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COMPARATIVE ADVANTAGE VERSUS ECONOMIC DEVELOPMENT: STATE OF THE DEBATE

by

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Summary and Implications for Policy

The recent concern over the economic development of less developed countries has generally been accompanied by reappraisals of the theory of comparative advantage and the pattern of world specialization. This stemmed from the fact that the majority of the less developed countries of the world have been traditionally highly trade oriented, yet have achieved little progress in their material welfare over the years. Strong reactions and criticisms of trade arguments were thus invited, and centered on the pattern of LDC's specialization in the production of primary commodities.

The arguments qualifying free international trade policies for LDC's treated in the following pages may be categorized as: 1) Those generally attacking international trade as leading to a pattern of perverse specialization for less developed countries. Such arguments--often cast in terms of the secular deterioration of the terms of trade of primary producers, the backwash effects of international trade, international trade and dualism, and arguments relating to disguised unemployment--have lost much ground in recent years.

2) Other arguments that do not attack free international trade, per se, but emphasize the presence of real and monetary economic problems as well as those that are social and political. They imply that an unqualified pursuit of free trade policy by LDC's is not optimal. These arguments are cast in terms of more dynamic analysis and rest on more practical considerations. They are more difficult to discredit than the first group and have been the subject of much recent debate.

Apart from external forces that lie beyond LDC power to control, LDC's need to enhance their capacity to transform the structure of their economies, as well as to improve their ability to react favorably to external demand or price conditions. They need to increase mobility and improve communications within their economies, and to improve their administrative efficiency. Last, but perhaps of most importance, they need to recognize that any improvement in their economic effectiveness will to a large extent depend upon the importance they assign to investment in human capital in the form of education, health, and training. Arguments based on disguised unemployment, pointing to the possibility of LDC's developing a comparative advantage in the production of specific manufactures, often depends tacitly on the extent of improvements in the education and skills of the work force.

Comparative Advantage versus Economic Development: State of the Debate

The Diverging Rate of Economic Growth Between the Developed and the Less Developed Countries

The concern over the economic development of the underdeveloped countries is a rather recent phenomena. Since the end of World War II it has received widespread attention on the part of the developed countries and has become the major preoccupation of the less developed countries.

Although the classical tradition offered theories relating to economic growth over time, outlined certain variables which they believed to be the main determinants of growth, and expressed worries over possible economic stagnation, by the time of the neoclassical economists, attention was shifted to shorter run considerations. In view of the economic conditions of their time, the fear over a stationary state with subsistence wages ceased to be a matter of concern. Great technological and resource discoveries highly brightened the prospects of a sustained process of growth, and pushed the problem of economic development into the background of economic discussion.[1]

By concentrating on the study of the distribution of income, value theory, and general equilibrium theory, the neo-classicists limited their time horizon and became more interested in the interrelationship among the various components of the economy at a particular point of time, than in how these components behaved over long periods of time. To a large extent they viewed development as a gradual and harmonious process and

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[1]Robert E. Baldwin and Gerald M. Meier, Economic Development, Theory, History, Policy (New York: John Wiley and Sons, Inc., 1963), pp. 65-66.

expressed their optimism concerning its prospects. Saving and investment were mainly the function of the interest rate, technological progress was simply dependent upon the diffusion of knowledge, and long-run unemployment was inconceivable.[1] In emphasizing the interdependent and complementary nature of the economy, however Alfred Marshall introduced the concept of external economies which was later to be incorporated as an important consideration in outlining development policies.[2]

In contrast to their optimism concerning the internal functioning of the economic system, however, the neo-classicists sometimes expressed their worries over the opportunities for continued progress with regard to the long-run course of international trade.[3] This fear over the dangers associated with a growing export of manufactures was used as a basis for an argument for protection. The argument was cast in both political and economic terms: the fear of war and blockade, as well as the fear that countries which were specialized in the production of foodstuffs and raw materials would want to have their own industries, thus forcing the older industrial countries to a catastrophic reversal of their

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[1] Ibid., pp. 66-73.

[2] In his Principles, Marshall speaks of "...the growth of correlated branches of industry which mutually assist one another...". Alfred Marshall, Principles of Economics (London: Macmillan and Co., Ltd., 1930), 8th Edition, p. 317.

