1974.

Aun si no bajasen mucho los precios del petróleo de la OPEP entre ahora y 1980, los países europeos miembros de la OCDE y el Japón alcanzarán el nivel máximo de su deuda con la OPEP a principios del decenio de 1980. En dicho nivel, el servicio de esta deuda no llegará al 2 % de

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su PNB. En el cuadro 3 puede apreciarse que el endeudamiento destinado a pagar una parte de los mayores costos del petróleo tiene la ventaja de difundir la diversificación de las exportaciones que se requiere para contrarrestar el empeoramiento de los términos de intercambio de la OCDE; aun si el interés de la deuda llegase al 5 % en términos reales (mucho más de lo que ahora se paga), la carga total del servicio de la deuda no llegaría al 10 % de las exportaciones proyectadas.

Para 1990 es probable que casi todos los países de la OPEP hayan reducido en forma considerable sus inversiones en la OCDE a medida que continúa creciendo su capacidad de absorción interna. Es posible que el capital fluya entonces en dirección contraria para apoyar la continuación del crecimiento de los productores de petróleo cuando sus ingresos petroleros se estanquen o declinen, pero las magnitudes no serían tan grandes que obstruyesen el crecimiento de los países de la OCDE. En consecuencia, resulta difícil sostener con argumentos económicos que la economía mundial no puede sostener corrientes de capital de la magnitud requerida, o que los países de la OCDE necesariamente sufrirán mucho en el proceso.

El otro obstáculo principal a la aceptación del endeudamiento con los países de la OPEP como una solución conveniente al problema petrolero es el temor de que tales países adquieran propiedades y un control excesivo de los activos de la OCDE. Las magnitudes supuestas —hasta 300 000 millones de dólares (a precios de 1974) para 1980— deben juzgarse en relación con los activos totales de los países de la OCDE, incluso a los Estados Unidos. La cifra de 300 000 millones de dólares equivaldría tal vez al 5 % del valor de todas las acciones y bonos de los principales países de la OCDE en 1980, o el 2 % de sus activos fijos. Éstas son proporciones de propiedad extranjera considerablemente menores que las experimentadas por muchos países en el pasado. Además, está claro que los países receptores tienen el poder de limitar las formas de activos que se entregan para evitar toda forma inconveniente de control externo.

Por lo tanto, en lugar de preocuparnos por el control extranjero de los activos existentes debiéramos meditar más sobre la pérdida de ingreso y riqueza que resultará probablemente de los esfuerzos mal orientados por limitar los déficit petroleros. Una disminución del crecimiento de la OCDE, de su nivel normal del 5 al 3.5 %, eliminaría cerca de 300 000 millones de dólares de la formación potencial de activos para 1980 y causaría considerable desempleo, lo que constituye un motivo de preocupación mucho más grande que los riesgos de control de la OPEP.

En suma, parecen existir conductos razonables para facilitar y volver
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tolerable el proceso de ajuste entre los países de la OCDE y la OPEP. Si se aceptara el análisis del cuadro 2, cierta reducción del precio del petróleo sería parte de la respuesta total. Pero aun si no ocurriese así, un sistema internacional mejor coordinado debería ser capaz de manejar las transferencias requeridas durante el periodo de transición. En términos económicos, los problemas existentes entre los países de la OCDE y de la OPEP se pueden solventar.

#### VI

Volvamos ahora al problema de los países menos desarrollados.

Los acontecimientos de los últimos años han tenido efectos muy diversos sobre los dos mil millones de habitantes del Tercer Mundo. El auge de los productos ocurrido en 1972-74 mejoró los términos de intercambio de la mayor parte de los exportadores de productos primarios, pero esta tendencia se ha invertido ahora, con las excepciones antes mencionadas del petróleo y de algunos minerales y alimentos. El efecto de los precios del petróleo y los alimentos sobre los miembros del Tercer Mundo que no pertenecen a la OPEP ha duplicado sus déficit de balanza de pagos —de 10 000 millones de dólares en 1973 a 20 000 millones en 1974—, contrarrestando los efectos de las corrientes actuales de préstamos en términos blandos y donativos.

Estos sucesos han iniciado un proceso de fragmentación del Tercer Mundo, que tiende a continuar. Los beneficiarios de estos cambios son cerca de 400 millones de personas que viven en países exportadores de petróleo y minerales, cuyas perspectivas de desarrollo han mejorado notablemente. Un segundo grupo comprende cerca de 600 millones de personas de los países en desarrollo del estrato superior de ingresos —el Brasil, Turquía, Corea, Tailandia, etcétera—, muchos de los cuales han sufrido pérdidas similares a las de la OCDE. Estos países tendrán que pedir prestadas grandes cantidades para contrarrestar sus déficit petroleros, pero la mayoría de ellos tienen economías suficientemente flexibles y diversificadas para ajustarse a las mayores exportaciones y a la nueva asignación interna de los recursos. Este grupo experimentará una disminución temporal de su crecimiento, pero sus perspectivas a largo plazo no tienen por qué verse afectadas gravemente, siempre que continúen teniendo acceso a los mercados de capital y a otras posibilidades de reciclaje.

La situación es muy diferente para los mil millones de habitantes de los países menos desarrollados del estrato inferior de ingresos. Para la

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mayoría de los países más pobres —principalmente en el sur de Asia y el centro de África—, los precios de sus exportaciones se han quedado atrás de la inflación general, mientras que los costos de sus importaciones han subido en forma aguda. Como consecuencia, sus términos de intercambio han empeorado 20 % en los dos últimos años, el doble de la cifra correspondiente a los países de la OCDE. Para muchos de estos países —y notablemente para la India y Bangladesh, donde viven dos tercios de la población de este grupo— las perspectivas de desarrollo se han retrasado diez años o más. En muchos casos, la escasez de alimentos y sus precios elevados son tan importantes como el aumento de los costos del petróleo para impedir el acceso a las divisas disponibles y la importación de otros productos necesarios para el desarrollo. Es en este "Cuarto Mundo" donde se conjugan las crisis del petróleo y los alimentos, lo cual requiere una solución conjunta.

En general, la capacidad para ajustarse a los cambios de las condiciones económicas externas disminuye a niveles menores de desarrollo. Los márgenes para la reducción del consumo de petróleo o alimentos se vuelven más estrechos, y hay un intervalo más limitado de exportaciones potenciales que puedan aumentar en el futuro cercano. Para muchos de los países más pobres, las posibilidades de ajuste interno se están agotando rápidamente. Algunos de ellos acumularon reservas de divisas durante el auge de bienes, pero estas reservas no contrarrestarán por mucho tiempo el mayor costo de las importaciones. Dado que se requerirán varios años para desarrollar nuevas exportaciones, el crecimiento sólo podrá sostenerse, aun a niveles menores, por un incremento de los préstamos blandos de tres mil a cuatro mil millones de dólares por año (a precios constantes) en los próximos años.<sup>6</sup>

En virtud de que la India alberga a más de la mitad del estrato inferior de los países en desarrollo y tiene oportunidades un poco mayores para adaptarse, merece un comentario aparte. Aunque la India ha tenido éxito considerable en el desarrollo de una base industrial y una reserva de habilidades humanas en los dos decenios últimos, ha sido uno de los últimos países en conservar la orientación hacia adentro de su esfuerzo de desarrollo, en lugar de seguir el ejemplo de Corea, el Brasil, México y la mayoría de los demás países en proceso de industrialización, que cambiaron el enfoque hacia las exportaciones de manufacturas. Se encontraba por lo tanto en posición muy débil para soportar el efecto de los mayores

<sup>6</sup> Robert McNamara, Mensaje a la Junta de Gobernadores del Grupo del Banco Mundial, septiembre de 1974.