[3] Interestingly enough, they expressed their concern over the future development of the old industrial countries from an international point of view. Marshall noted that "...those who have surplus raw products to sell will have the upper hand in all international bargains... It is this consideration, rather than the prospect of any immediate danger which makes me regard the future of England with great anxiety." Thus, though favoring a general policy of free trade, Marshall was cautious about prescribing it as an absolute policy.

Alfred Marshall, "Memorandum on the Fiscal Policy of International Trade," Official Papers (London: William Hodge and Co., 1936), pp. 286-287.

development.[1] Since the end of World War II, however, and in the midst of the concern over the construction and rehabilitation of the European and other countries suffering from war destruction, the question was raised of the existence of a large number of countries, which have not managed to improve their material welfare over the years. It was increasingly becoming apparent that the world was not a homogeneous group in any economic sense, apart from political, social or cultural considerations. Talks and discussions were emanating from the United Nations and from almost all countries dividing the world into center and periphery, advanced and backward, industrial and primary producing, and developed and underdeveloped. A small group of countries mainly in North America, Western Europe, Australia and New Zealand were enjoying per capita national incomes of $1,000 a year of more, while a large group of countries in most of Asia, Africa and Latin America, had per capita incomes of $100 or less.[2] Furthermore, in view of the higher rate of population growth, the latter group of countries have been experiencing a lower rate of growth in per capita income thus widening the gap between the developed and the less developed countries.

Thus, it could no longer be taken for granted that economic development was a gradual and harmonious process. The fear of a Malthusian trap became a real issue and invited research into the causes of the poverty of nations. Contrary to the worries of the neo-classicists over the economic fortune of the old industrial nations, it was basically those

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[1] Gottfried Haberler, The Theory of International Trade (London: William Hodge and Co., 1936), pp. 286-287.

[2] United Nations Statistical Papers, "Per Capita National Product of Fifty-Five Countries: 1952-54," Series E, No. 4, 1957.

Table 1

ESTIMATED AVERAGE ANNUAL GROWTH RATES OF DEVELOPED AND LESS DEVELOPED COUNTRIES
Summary by Region

Region	Percent Change in Total Gross National Product				Percent Change in GNP Per Capita				Percent Change in Population		
	1950-1955	1955-1960	1960-1965	1957-58 Av. to 1964-65 Av.	1950-1955	1955-1960	1960-1965	1957-58 Av. to 1964-65 Av.	1950-1955	1955-1960	1960-1965
LESS DEVELOPED COUNTRIES											
Total	5.0%	4.5%	4.6%	4.7%	2.8%	2.2%	2.2%	2.3%	2.2%	2.3%	2.4%
Latin America	5.1	4.8	4.4	4.7	2.4	1.9	1.5	1.5	2.7	2.9	2.9
Near East		6.1	6.1	5.9		3.7	3.7	3.5		2.4	2.4
South Asia	3.6	4.2	3.4	4.4	1.5	2.1	1.0	2.1	2.1	2.1	2.4
Far East											
Including Indonesia		4.0	4.4	4.4		1.5	1.7	1.8		2.5	2.7
Excluding Indonesia		4.9	5.8	5.9		2.2	2.9	3.1		2.7	2.9
Africa			3.3	3.4	3.4		1.1	1.2			2.2
Other[a]			8.8	7.0			7.6	5.9			1.2
DEVELOPED COUNTRIES											
Total Including U.S.	4.7	3.3	4.8	4.7	3.5	2.1	3.6	3.5	1.2	1.2	1.2
Total Excluding U.S.	5.2	4.8	5.2	5.4	4.2	3.8	4.1	4.3	1.0	1.0	1.1
United States	4.3	2.2	4.5	4.0	2.6	0.5	3.0	2.4	1.7	1.7	1.5
Europe	5.0	4.5	4.5	4.8	4.3	3.7	3.5	3.9	0.7	0.8	1.0
Other Developed Countries	6.2	5.8	7.1	7.2	4.4	4.3	5.7	5.8	1.8	1.5	1.4

[a]Largely Spain and Puerto Rico

Source: Gross National Product, "Growth Rates and Trend Data by Region and Country, AID, Office of Program Coordination, Statistics and Reports Division, RC-W-138, June 15, 1966.