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precios del petróleo, alimentos y fertilizantes, que agregó dos mil millones de dólares al valor total de sus importaciones, que entre 1972 y 1974 ascendió a tres mil millones de dólares. Sin embargo, a la inversa de los otros países muy pobres, la India tiene una estructura industrial que podría servir de base al crecimiento rápido de las exportaciones si confiriera prioridad a este esfuerzo que ha resultado necesario para otros exportadores exitosos.

En resumen, conviene poner de relieve las diferencias básicas existentes entre los mecanismos de ajuste más limitados al alcance de los países menos desarrollados y los que pueden utilizar los países avanzados:

- a) Los superávit de la OPEP se invertirán automáticamente en los mercados de capital de los países avanzados; se requerirán esfuerzos especiales (tales como garantías o subsidios) para desviar alguno de estos fondos hacia los países en desarrollo o para lograr que los países de la OCDE se los presten, a su vez.
- b) La conservación de energía constituye un elemento importante del ajuste en los países ricos, pero en los países menos desarrollados hay un margen mucho menor para este efecto.
- c) Dado que tres cuartas partes del superávit de la OPEP son respecto a la OCDE, los miembros de esta última no pueden reducirlo con la expansión de sus importaciones dentro del grupo. Pero los países de la OCDE deben aceptar un desarrollo continuo de las exportaciones de los países del Tercer Mundo porque este último grupo sólo puede recurrir al reciclaje en medida limitada.

### VII

A pesar de los pronósticos generalizados de desastres económicos inminentes, estos acontecimientos no son más inevitables ahora que los pronósticos similares de 1946 y 1947. El problema básico que afrontamos es el ajuste de las exigencias de una redistribución relativamente pequeña del ingreso mundial entre los países sin incurrir en ninguna pérdida de bienestar mayor de lo indispensable. Una solución del problema sería que los productores de petróleo y alimentos moderasen sus exigencias, pero un retorno a las relaciones de precios anteriores puede excluirse virtualmente, de modo que debe buscarse cierto grado de reajuste estructural.

Podemos resumir en tres proposiciones las conclusiones de política de este análisis: a) en cuanto se acepten las dimensiones del problema

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básico, deberá resultar enteramente factible la elaboración de un conjunto de políticas que permita a las diversas partes de la economía mundial reasumir tasas satisfactorias de desarrollo; b) los diversos elementos de la solución son interdependientes en alto grado y requieren de calidad y sinceridad en la cooperación internacional, lo que no ha existido desde principios de los años cincuenta; c) los efectos de la incapacidad para hacer ajustes en el sistema internacional serían considerablemente más costosos para la mayoría de los participantes que las ganancias obtenibles por cada país mediante una acción independiente, y la carga de tal fracaso caería en forma desproporcionada sobre los hombros de los países más pobres.

No me propongo analizar ahora los diversos cambios institucionales necesarios para la producción de estos resultados, pero si delinear los elementos principales de un enfoque cooperativo a la solución:

### 1. Disminución de la incertidumbre del mercado petrolero

La incertidumbre en cuanto a las políticas petroleras de la OPEP y las respuestas que deban dárseles constituye el obstáculo principal para la aceptación del problema de los precios más altos por parte de los países importadores. La disminución de esta fuente de incertidumbre ayudaría mucho a la adopción de otras medidas tendientes a restaurar el equilibrio en la economía mundial.

## 2. Financiamiento de los déficit petroleros

Se acepta generalmente que los mecanismos de reciclaje existentes —préstamos de la OPEP a ciertos gobiernos amigos, uso limitado de las instituciones internacionales, inversiones directas de la OPEP, y el sistema bancario privado— serán cada vez más inadecuados a la magnitud del superávit de la OPEP en el curso de 1975. Un sistema más satisfactorio ampliaría la utilización de todas estas vías, pero también debería garantizar un volumen de préstamo adecuado para el financiamiento de los déficit petroleros de los países de la OCDE y el estrato superior de los países en desarrollo que pueden asumir una deuda adicional. Se requieren tales garantías para evitar políticas de "amolar al vecino" mediante las cuales traten los países importadores de reducir sus déficit petroleros individuales a costa de los demás. Pero los países más pobres no pueden asumir mucha deuda adicional si no es en términos de concesión.

### 3. Apoyo al desarrollo de la OPEP

Dado que el objetivo principal de los gobiernos de la OPEP es el desarrollo rápido y seguro de sus economías, su inclinación a cooperar en la solución de los problemas del resto del mundo tenderá a aumentar cuando se tomen medidas que les permitan alcanzar aquella meta. Tales medidas deberán incluir un rendimiento seguro sobre la inversión externa y asistencia para su desarrollo interno. A cambio podrían estar dispuestos a sacrificar beneficios elevados a corto plazo para asegurar un mercado futuro más grande a su petróleo.

## 4. Crecimiento de la OCDE

Aunque se cuente con mecanismos de reciclaje adecuados, cierta reducción a corto plazo del crecimiento de los países industriales es virtualmente inevitable como parte del esfuerzo mundial por controlar la inflación. Pero un retorno a la tendencia de crecimiento del PNB de los países de la OCDE, de 5 % anual, es enteramente factible para 1976, y haría una contribución importante a la solución de los problemas de los países en desarrollo.

## 5. Recuperación del crecimiento de los PMD

En la atmósfera de inflación actual, de déficit de la balanza de pagos y de recesión económica, parece políticamente imposible que los países industriales concedan atención y apoyo adecuados a los países en desarrollo. Es poco probable que esta situación se modifique antes de que los países de la OCDE se encuentren en camino de resolver sus propios problemas. Mientras eso no ocurra, no es probable que se contrarreste la erosión de la ayuda causada por la inflación, y resultará difícil resistir la tendencia a restrigir las importaciones procedentes de los países menos desarrollados.

En términos cuantitativos, son modestas las necesidades anuales de los países en desarrollo en cuanto al apoyo adicional que requieren para restablecer tasas razonables de crecimiento: de 3 000 a 4 000 millones de dólares (a precios de 1974) durante el resto de este decenio. Debida cuenta de las tasas de crecimiento de los países de la ocDE, esto haría regresar el total de los préstamos blandos al 0.3 o 0.4 % de los productos nacionales de los países de la ocDE y la OPEP. Los países de la ocDE man-

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tuvieron precisamente estos niveles hasta hace poco, cuando se vieron reducidos por efecto de la inflación. Pero para recuperarlos requerirá incrementos sustanciales en las aportaciones actuales, para contrarrestar el aumento de los precios.

Sin cierta expansión de la ayuda, la recuperación del crecimiento en el resto del mundo significará relativamente poco para los países más gravemente afectados que no podrán cambiar fácilmente sus exportaciones para aprovechar tal recuperación. Tampoco pueden utilizar en forma amplia las posibilidades de reciclaje en términos convencionales. Así pues, estos países no disponen de ningún mecanismo de ajuste a corto plazo que no sea la reducción de su crecimiento. Se requiere alguna ayuda especial —ya sea en forma de precios menores del petróleo y alimentos o de incrementos de los préstamos blandos— para no imponerles la carga principal de los ajustes del petróleo y los alimentos a la vez.

## VIII

Dado que la serie de negociaciones y de cambios institucionales necesarios para la instalación de este escenario optimista requerirá un periodo apreciable, tendremos que improvisar soluciones temporales. A corto plazo no hay alternativa al uso de las instituciones existentes de reciclaje, la reasignación de presupuestos de ayuda y de reservas alimenticias a los países más afectados, y una repartición *ad hoc* entre los países más fuertes de la OCDE y la OPEP de las cargas del ajuste y los riesgos de los préstamos.

A largo plazo, el mundo tiene una elección: entre la concertación de un esfuerzo cooperativo según el modelo del periodo de posguerra o la aceptación de los costos mucho mayores de un reajuste no coordinado donde es probable que todas las partes sufran.

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Lecture Delivered at State Bank of Pakistan, 3RD /15 Karachi, October 1976 Hole's B chenery PROSPECTS FOR DEVELOPING COUNTRIES

WBG

CHIN I wish to discuss with you today the general prospects for developing countries in order to provide a background for considering some of the specific problems of Pakistan. I last gave a talk in Karachi ten years ago, on the occasion of a gathering of the advisers of the Pakistan Institute of Development Economics, at a time when the Third Five Year Plan was just beginning. I made a rather optimistic assessment of Pakistan's prospects of success and some alternative projections for the future. Before coming here today, I have gone back over that assessment to see how much of it appears valid, and what seems notably different about the situation now. This review shows improvements in some respects and deterioration in others.

## I. 1950-1970: Expanding Trade and Growth

We used to think, and perhaps not wrongly, that the essential feature of development was growth. Most of the development plans of the 1950s and early 1960s, including those of Pakistan, were based on this principle. The growth of the economy, it was said, must be rapid, and no harm would be done by following the model of the industrialized west. During all of this period, countries pursued their development plans in an international environment that was relatively stable. With steady growth in the industrialized countries, world trade was expanding rapidly. By increasing their exports, most of the developing countries were able to reduce the amounts of foreign capital they needed to expand imports and investment. Their economies grew somewhat faster than many, including myself, had predicted--at between 5 and 6% a year--while inflows of foreign capital were rarely much higher than 2 to 3% of GNP.

But towards the end of the 1960s there were rumblings of discontent. Growth expectations had been achieved; average income per head in many developing countries had increased by 50% or more; but it was becoming increasingly clear that such average figures bore little relation to the living standards of large numbers of people in poverty. Growth had been marked by worsening economic dualism, whereby the modern sector expanded more rapidly than the traditional, absorbing more investment, generating more savings, increasing its output more quickly. The linkages between the modern sector and the rest of the economy were commonly very weak, and thus people who were not associated with the modern sector--who, for example, were engaged in traditional agriculture, or who lived in regions unaffected by modernization -benefited far less than the average. I need hardly elaborate on this theme in a country where it has been much debated.

With the economic events of the 1970s, we have been made far more aware that the perception of unequal advantage has an international dimension too. If we are to analyze the long-term prospects of developing countries,

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including those of Pakistan, we must try to explain the consequences of the economic crisis of 1973-74 and to examine whether different countries' efforts to overcome it have reinforced or retarded their development.

## II. Economic Crisis, 1973-74

The major elements of the recent crisis are well known and have been widely discussed. If I may recall the atmosphere of 1974, there had been an unprecedented boom in the advanced countries, whose economies had been growing at what turned out to be unsustainable rates exceeding 6% per year. As a result, the prices of primary products relative to manufactured goods had risen higher than at any time since the Korean war twenty years earlier. At this point, it would have been logical for the price of oil to also go up, regardless of whether or not concerted action was taken by producers. In the event, these economic forces coincided with the Middle East crisis, and oil prices increased by a factor of four. As a result, the OPEC countries' oil revenues increased by about US\$80 billion per year, an amount equivalent to 10% of the total value of world exports. The import bills of the oil importing countries went up by some 10%, purely as a consequence of this price change. The OECD countries' balances of payments were severely disrupted at first, but in the recession which followed they managed to reduce their deficits by reducing economic growth. Since then, their collective deficit has

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been small or non-existent. Deficits in England and Italy have been offset by surpluses in Germany, Japan and the United States. The non-oil exporting developing countries-let us call them non-oil countries for short--have had nothing like the rich countries' freedom of choice. Their current account deficit increased from US\$10 billion in 1973 to US\$30 billion in 1974, and has been between US\$30 and \* US\$40 billion ever since. A substantial part of this continuing deficit has been caused by the recession of the OECD countries, which has had an even greater impact than the initial effect of the rise in oil prices.

Pakistan was not at first among the most seriously affected countries because the prices of its primary exports had been continuing to rise. But by 1975, its terms of trade had worsened, and its deficit had risen from US\$130 million to something like US\$1,200 million, equal to half of its total imports. Many factors contributed to this increase in debt: though Pakistan's experience was fairly typical for the non-oil countries in that its total import bill rose by some 10% (an increase that amounted to 2% of its GNP), its increased expenditures on oil accounted for a relatively small part--only US\$250 million. I shall return to this question later.

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How far the world recession was caused by the increase in the oil price is still a matter of debate, but one thing is clear: the oil importing countries as a group can only reduce their deficit as the OPEC countries expand their imports and reduce their surpluses. In the meantime, borrowing has enabled most of the developing countries to avoid a reduction in their imports and GNP and has also cushioned the effects of the OECD recession. At the international level, the action most needed is to complete the recovery of the OECD countries and thus enable the developing countries to expand their exports and reduce their deficits to  $\frac{1}{2}$ 

#### III. The Adjustment Process

How have the developing countries been adjusting to the fall in their import capacity and lower growth of income? In the short run, demand had to be restrained, through curtailing consumption, or investment, or government spending, or some combination of these. But to try to reduce the enormous balance of payments deficits immediately would have meant such a loss of growth that countries resorted to borrowing, from whatever sources were available and generally on harder terms. Of the increase in their debt of about

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US\$30 billion per year (since 1974), about four-fifths was contracted on relatively hard terms, from the OPEC countries; from the Eurocurrency market; and from the World Bank and the IMF. The remaining US\$5 billion was borrowed on soft terms, both from OPEC and OECD countries.

In the long run, if growth is not to be permanently impaired, structural adjustments in the payments deficit have to be made through reducing the need for imports, modifying domestic consumption patterns and diversifying and expanding exports. But countries differ greatly in their ability to borrow and in the other policy options open to them. The poorest countries -- those with per capita incomes under \$200, which people are now calling the Fourth World--have had no large sources of external finance save a limited amount of soft loans and the IMF oil facility. A high proportion of their imports already consisted of food and fuel, and the crisis came at a time when their terms of trade had been worsening steadily for several years. (Between 1973 and 1975, their terms of trade deteriorated by about 20%.) Largely because they had no immediate way of compensating for this decline in purchasing power of their exports, they have had virtually no increase in per capita incomes since 1970.

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In contrast to most of the low income countries, the situation of Pakistan has been eased to a considerable extent. Its ability to borrow from OPEC countries has probably "bought" about two years of time, but eventually it will have to complete the same adjustment process as others.