Table 2

PER CAPITA INCOME LEVELS IN SOME DEVELOPED AND LESS DEVELOPED COUNTRIES
(1965, dollar equivalents, per capita GNP in 1962 prices)

Region and Country	GNP per Capita ($)
Developed Countries	
Europe	
West Germany	1,724
France	1,664
Belgium	1,543
Denmark	1,766
Italy	863
Norway	1,694
United Kingdom	1,663
Austria	1,129
Ireland	835
Switzerland	2,043
North America & Oceania	
United States	3,312
Canada	2,273
Australia	1,789
New Zealand	1,847
Less Developed Countries	
Latin America	
Bolivia	162
Brazil	175
Chile	474
Columbia	286
Ecuador	202
Costa Rica	360
Paraguay	200
Near East and South Asia	
Turkey	233
Iraq	266
Jordan	240
Ceylon	139
India	81
Pakistan	87
Less Developed Countries (continued)	
Far East	
Burma	72
Korea	118
Malaysia	290
Philippines	136
Thailand	126
Africa	
Ghana	219
Kenya	86
Nigeria	104
Sudan	102
Tanganika	71
Uganda	74

Source: Ibid.

countries specializing in raw materials and primary products that have remained trapped in a low state of development with all its consequences of low per capita income, high rate of population growth and low levels of health and education.

Table 3

COMPARISONS BETWEEN DEVELOPED AND LESS DEVELOPED AREAS
(generally for 1964)

	Developed Areas	Less Developed Areas
Population:		
Total	610 millions	1,550 millions
Annual growth	1.3%	2.4%
Persons per square mile	50	60
Land:		
Total square miles	12 million	25.4 million
Agriculture land per capita	5 acres	2.7 acres
GNP:		
Per capita	$1,830	$155
Rate of growth annually (1957-58 to 1963-64)	4.4%	4.7%
Percent derived from agriculture	6%	35%
Electric Power per Capita:		
KWH per year	3,340	140
Health:		
Life expectancy	69 years	47 years
Calories per day	2,920	2,260
People per physician	800	3,650
Education:		
Percent literate	96%	35%
Students as percent of Population	19%	11%

Source: AID Selected Economic Data for the Less Developed Countries, June, 1966.

In addition, the degree of dependence of less developed countries on international trade has been typically high. In many cases exports of these countries constituted more than 15 percent of their national income,

and 50 percent or more of their export earnings were derived from one or two commodities. Such high dependence on international trade has led,, in recent years, to questioning any causal relationship between free international trade and economic development in general, and between specialization in primary production and economic development in particular. On the one hand, the theory of comparative advantage preached that efficient specialization and free trade by all participating countries would lead to the benefit and well-being of each. Yet, on the other hand, the persistence of such a great disparity between the income levels of the developed and less developed countries has invited reconsiderations and repraisals of free trade implications.

Theories of the Pernicious Effects of International Trade on the Economic Development in the Less Developed Countries

The theories discussed in this section contend that international trade far from promoting international equality and development has only tended to the advancement of the presently developed countries and leads to the retrogression of the underdeveloped countries. These theories have lost much ground in recent years.

A. The Alleged Long Run Tendency for the Terms of Trade to Deteriorate for Primary Producers

$$\frac{Px}{Pm}$$

This argument is mainly associated with the names of Raul Prebisch and Hans Singer. It was first advanced as a result of a U.N. study entitled, "Relative Prices of Exports and Imports of Underdeveloped Countries."[1]

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[1] U.N., "Relative Prices of Exports and Imports of Underdeveloped Countries," Lake Success, New York, 1949, pp. 21-24.

Table 4

SOME INFORMATION OF THE EXPORT ORIENTATION
OF SELECTED LESS DEVELOPED COUNTRIES
(1963)

Country	GNP in million $ 1962 prices	Exports in million $	Exports / GNP %	Leading Exports / Exports (av. '61-63) %
Philippines	4,015	727	18.1%	Sugar 23% Coconuts 30% Wood 20%
Burma	1,737	271	15.6%	Rice 65%
Indonesia	8,065	696	8.6%	Rubber 39% Oil 34%
Taiwan	1,925	332	17.2%	Sugar 27%
Thailand	3,245	466	14.3%	Rice 35% Rubber 21%
Vietnam	1,640	77	4.7%	Rubber 57%
Cyprus	364	61	16.75%	Minerals 40%
Greece	3,335	290	8.7%	Tobacco 36%
Syrian Arab Republic	800[1]	189	23.6%	Cotton 47%
Ceylon	1,478	363	24.5%	Tea 64%
Ecuador	1,147.2	148.7	12.0%	Banana 57%[2] Coffee 12% Cocoa 13%
El Salvador	718	153.9	21.0%	Coffee 48%[2] Cotton 24%
Dominican Republic	848	147.3	17.0%	Sugar 60%[2] Coffee 12% Cocoa 9%
Ghana	1,640.8	273.2	16.0%	Cocoa 70%[2]
Sudan	1,326.6	221.3	16.7%	Cotton 59%[2]

[1] In 1963 prices.