\* Even disregarding the changes in the world economy, the fact that over the past 5 or 6 years there has been little or no growth in per capita income and consumption in Pakistan is not surprising. The creation of two separate countries obviously involved large changes in the productive structures of both, a reordering of trade, a large shift in ownership and other changes in the economic structure. But there have also been other disruptions. Pakistan's terms of trade are by now about 15 to 18% worse than in 1973. The amount it has borrowed during the last several years is more typical of the more affluent developing countries than of a poor one: 5 to 8% of its GNP. Pakistan has thus been financing more than half of its total investments from foreign borrowings. These are exceptional proportions by any standards. Exactly how large a flow will be manageable in future of course depends on the terms of the loans, but certainly the ratio of foreign borrowing to GNP will need to be reduced. To do so, as I gather is one of the aims of the new Six Year Plan, will require significant changes in trade policies. Quite a large part

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of the trade deficit can be attributed to increases in import volumes. In future, export earnings will have to grow faster than imports. Moreover, savings will have to grow very much more rapidly than investment, rather than continuing their drastic decline as a share of GNP. It will also be necessary to broaden the base of development, giving more emphasis to raising the productivity of small producers. Changes in agricultural price policy will be called for too. Subsidies to consumers are already being reduced, but producers will need to be given enough incentives to increase output not only to meet domestic demand but also for export. This implies that agricultural prices must be allowed to rise to international levels.

Pakistan has the physical resources necessary for a successful completion of the transition to a more sustainable pattern of growth. Its agricultural sector has more potential than most of its neighbors, and technically it would be quite feasible to have agricultural output growing at 5% a year for the next decade, through the use of increased irrigation and fertilizer, pesticides and so forth. Whether this can actually be achieved depends largely on price policies and administrative capability.

Whereas in the case of agriculture I think it is fair to say that most of the problems are on the supply side, in industry it could equally be said that the main problems are those of demand. This is not true only of Pakistan:

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throughout the subcontinent, industrial growth has been slow less because of the structure of industry than because domestic demand has not been expanding and export incentives have been inadequate. In order to correct other problems, growth of income has had to be slowed down and this has curtailed the growth of the market for industrial goods.

. Though Pakistan will face difficult problems of structural readjustment in regaining the growth rates of the late 1960s, of 6% per year, it is hard to point to any one of them which seems insurmountable. But the question is whether the government will perceive this overall strategy as necessary and take the steps required to carry it out.

In other poor countries, the price changes which were necessary to reduce consumption and imports, and the measures necessary to increase investment and to encourage production for export have had to be put in place more quickly than in Pakistan. This has given rise to a certain amount of inflation and consumers have inevitably suffered serious hardships. In most of the poorer countries, such as India, Sri Lanka, and Tanzania, economic growth has been reduced, but a better basis has been established for future development.

The richer developing countries--mainly those of Latin America, the Mediterranean basin and East Asia--have generally been more fortunate. They have had greater access to private capital markets and--though they ran large deficits-they were able to sustain their imports, finance their needs

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for continued growth and expand their exports. Even though the economies of the OECD countries were not growing at all, these middle income developing countries have managed to sustain growth at 4 to 5% a year. The fact that their debt is increasing is of secondary importance, so long as they can resume rapid growth and continue expanding their trade. Since they are able to earn sufficient foreign exchange to service their debt, their main problem will be one of debt management.

Taking the period of 1974-76 as a whole, there has thus been a large run-up in the borrowings of all non-oil developing countries, though limited in the poorer ones by their lack of access to capital markets. The adjustment process in the world economy will consist of a gradual reduction of this amount in relative importance, as economic growth is resumed. By 1981 I think that we can look forward with some confidence to a return in most developing countries to a level of net capital inflow that is no higher than the levels of 2-3% of GNP that existed in the 1960s. Some countries will still have larger debt burdens than at the beginning of the 1970s, particularly those that do not focus on expanding exports.

Though there have been severe strains on individual countries, the recent crisis has not resulted in the collapse of the international economic system. It is worth noting that in its provision of funds to developing countries which were creditworthy, the private banking system has shown itself far more

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flexible than had been anticipated and has facilitated a shift of public financing to the poorer countries where the need is greatest.

Let us look for a moment at the effects of these events on future development prospects. One of the objectives of the United Nations Second Development Decade (1971-80) was to achieve an average annual growth rate of 6% for all developing countries. That overall target may well be achieved by 1980, but in a form very different from what was originally envisaged. While a relatively small number of countries will have grown very fast, a billion people are living in countries which will have had little or no growth in per capita income over the whole of this decade.

Not only have the effects of the recent crisis been worse for poor countries than for rich; within countries, the poor have generally suffered more than the rich, who are much less vulnerable. Although the statistics on income distribution are very sketchy, I feel relatively confident in saying that the restructuring which is taking place is not improving the relative position of poor people or of poor countries. Thus, once the balance of payments ceases to be the main preoccupation of governments, the problems of poverty and the distribution of income will demand even more urgent attention than in the past. It is to these issues that I want to devote my concluding remarks.

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## IV. Longer Term Prospects and Policy Options

Since the slowdown in growth of GNP has not been accompanied by a slowing of population growth, there are larger numbers of people in unproductive occupations than there would have been with more rapid economic growth. This means that the dualistic features of growth have been accentuated, in Pakistan, as in other countries.

In such circumstances, the reduction of poverty and improvements in income distribution require a deliberate strategy. What has experience taught us about the design of such a strategy? First, in poor countries there is little promise in attempting to equalize the distribution of income through subsidizing the consumption of the poor. Even if a government took the political risk of imposing extremely heavy taxes, it is unlikely that the funds so generated would suffice to raise the incomes of the poor very substantially. But even more important is the cost of such a transfer policy in terms of investment forgone. The largest income transfer program I know is that of Sri Lanka, which was designed to make the poor better off through subsidies on food and education. After two decades of this policy, GNP growth was considerably reduced through the diversion of resources from investment. Arguably, almost everyone is now worse off than they might have been otherwise. Though income transfers can improve the welfare of the poor in the short run, their cost in terms of forgone investment and slower growth is too high to make them

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viable on a large scale for long periods. A concern with distribution is of little use if there is not much increase in income to distribute.

The opposite extreme --maximizing growth--is also unlikely to be sufficient. The evidence from several countries in the 1960s tends to confirm Kuznets' hypothesis that as poor countries grow, the distribution of income normally gets worse before it gets better. However, there are several examples which suggest that this tendency can be counteracted by deliberate measures. Most notable are Korea and Taiwan, both of which have been growing at 9 or 10% per year for the last 10 to 15 years. While income distribution was already fairly good as a result of the land reforms of the early 1950s, it has become demonstrably better. In general, it appears that while the poor will usually be better off with high growth than with low because of the effect on employment and wages, their welfare can be substantially enhanced by land reform and other measures to spread the benefits of increasing productivity more widely.

I think it is also important to dispel the view that long-term growth must necessarily be sacrificed to improve distribution, or vice versa. In the short run, there may indeed be such a trade-off. For example, redirecting public investment to build up the capital stock available to the poor is likely to involve some sacrifice of output--investments in human capital take longer to mature. But whether there is a conflict or not also depends upon one's values: for example, is the

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welfare of society reduced if GNP growth is reduced from 8 to 7-1/2%, but the poor are now sharing more widely in that growth? If one assigns as much weight to raising the consumption of the poor as the more affluent, the welfare of the society can be increased more rapidly, even with somewhat  $\frac{1}{2}$  lower increases in GNP.

There are very few countries nowadays which would draw up a development program that only aimed to maximize growth. But one of the main problems in designing a strategy combining substantial growth with a better sharing of the benefits is that there are so few successes for us to learn from. We know a good deal by now about the prescriptions for growth: ingredients such as capital formation, development of human capital, balanced investment, which seem to be necessary in communist and capitalist countries alike. But it is difficult to know in political and social terms how best to combine growth with a redirection of investment, and a broadening of access to education, health and various other public services. Many research groups (including that in the World Bank), as well as many government policy units are examining what the mechanisms should be. At present I can only speculate where the analysis is leading to without laying down firm conclusions.

1/ This point is elaborated in Ahluwalia and Chenery, "A Model of Distribution and Growth", in Chenery et al, Redistribution with Growth, Oxford, 1974.

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To comment on a question which is being debated in Pakistan at the moment, it seems to me that making the poor more productive will have little to do with whether the means of production are private or public. In Turkey, Mexico, Brazil and other mixed economies, the state industrial enterprises in fact behave in much the same way as the private sector: they over-invest in capital-intensive technologies and generally make little contribution to employment. While there may be good reasons for state ownership of industry-particularly heavy industry, which is characterized by economies of scale and needs large amounts of capital--this has not been a solution to problems of income distribution. State enterprises usually have preferential access to capital and foreign exchange. In these circumstances there is a grave risk that other, smaller producers who could contribute more to employment may be starved of these essentials. The moral from the experience of mixed economies seems to be that if state enterprises are not to become a burden on the economy, they must not be afforded preferential treatment in the cost of capital, access to imports, or output pricing.

Governments have typically taken the line of least resistance by concentrating on large scale enterprises in the modern sector, which if they are not government-owned can at least be organized and controlled comparatively easily. But to improve the income distribution and spread the benefits of

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growth more widely, the much larger number of people who are employed in small scale activities need to have equal access to productive inputs. The heart of the poverty problem lies not so much in the form of ownership as in devising institutions which will reach these producers, both in agriculture and in manufacturing.

Development planning is more complicated than we used to think. It is necessary to analyze the process by which income distribution is generated as a part of the overall process of development, and a plan has to take as much account of its impact on income distribution as of its impact on the balance of payments or on the growth of GNP. Hopefully before too long we shall not have to regard the availability of foreign exchange as the main constraint on development. Some means of spreading the benefits of growth more equitably-by region, by country, and by groups of people within countries-will have to be found if the next decade of development is to be more satisfactory than the last.

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# Lecture Delivered at State Bank of Pakistan, Karachi, October 1976 Hollin B Chemery PROSPECTS FOR DEVELOPING COUNTRIES

I wish to discuss with you today the general prospects for developing countries in order to provide a background for considering some of the specific problems of Pakistan. I last gave a talk in Karachi ten years ago, on the occasion of a gathering of the advisers of the Pakistan Institute of Development Economics, at a time when the Third Five Year Plan was just beginning. I made a rather optimistic assessment of Pakistan's prospects of success and some alternative projections for the future. Before coming here today, I have gone back over that assessment to see how much of it appears valid, and what seems notably different about the situation now. This review shows improvements in some respects and deterioration in others.

## I. 1950-1970: Expanding Trade and Growth

We used to think, and perhaps not wrongly, that the essential feature of development was growth. Most of the development plans of the 1950s and early 1960s, including those of Pakistan, were based on this principle. The growth of the economy, it was said, must be rapid, and no harm would be done by following the model of the industrialized west. During all of this period, countries pursued their development plans in an international environment that was relatively stable. With steady growth in the industrialized countries, world trade was expanding rapidly. By increasing their exports, most of the developing countries were able to reduce the amounts of foreign capital they needed to expand imports and investment. Their economies grew somewhat faster than many, including myself, had predicted--at between 5 and 6% a year--while inflows of foreign capital were rarely much higher than 2 to 3% of GNP.

But towards the end of the 1960s there were rumblings of discontent. Growth expectations had been achieved; average income per head in many developing countries had increased by 50% or more; but it was becoming increasingly clear that such average figures bore little relation to the living standards of large numbers of people in poverty. Growth had been marked by worsening economic dualism, whereby the modern sector expanded more rapidly than the traditional, absorbing more investment, generating more savings, increasing its output more quickly. The linkages between the modern sector and the rest of the economy were commonly very weak, and thus people who were not associated with the modern sector--who, for example, were engaged in traditional agriculture, or who lived in regions unaffected by modernization -benefited far less than the average. I need hardly elaborate on this theme in a country where it has been much debated.

With the economic events of the 1970s, we have been made far more aware that the perception of unequal advantage has an international dimension too. If we are to analyze the long-term prospects of developing countries,

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including those of Pakistan, we must try to explain the consequences of the economic crisis of 1973-74 and to examine whether different countries' efforts to overcome it have reinforced or retarded their development.

## II. Economic Crisis, 1973-74

The major elements of the recent crisis are well known and have been widely discussed. If I may recall the atmosphere of 1974, there had been an unprecedented boom in the advanced countries, whose economies had been growing at what turned out to be unsustainable rates exceeding 6% per year. As a result, the prices of primary products relative to manufactured goods had risen higher than at any time since the Korean war twenty years earlier. At this point, it would have been logical for the price of oil to also go up, regardless of whether or not concerted action was taken by producers. In the event, these economic forces coincided with the Middle East crisis, and oil prices increased by a factor of four. As a result, the OPEC countries' oil revenues increased by about US\$80 billion per year, an amount equivalent to 10% of the total value of world exports. The import bills of the oil importing countries went up by some 10%, purely as a consequence of this price change. The OECD countries' balances of payments were severely disrupted at first, but in the recession which followed they managed to reduce their deficits by reducing economic growth. Since then, their collective deficit has

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been small or non-existent. Deficits in England and Italy have been offset by surpluses in Germany, Japan and the United States. The non-oil exporting developing countries-let us call them non-oil countries for short--have had nothing like the rich countries' freedom of choice. Their current account deficit increased from US\$10 billion in 1973 to US\$30 billion in 1974, and has been between US\$30 and US\$40 billion ever since. A substantial part of this continuing deficit has been caused by the recession of the OECD countries, which has had an even greater impact than the initial effect of the rise in oil prices.

Pakistan was not at first among the most seriously affected countries because the prices of its primary exports had been continuing to rise. But by 1975, its terms of trade had worsened, and its deficit had risen from US\$130 million to something like US\$1,200 million, equal to half of its total imports. Many factors contributed to this increase in debt: though Pakistan's experience was fairly typical for the non-oil countries in that its total import bill rose by some 10% (an increase that amounted to 2% of its GNP), its increased expenditures on oil accounted for a relatively small part--only US\$250 million. I shall return to this question later.

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How far the world recession was caused by the increase in the oil price is still a matter of debate, but one thing is clear: the oil importing countries as a group can only reduce their deficit as the OPEC countries expand their imports and reduce their surpluses. In the meantime, borrowing has enabled most of the developing countries to avoid a reduction in their imports and GNP and has also cushioned the effects of the OECD recession. At the international level, the action most needed is to complete the recovery of the OECD countries and thus enable the developing countries to expand their exports and reduce their deficits to  $\frac{1}{2}$ 

### III. The Adjustment Process

How have the developing countries been adjusting to the fall in their import capacity and lower growth of income? In the short run, demand had to be restrained, through curtailing consumption, or investment, or government spending, or some combination of these. But to try to reduce the enormous balance of payments deficits immediately would have meant such a loss of growth that countries resorted to borrowing, from whatever sources were available and generally on harder terms. Of the increase in their debt of about

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In contrast to most of the low income countries, the situation of Pakistan has been eased to a considerable extent. Its ability to borrow from OPEC countries has probably "bought" about two years of time, but eventually it will have to complete the same adjustment process as others.

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of the trade deficit can be attributed to increases in import volumes. In future, export earnings will have to grow faster than imports. Moreover, savings will have to grow very much more rapidly than investment, rather than continuing their drastic decline as a share of GNP. It will also be necessary to broaden the base of development, giving more emphasis to raising the productivity of small producers. Changes in agricultural price policy will be called for too. Subsidies to consumers are already being reduced, but producers will need to be given enough incentives to increase output not only to meet domestic demand but also for export. This implies that agricultural prices must be allowed to rise to international levels.