[2] For 1963

Source: Data mainly from AID, Economic Growth Trends, June 1965 and September 1965; U.N., Yearbook of International Trade Statistics, 1963 and 1964; and U.N., Statistical Yearbook, 1963 and 1964.

The study, using the British data as representing the terms of trade between primary and manufactured products, indicated that there was from 1876 on a trend of prices unfavorable to primary producers. On the basis of these findings, the point was made that not only are the terms of trade of primary goods deteriorating,[1] but they would continue to do so in the long run.

A number of other studies have been conducted to test this hypothesis, and have generally reached the conclusion that although the terms of trade showed short-run instability, there was no long-run trend discernable.[2]

In a more recent study entitled, "The Long Run Terms of Trade Between Agriculture and Manufacturing," Professor Morgan points out that the British series on which the hypothesis of the deteriorating terms of trade was founded provides an inadequate basis for interpretation. Examination of British data available for longer periods indicate that findings based on 1876-1948 calculations are only an a-typical segment. The terms of trade of primary products are believed to have improved from 1801 to 1860 or 1870, before the marked decline began. The series indicated both short run and long run instability. The British data have also been shown to embody two systematic biases which tend

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[1]To demonstrate the magnitude of the problem Prebisch stated that with the same amount of primary products, only 63 percent of the manufactured goods which could be bought in the 1860's were to be had in the 1930's, i.e., an average of 58.6 percent more primary products was required to purchase the same quantity of manufactured goods. Raul Prebisch, "The Economic Development of Latin America," Economic Bulletin For Latin America (February, 1962), p. 4.

[2]Studies by Colin Clark, The Conditions of Economic Progress (London: Macmillan and Co., 1940), p. 453; and Albert H. Imlah, "The Terms of Trade of the United Kingdom, 1798-1913," The Journal of Economic History (November 1950), pp. 177-82, support the view that there is no clear cut long run tendency in the direction of movement of terms of trade.

to understate the position of the world's primary producers. First, qualitative improvements appearing predominantly in the area of manufactures, have not been adequately taken into account. Second, the fall in transportation costs have tended to favor the primary products. Furthermore, by examining data of countries[1] other than that of the U.K., Morgan concludes that there is a wide variety of experience of different countries which suggest diverse supply and demand conditions in the various countries for the different commodities.[2]

Both Prebisch[3] and Singer[4] dismissed the possibility that the unfavorable change in price relations may be a reflection of changes in the productivity of the manufactured exports of the industrialized countries relative to those of food and primary materials of the less developed countries, and concluded that international trade was harmful to the latter.

> "Foreign investment of the traditional type which sought its repayment in the direct stimulation of exports of primary commodities, either to the investing directly or indirectly through multilateral relations, had its beneficial cumulative effects in the investing country, and the people of the latter, in their capacity as consumers, also enjoyed the fruits of technical progress in the manufacturing of primary commodities thus stimulated and at the same time, in their capacity as producers, enjoyed the fruits of technical progress in the

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[1]Mainly that of U.S., India, Japan, New Zealand, Brazil, and Union of South Africa.

[2]Theodore Morgan, "The Long Run Terms of Trade Between Agriculture and Manufacturing," Readings in Economic Development, edited by T. Morgan, G.W. Betz, and N. Choudhry (San Francisco: Wadsworth, 1963).

[3]Raul Prebisch, op. cit., p. 4.