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throughout the subcontinent, industrial growth has been slow less because of the structure of industry than because domestic demand has not been expanding and export incentives have been inadequate. In order to correct other problems, growth of income has had to be slowed down and this has curtailed the growth of the market for industrial goods.

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Though there have been severe strains on individual countries, the recent crisis has not resulted in the collapse of the international economic system. It is worth noting that in its provision of funds to developing countries which were creditworthy, the private banking system has shown itself far more

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flexible than had been anticipated and has facilitated a shift of public financing to the poorer countries where the need is greatest.

Let us look for a moment at the effects of these events on future development prospects. One of the objectives of the United Nations Second Development Decade (1971-80) was to achieve an average annual growth rate of 6% for all developing countries. That overall target may well be achieved by 1980, but in a form very different from what was originally envisaged. While a relatively small number of countries will have grown very fast, a billion people are living in countries which will have had little or no growth in per capita income over the whole of this decade.

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## IV. Longer Term Prospects and Policy Options

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Since the slowdown in growth of GNP has not been accompanied by a slowing of population growth, there are larger numbers of people in unproductive occupations than there would have been with more rapid economic growth. This means that the dualistic features of growth have been accentuated, in Pakistan, as in other countries.

In such circumstances, the reduction of poverty and improvements in income distribution require a deliberate strategy. What has experience taught us about the design of such a strategy? First, in poor countries there is little promise in attempting to equalize the distribution of income through subsidizing the consumption of the poor. Even if a government took the political risk of imposing extremely heavy taxes, it is unlikely that the funds so generated would suffice to raise the incomes of the poor very substantially. But even more important is the cost of such a transfer policy in terms of investment forgone. The largest income transfer program I know is that of Sri Lanka, which was designed to make the poor better off through subsidies on food and education. After two decades of this policy, GNP growth was considerably reduced through the diversion of resources from investment. Arguably, almost everyone is now worse off than they might have been otherwise. Though income transfers can improve the welfare of the poor in the short run, their cost in terms of forgone investment and slower growth is too high to make them

viable on a large scale for long periods. A concern with distribution is of little use if there is not much increase in income to distribute.

The opposite extreme --maximizing growth--is also unlikely to be sufficient. The evidence from several countries in the 1960s tends to confirm Kuznets' hypothesis that as poor countries grow, the distribution of income normally gets worse before it gets better. However, there are several examples which suggest that this tendency can be counteracted by deliberate measures. Most notable are Korea and Taiwan, both of which have been growing at 9 or 10% per year for the last 10 to 15 years. While income distribution was already fairly good as a result of the land reforms of the early 1950s, it has become demonstrably better. In general, it appears that while the poor will usually be better off with high growth than with low because of the effect on employment and wages, their welfare can be substantially enhanced by land reform and other measures to spread the benefits of increasing productivity more widely.

I think it is also important to dispel the view that long-term growth must necessarily be sacrificed to improve distribution, or vice versa. In the short run, there may indeed be such a trade-off. For example, redirecting public investment to build up the capital stock available to the poor is likely to involve some sacrifice of output--investments in human capital take longer to mature. But whether there is a conflict or not also depends upon one's values: for example, is the

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welfare of society reduced if GNP growth is reduced from 8 to 7-1/2%, but the poor are now sharing more widely in that growth? If one assigns as much weight to raising the consumption of the poor as the more affluent, the welfare of the society can be increased more rapidly, even with somewhat  $\frac{1}{2}$ 

There are very few countries nowadays which would draw up a development program that only aimed to maximize growth. But one of the main problems in designing a strategy combining substantial growth with a better sharing of the benefits is that there are so few successes for us to learn from. We know a good deal by now about the prescriptions for growth: ingredients such as capital formation, development of human capital, balanced investment, which seem to be necessary in communist and capitalist countries alike. But it is difficult to know in political and social terms how best to combine growth with a redirection of investment, and a broadening of access to education, health and various other public services. Many research groups (including that in the World Bank), as well as many government policy units are examining what the mechanisms should be. At present I can only speculate where the analysis is leading to without laying down firm conclusions.

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<sup>1/</sup> This point is elaborated in Ahluwalia and Chenery, "A Model of Distribution and Growth", in Chenery et al, Redistribution with Growth, Oxford, 1974.

To comment on a question which is being debated in Pakistan at the moment, it seems to me that making the poor more productive will have little to do with whether the means of production are private or public. In Turkey, Mexico, Brazil and other mixed economies, the state industrial enterprises in fact behave in much the same way as the private sector: they over-invest in capital-intensive technologies and generally make little contribution to employment. While there may be good reasons for state ownership of industry -particularly heavy industry, which is characterized by economies of scale and needs large amounts of capital--this has not been a solution to problems of income distribution. State enterprises usually have preferential access to capital and foreign exchange. In these circumstances there is a grave risk that other, smaller producers who could contribute more to employment may be starved of these essentials. The moral from the experience of mixed economies seems to be that if state enterprises are not to become a burden on the economy, they must not be afforded preferential treatment in the cost of capital, access to imports, or output pricing.

Governments have typically taken the line of least resistance by concentrating on large scale enterprises in the modern sector, which if they are not government-owned can at least be organized and controlled comparatively easily. But to improve the income distribution and spread the benefits of

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growth more widely, the much larger number of people who are employed in small scale activities need to have equal access to productive inputs. The heart of the poverty problem lies not so much in the form of ownership as in devising institutions which will reach these producers, both in agriculture and in manufacturing.

Development planning is more complicated than we used to think. It is necessary to analyze the process by which income distribution is generated as a part of the overall process of development, and a plan has to take as much account of its impact on income distribution as of its impact on the balance of payments or on the growth of GNP. Hopefully before too long we shall not have to regard the availability of foreign exchange as the main constraint on development. Some means of spreading the benefits of growth more equitably-by region, by country, and by groups of people within countries-will have to be found if the next decade of development is to be more satisfactory than the last.

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## UNIVERSITY OF COLORADO

Boulder Colorado 80309

November 12, 1976

INSTITUTE OF BEHAVIORAL SCIENCE

Mr. Hollis Chenery Vice President World Bank 1818 H Street, N.W. Washington, D.C.



Dear Hollis:

A couple of months ago I wrote to mention that our papers for the Estes Park Conference of last April will be published by the Westview Press, and to ask your clearance for including the transcript of your talk at the University of Colorado. You had earlier told me that you would want to have your editors go over it first.

As I mentioned to you, we face a <u>publisher's deadline</u> of <u>November 15</u>, which is fast approaching. Can I hear from you right away, please?

With best wishes,

Sincerely yours,

Jack

John P. Powelson

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DRAFT HBChenery:nff November 9, 1976

The World Bank has taken rather a circuitous route from financing rich to financing poor countries. It was established 30 years ago as the International Bank for Reconstruction and Development, and at first its main function was to lend for reconstruction in European countries. It supplemented the capital subscriptions of its members by borrowing on the world capital market, added on half a percent or so to the interest rate and re-lent the money. Gradually the clients shifted to the developing countries, but its borrowers were not subsidized except in the Bank's accepting the risk of default. Only in 1960 did the Bank really get down to lending in any volume to poor countries, with the formation of its soft-loan affiliate--the International Development Association--which lends at very low (almost zero) interest rates and with long maturities.

The philosophy of the Bank in the 1960s remained rather conservative: development was largely synonymous with growth, and growth would be brought about by investment in sound projects. Until recently the bulk of the Bank's lending was for infrastructural projects, such as roads or electric power, selected on the basis of their contribution to growth.