[4]Hans Singer, "The Distribution of Gains between Investing and Borrowing Countries," International Development: Growth and Change (New York: McGraw Hill Book Company, 1964), p. 169.

production of manufactured commodities. The industrialized countries have had the best of both worlds, both as consumers of manufactures and as producers of raw materials."[1]

The evidence presented in support of the theory of the deterioration of the terms of trade rests upon the two following causes: (1) the existence of monopolistic machinations[2] in the developed countries. Thus, labor in the developed countries can get higher wages because of organized trade unions. (2) The declining demand for primary products (based upon Engel's law that the consumption of food is a decreasing function of income). Concerning the first point, it is argued that the movement of money wages and prices should not be regarded as sufficient indication of prices in the international market. As Morgan puts it:

> "World supply and demand are the determinants of world price levels. Any country whose unions had been especially successful in hiking money wage rates would find itself in a competitive squeeze. Its sales of exports would slip, its balance of payments turn adverse; and if domestic prices did not in the longer run fall, the exchange value of its currency would fall instead."[3]

Thus the real relevant question should concern the relation of prices to productivity and in this regard a study of the factorial terms of trade provides a more accurate and better index of the country's gain or loss than the commodity terms of trade. If the productivity in the export industries is increasing more rapidly than the fall in export prices, a country's real income can rise despite a deterioration in its commodity

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[1]Singer, Ibid., p. 167.

[2]Prebisch states that "The characteristic lack of organization among the workers employed in primary production prevents them for obtaining wage increases comparable to those of the industrial countries and from maintaining the increases to the same extent...", op. cit., p. 6.

[3]Morgan, op. cit., p. 283.

terms of trade. Moreover, any less developed country that attempts to improve its relative position via increasing the price of its exports and paying higher wages would be running the risk of pricing itself out of the world market. Similarly the less developed countries as a whole cannot pursue this policy without running the risk of a more than proportionate fall in demand for their products, and inviting further research for substitutes for primary products by the developed countries.[1]

The argument relating to the declining world demand for primary products is more substantive. Yet, it should not be utilized as an argument to abandon the production and trade of those primary commodities in which these countries have traditionally held a comparative advantage. The primary products area heterogeneous group some of which are definitely facing a rising world demand. In addition to petroleum and its products, such primary commodities are forest products, fats and oils, rice, coffee, and tin and its products have experienced high demand in recent years. Thus within the general framework of comparative advantage, each country should take advantage of the export growth prospects of different commodities. M. Flanders also points out that it is known that the income elasticity of demand for food is higher among lower-income groups than among higher-income groups, and hence as less developed countries grow an increasing demand for food may compete with imports, and a growing demand for the export good for domestic consumption may be expected.[2]

A major criticism of the terms of trade argument for protection, thus, is that preoccupation with this aspect of the problem (of the economic

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[1] T. Morgan, op. cit., p. 283.

[2] M. Flanders, "Prebisch on Protectionism: An Evaluation," Economic Journal (June 1964), p. 324.

development of the less developed countries) presupposes the permanent commitment of resources to the existing lines of production, particularly in the export sector. Although this view may be plausible for short time considerations, it loses much of its significance when applied to the question of development which calls for longer-run considerations. An unfavorable movement in the export prices of one country relative to its import prices may induce a more advantageous allocation of resources. This, though, does not necessarily imply movement of the factors from their existing employment, but may call for reallocation of the increments in the supply of resources.

B. The Backwash of Backsetting Effects of International Trade

Extending the analysis of the forces making for regional inequality to the international sphere, Myrdal advances the argument that although international trade has certain favorable spread effects, it has certain undesirable backwash effects which it inflicts upon the participating primary producing countries. He thus maintains that:

> "...trade by itself does not lead to such a development, it rather tends to have backwash effects and to strengthen the forces maintaining stagnation or regression."[1]

If market forces are left to operate, he holds, they will tend cumulatively to accentuate international inequalities, through the movements of capital and labor.

Myrdal discusses the development process in the context of his theory of circular causation through which he attempts to analyze the causal interrelations within a system as it interacts under the influence of external forces and the momentum of its own internal processes. The

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[1]Gunnar Myrdal, Economic Theory and Underdeveloped Regions (London: Gerald Duckworth and Co., Ltd., 1957), pp. 52-53.

application of this hypothesis, he believes, disconnects traditional economic theory from any realistic study of the process of development, such a realistic study requires the consideration of non-economic factors left out of the classical analysis. However, by admitting that the weak spread effects between countries are largely a reflection of the weak spread effects within the less developed countries themselves (which are in turn a function of their low level of development), Myrdal simply entangles us in a kind of circular reasoning. If the circular causation making for inequality is in constant operation among regions of the same country as between different countries, then the burden of such disequilibria is, perhaps, primarily a function of domestic forces. The problem thus becomes more fundamental than merely an argument against free trade.

Emphasizing the importance of the degree of responsiveness of the local environment to the potential developmental transmission mechanism of international trade, Harry Johnson maintains that a favorable environment may be lacking thus halting the operation of the spread effects. Population growth can also nullify any increase in export earnings and restrict increases in per capita income, hence producing a less favorable environment for the development of local industry. Similarly a traditional social organization whose existence and perpetuation had been the objective of either a colonial power or a local administration may prevent agriculture from becoming a dynamic sector. The development of an industrial structure may, furthermore, by impeded by the lack of the requisite training facilities, the lack of an organized capital market, and the discrimination against entrepreneurship.[1]

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[1] Harry Johnson, Economic Policies Toward Less Developed Countries (New York: Frederick A. Praeger, 1967), p. 51.

Rejecting the view that international trade had operated as a mechanism of international inequality, G. Meier singles out three conditions that he regards as possible explanations of the lack of the "carry-over" stimulus from the export sector, namely, (1) the differential effects of the various export goods according to the characteristics of their production functions, (2) market imperfections, and (3) socio-cultural impediments within a poor country. Among the important factors he emphasizes are the linkages emanating from the production of particular export commodities, the distribution of income resulting from the use of different factor combinations and its impact on the level of savings, and the contribution to the improvement in skills and organizational activities.[1]

To offset "export pessimism" kinds of arguments, it is reasonable for the less developed countries to try to specialize as much as possible in exports with the highest growth potential, to be able to shift resources according to demand prospects within their traditional exports, and to take advantage of the new export opportunities in manufactured goods. The experience of Japan and the most recent of Hong Kong, Puerto Rico, and other countries should be enlightening in this respect.

C. International Trade and Dualism

It is argued that the forces of international trade have led to the creation of dual economies in primary producing countries. This is, furthermore, identified with the development of the export sector by foreign capital leading to a pattern of resource utilization deterring economic development in these countries. In his article entitled, "The

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[1]Gerald M. Meier, Leading Issues in Development Economics (New York: Oxford University Press, 1964), p. 373.

Distribution of Gains between Investing and Borrowing Countries," Hans Singer asserts that:

> "The export industries in underdeveloped countries--metal mines, plantations, etc. are often highly capital intensive industries supported by a great deal of imported foreign technology. By contrast, production for domestic use, especially of food and clothing, is often of a very primitive subsistence nature. Thus the economy of the underdeveloped countries often presents the spectacle of a dualistic economic structure: a high-productivity sector producing for export co-existing with a low-productivity sector producing for the domestic market."[1]

Singer casts his argument against foreign investment leading to specialization in primary production in terms of questions of ownership and opportunity costs. He argues that although the investment was geographically located in the LDC's, yet economically, speaking they were really an outpost of the economies of the investing countries. Thus the main secondary multiplier effects of investment took place not where the investment was physically located but--to the extent that the returns from these investments were diverted to the home country--where the investment came from. The second argument, resting upon the principle of opportunity costs, asserts that although the plantations and mines may be more productive than the domestic industries that might have developed in those countries had they not become as specialized as they are now in the export of food and raw materials, i.e., in terms of foregone opportunities.[2]

With respect to the first argument it could be said that although the distribution of the returns from foreign investment in the LDC's may not have been favorable to them, this does not constitute an argument

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[1]Singer, op. cit., p. 162.

[2]Ibid., pp. 163-165.

against international specialization. There is no a priori reason to believe that the gains from exports and technical progress could not be retained in the LDC's through some fiscal or other measure, improving the distribution of export proceeds. The important thing in this respect, as Singer still recognizes, is that absorption of the fruits of technical progress in primary production is not enough. What is needed is absorption for investment and productive consumption. If the national increment from foreign investment is absorbed in higher wages, for example, then unless domestic savings and investment are expected to rise, or labor productivity to increase accordingly, it may prove to be an inhibiting factor.[1]

The second line of argument based on opportunity costs actually represents a confrontation of an existing pattern of resource utilization with some ideal one. Meier believes that there is little foundation to the assertion that an LDC would have been much better off in terms of generating domestic investment and entrepreneurial talents had there been no foreign investment. The real choice, he proceeds, was not between employing the resources in the export sector or in the domestic sector, but rather between giving employment to the surplus resources in export production or leaving them idle.[2]

It is also important to note that this visualized dichotomy between production for export and the domestic market could not be generalized as the pattern in existence in all LDC's. Production for

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[1]Inflationary pressures may be increased resulting in higher prices throughout the economy including the export sector thus limiting the competitive status of the country.