As development economists began to question this philosophy, seeing that growth was having little effect on large numbers of people who were left behind in poverty, the Bank also began to alter its approach. After McNamara became president in the late 1960s, the Bank's operations were broadened to give more prominence to other sectors, particularly education and agriculture. At that time, those who doubted that growth was a sufficient goal of development policy were pointing to the evidence of growing unemployment in developing countries. In the early 1970s the International Labour Office began its studies of the "employment problem", but it soon became clear that this was not the most useful focus for research. Since many of the unemployed were not among the poorest people, and since the great bulk of the poorest people did have employment-but at very low levels of productivity--it was clearly necessary to look at other causes of poverty.

The Bank began doing research on poverty and the distribution of income about 5 years ago. This was not because we were seeking a theory for its own sake, but because we needed to know enough to determine whether what we were doing was wrong, and, if so, to identify the changes in policy that were needed. At that time the available data on income distribution were so poor that almost any generalization could be supported. The Bank set out to remedy this situation by collecting and analyzing new data and by compiling existing studies. Though there are still many serious deficiencies; I think we have become the world's main source of income distribution data. In 1973, we sponsored jointly with the Institute of Development Studies in Sussex a meeting in which a group of planners and policymakers pooled their ideas about income distribution. We have still to find definitive answers to many of the questions which were being raised then: does income distribution normally

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get worse before it gets better; is there necessarily a trade-off between distribution and growth? The scarcity of data, and in particular the lack of time series data for individual countries, means that we cannot yet make very strong statements about these issues.

But having persuaded ourselves that poverty problems were not, indeed, being solved by the mechanisms of growth, we have not waited for new theories to be perfected before beginning to reshape our operations. Investments in rural and urban development are monitored so that we can learn from what are now rather large scale experiments. For example, in conjunction with the one billion dollars we are lending this year for rural development, we shall spend some 10 million dollars on monitoring, which will help show us how to design such projects more effectively in future. Nonetheless, from the outset there have been fundamental questions that could not be answered from looking at individual projects.

First, any anti-poverty strategy must be able to identify poor people and some of the reasons for their poverty. Research on the existing distribution of income in developing countries, by the Bank as well as the development community generally, has identified certain groups containing the majority of poor people, who have characteristics that make it harder for them to benefit from the workings of the market and particularly to get into the advanced sector of the economy, where incomes are higher. Not all of these "target groups" can be reached through existing mechanisms, as I shall

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mention later.

Second, if one is interested in the welfare of individuals and not merely in the growth of GNP, what measure does one use to evaluate these projects, or social programs, or the performance of the economy as a whole? Though GNP is a simple and convenient index, it has obvious deficiencies as a welfare measure. Since the upper 20% typically receive over 50% of total income, GNP weights the income of the rich much more heavily than that of the poor. If the objective is to alleviate poverty, one must allow for the fact that an additional dollar of income would make far more difference to the welfare of a poor than of a rich family. This approach yields different answers as to what is a profitable, sound or efficient project. For example, if the objective is to maximize GNP, I would have to prefer a cattle raising project with a rate of return of 25%, whose main beneficiaries were large landowners, to a small farm development project which benefitted many low income families but whose overall rate of return was only 20%. How the incomes of different groups should be weighted is still a matter of experiment in Bank work, but research is continuing in this area and those evaluating projects have taken some important steps in getting away from the simple GNP criterion.

The third question that needs to be answered is how far governments can redistribute income through fiscal policy, . using tax and welfare systems. Studies we undertook in several developing countries, tracing who paid taxes and who benefitted from the revenues that were generated, showed that in general

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such redistribution as takes place through the fiscal system is perverse. In most poor countries the effect of the fiscal system is regressive; the rich get far more than their share of education, roads, housing and most other public services. To a large extent this reflects the fact that some three quarters of the poor live in rural areas while most of the well-to-do are urban. People with power living in urban areas can perceive their own needs far more clearly than rural needs. Outside of China, Tanzania and a few other firmly rural-oriented economies, the urban areas receive more than their fair share of public spending. This perception leads to an obvious cure: to distribute public investment more fairly. Since public investment is a large share of the total; and since this is an area in which the Bank has traditionally been involved, it has been one of the main ways in which the Bank has sought to combat poverty. We may not yet know how to ensure that small . farmers benefit from cooperative credit schemes, but we do know how to design rural roads. This is one of the few cases in which diagnosis and cure come quite close together.

This recognition that distributional effects follow directly from the type of production and that therefore distributional aspects of growth have to be considered in project selection, is what I would call the "minimum diagnosis" which has led not only the Bank but most of the development assistance agencies of the western world to change their policies. The Swedes, in particular, take the view that all aid should be directed to poverty groups, either poor countries or poor

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people in poor countries.

It will be clear that such changes in direction run against many people's ideas of what is appropriate for the World Bank as a bank. However, its ability to affect conditions in borrowing countries always depends on the countries themselves. In order even to start a project directed at the poor in a given country, the Bank must be able to find an agency in that country whose aims are sympathetic (and which has a minimum degree of effectiveness). If the government of that country has no desire to improve the welfare of the poor, the Bank's efforts are not likely to change the situation. Here the executive directors who represent the more liberal of the Bank's 125 member countries face a dilemma. Part of the liberal philosophy is against intervention in other countries' affairs: "Who do you think you are, knowing better than country X?" But if the income distribution in country X is visibly getting worse, it is often the more liberal among our directors who are the strongest advocates of intervention. Whether or not to intervene is perhaps the most difficult problem in trying to help from the outside.

II

Having raised these general issues I will now say a little about our approaches to lending. As yet we do not know the effectiveness of different instruments for reaching the poor, and those we are using now will probably be changed considerably over the next few years as we gain more experience.

There is a large body of literature which urges that the poor must participate in designing whatever project is going to affect them. Though intuitively this may seem an excellent idea, I think that as with many other ideological approaches to poverty-alleviation the success in implementing it has been very spotty. But it is clear, at least, that programs of this nature cannot be specified by economists and cannot be centrally administered. For an agency like the Bank, which operates in many diverse countries and whose projects are usually large in scale, it is easier -- at present -to concentrate on aspects of the poverty problem which can be tackled through rather large implementing agencies, and leave other aspects to governments themselves and to agencies which can work with small groups on diverse small scale projects. However, we recognize that our perceptions in, say, five years' time will probably differ from our perceptions now, and we are trying to allow flexibility in the design of projects, so that we can take advantage of experience and, if necessary, change the specifications while implementation in is progress.

Doing something for the poorest income groups is not at all easy with the instruments the Bank has available, since we cannot directly reach people who have no control over productive resources. Thus, we can reach small farmers, but not landless laborers; we can reach the independent small craftsmen in cities, but we cannot reach beggars or people with no employment. We are probably furthest ahead in schemes to help the small farmer. He controls some land, whether he

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is an owner or a tenant; he knows how to farm. We can supply him with productive inputs; help remove the discrimination against him by giving him access to credit, or lowering interest rates; help with his marketing; educate his children, and so make the family more productive. Reaching the landless laborer is far more difficult. Even if you provide him with skills, there is no guarantee that he will ever have the chance to use them.

So far, small farmers have been our main rural target group, and most countries' own anti-poverty programs have also focused on that group. Though the settings vary from Ujamaa villages in Tanzania to more capitalistic environments, the rural development package most commonly desired by governments has been about 70% for agricultural inputs, with the remainder for roads, water supply, education and so forth. We should like to give more emphasis now to other facets in rural development programs, and somewhat less primacy to productive inputs, but at the beginning these are the easiest instruments.

Attempts to increase productivity through making inputs available may be self-defeating if the prevailing policies are unfavorable--for instance, if agricultural prices are kept low, perhaps to subsidize wage goods of low-income urban consumers, farmers may have no incentive to increase their output. In such a situation the Bank will urge the government. to make the necessary policy changes.

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Experience has also taught us that projects must be replicable: it is necessary to use an approach which fits the income level of the country in question. For example, in a country where per capita income is \$150, and the government collects 12% of that in public revenues, 18 dollars per capita indicates the type of public investment projects that should be planned. Very few poor countries are willing to recognize that they have such limited public funds, or to admit that the appropriate standard of, say, housing, for that income level is a somewhat modernized version of a slum they already have. It is very tempting to knock down the slums that people have built for themselves and to build a few politically advantageous showpieces, which can house very few people. Much the same sort of thing has been true in irrigation, and many kinds of agricultural production and manufacturing. One of the most important lessons we can hope to learn from the Chinese experience is how to tailor development projects to the existing level of income so that they can be replicated for the whole population.

### III

I will now comment on our experience in four areas of inequality: <u>rural and urban poverty</u>; <u>regional disparities</u>, and <u>inequalities between nations</u>. The Bank started lending for rural development about 3 years ago with a very optimistic set of objectives. It was thought that, on a scale suitable

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for the income level of the country in question, a package could be introduced to enable small farmers to increase their output by 5% per year. Recognizing that the average growth of output is less than 4% per year for the agricultural sector as a whole in developing countries, and that small farmers are usually less efficient than more favored producers, to realize this goal would be quite remarkable. Nonetheless, those who are monitoring the projects assert that this is happening. Unfortunately, it takes a very long time before one really knows what has happened in any agricultural project, particularly if it involves building roads, irrigation and moving people. And we do not yet have much evidence on how much the rural community as a whole is benefitting from these projects--which is necessary if the strategy is to work.

It is also too early to measure what is sacrificed in basing one's approach on the alleviation of poverty. Will the returns on investment, measured in conventional GNP terms, necessarily be lower? So far the estimated rates of return on good rural development projects have been just as high as in more conventional projects, agricultural or not. However, I think there is likely to be a trade-off in terms of time: although the poor, who are less educated and have less access to inputs, will become as productive eventually, increases in production could be realized more quickly if the same resources were made available to people already used to modern technology.

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Urban poverty is not yet so urgent a problem for the poor poorest of the developing countries, where 80% of the poor are rural. But at higher levels of development--when incomes reach say \$400per capita--urbanization usually takes place so rapidly that not even an ideal society would be able to provide housing, transportation, sanitation and other facilities quickly enough.

Most Latin American countries now have more than half their populations in cities and towns. Bogota had 2 million people ten years ago; it has 4 million now; it will probably have 8 million in another ten years. Sao Paolo has 10 million, and it seems inevitable that this figure will double in another 12 or 13 years. Following the experience of the developed countries, it is likely that in another 20 years the Latin American countries will be 70% urbanized, and that ruralurban migration will then begin to taper off.

Thus, we can expect the problems of cities in developing countries to get worse before they get better. Only a few of the more advanced city governments have fully realized that they have to accept the squatters, and to install minimal facilities for them, rather than building middle class housing and trusting that the poor will not migrate. When the realization comes too late, the result is the worst of both worlds: the facilities are more expensive and difficult to install in squatter communities than if they had been planned from the start. In the end higher costs are incurred from lack of planning. For example, many people in Sao Paolo spend four

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to five hours each day commuting to work because of the lack of more accessible housing. Though for a long time studies of urban migrants found that they felt better off, subjectively, in the towns, despite their miserable living conditions, there is some evidence in Brazil that this is no longer the case. The rising infant mortality rate in Sao Paolo also suggests that conditions are actually getting worse for the poor, despite rapidly rising GNP in Brazil.

The Bank has recently begun work on urban poverty problems and is finding it more difficult than in rural areas to identify target groups who can be directly assisted. We cannot treat entrepreneurs in the informal or "murky" sector as though they were the urban equivalent of small farmers. Not only are the delivery systems to this sector very diffuse; we do not know how poor urban households behave, what they consume, what they produce. If a large number of producers live off a fixed amount of trade, and some of them are made more efficient, the others will be driven out of business and the income distribution will not be improved at all. If the volume of goods produced by the informal sector is increased, will the market be glutted and the prices fall? Until some of these questions are answered, it is difficult to plan projects directly for particular groups of people.

The income distribution in cities is clearly connected with the distribution of public investment. This being the case, the Bank may concentrate for the immediate future on

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simpler types of urban projects in which it has experience, such as making transportation more efficient; locating work places nearer where people live, and generally trying to plan the inevitable growth of cities in such a way that the poor do not become poorer after migrating.

A third aspect of the Bank's work on poverty and inequality, which I will just mention briefly, concerns backward regions in countries that are otherwise fairly prosperous. The largest pocket of poverty in the western hemisphere is Northeast Brazil, where there are 20 million people with living standards very much lower than in the rest of Latin America, let alone the other parts of Brazil. The Brazilian Government has channeled a great deal of investment to the area, but its effect on the poor has been relatively small. In addition to rural and urban investment projects to try to reduce such regional imbalances, the Bank is doing research on why they exist and are perpetuated.

The subject of the growing inequality among nations has received much popular attention. The dramatic changes in the world economy over the past few years--sudden rises and falls in raw material prices, the rise in the price of oil and unprecedented rates of world inflation--have had far more disruptive effects on the poor countries than on others. Though the U.S. has complained loudly, its sufferings are minimal compared with those of most countries in Africa and South Asia. The United States and most of Western Europe have

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managed to adjust to the changed economic circumstances, and of course the OPEC countries have done well. Many of the middle income developing countries, too, have been able to withstand the recent shocks without a great reduction in growth. But in the poorest countries, where there are large groups of people on the margin of survival, per capita incomes have been stagnating or actually declining. While this is partly the result of inefficient internal policies, it is largely the result of changes in the international environment.

IV

I turn now to possible remedies. It seems to me unlikely that the developing countries can expect the absolute volume of aid they receive to increase very substantially in real terms. The member countries of OECD's Development Assistance Committee, which tries to define aid policies for the market economies as a group, set a target of 0.7% of donors' GNP for development assistance on concessional terms. U.S. assistance came fairly close to that target 15 years ago, and at present several of the West European countries are meeting it. But the U.S. effort has declined drastically, so that it is now only around 0.26% of the U.S. GNP. This means that the target for the OECD countries as a whole has less chance of being met now than 10 years ago.

If the capital transfers to the developing countries cannot be increased very much, then at least what is available

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could be allocated more fairly amongst them. The OECD has been advocating a distribution of aid that conforms more closely to recipients' needs, with some'success outside the U.S., where political criteria predominate. The World Bank Group has been trying hard to improve the distribution of its own lending, so that IDA credits are made only to countries with per capita incomes under \$200. We have doubled the amount of concessional assistance for countries that were hardest hit by recent events in the world economy. We have thus been trying to redistribute concessional assistance both among countries according to their needs, and within countries, to redirect the lending program in favor of poverty groups. This policy involves somewhat higher risks than we should incur in merely maximizing GNP. If our aim were only to raise the growth rate of developing countries as a group, we should have gone on lending mainly to efficient countries such as Brazil, Korea and Taiwan (which themselves have the resources to eradicate poverty).

- 15 -

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