[2]Meier, op. cit., p. 371.

export has in many LDC's taken place within the same traditional methods of production. There are actually two main processes through which the production for exchange may have come about in any typical LDC. One process is the development of the exchange sector by large scale foreign enterprise, using advanced technology and heavy capital investment as the usual form for mineral production and plantation agriculture. The other process would be the transfer of some producers within the traditional structure to production for the market. The importance of this type of "peasant export production" is stressed by Myint in view of the fact that its expansion has been spectacular in a number of Asian and African underdeveloped countries, and that it represents a very high percentage of the total exports of many less developed countries.[1]

The fact still remains, however, that although almost all less developed countries have experienced production for exchange in one form or another, the exchange sector which usually had its first stimulus for export production had not provided a propelling force to pull the rest of the economy from its stage of stagnation. One possible

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[1]Hla Myint, The Economics of the Developing Countries (New York: Frederick Praeger, 1964), p. 39.

(According to his findings--using 1870 as a base--the value of peasant rice exports from Burma and Thailand increased about 10 to 13 times by 1913 and up to 20 times in the late 1920's. The value of Ghana's cocoa exports increased about 13 times during the 1913-53 period, and during the same period, Nigeria expanded her exports of oil and oil seeds by 7 times in addition to its expansion of cocoa exports.)

Peasant export production also represents a high percentage of the total exports of some less developed countries, for example, it represented almost 2/3 of Burma's export up to 1963. Cocoa contributed 50% to the value of Ghana's total exports in 1913 and 70% in 1963. Similarly in 1963 oil and oil seeds contributed 70% to Nigeria's total exports and cotton contributed almost 50% of Syria's total exports and 59% of Sudan's total exports.

explanation lies in the distribution of production roles in the exchange sector. As Myint points out specialization in the peasant economies did not mean a greater degree of division of labor leading to higher productivity and economies of production. In the case of mines and plantations the perpetuation of low wages and low productivity resulted from the cheap labor policy which did little to raise the technical efficiency of the indigenous people.[1] It is important to recognize, however, that whereas the development of the exchange sector might have resulted in some problems to the less developed countries, further economic development necessitates larger expansion of this sector. Thus the fact that export production both within the traditional economy and in the enclaves has failed to transmit technological advancement to the rest of the economy does not necessarily imply that it is inherently incapable of so doing.

D. The Problem of Disguised Unemployment

Closely related to the previous concepts in their bearing upon the problem of the pattern of resource allocation in the less developed countries is the concept of disguised unemployment.

According to Professor Ragnar Nurkse, the subject of disguised unemployment must be viewed in the context of the general population problem in many LDC's. About two-thirds of recent increase in world population has taken place in the LDC's, mainly as a result of the fall in death rates. Since it is in these countries that the majority of the population is engaged in agriculture, rapid population

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[1]Myint, Ibid., pp. 51 and 64.

growth would lead to excess population on the land. The situation is aggravated by the fact that population is increasing while land, capital and techniques of production remains relatively unchanged; at the same time alternative employment opportunities may also be lacking.[1]

The concept of disguised unemployment, with the consequence that the excess population can be so great in relation to land and capital that the marginal productivity of labor is reduced to zero, and the extent to which this constitutes a free potential for industrialization in the LDC's has been, however, a subject of argument. Strictly defined, the concept of disguised unemployment is used to refer to a situation where the removal of some units of labor, other things being equal, will leave the aggregate product undiminished. A most important distinction that should be made in this regard, however, is between the amount of labor and number of laborers. The relevant point is not that too much labor is being used, as that too many laborers are supplying the required amount. As emphasized by many economists,[2] there is nothing wrong with applying labor to land until the marginal product of labor falls to zero if we assume that no wages are paid and that labor is free within the family. Disguised unemployment, in this context, takes the form of a smaller than acceptable normal number of working hours per head per unit of time, resulting in the situation where although the marginal productivity of labor is just equal to zero at the margin, the marginal productivity of the laborer is zero

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[1]Ragnar Nurkse, "Excess Population and Capital Construction," Malayan Economic Review (October, 1957), p. 1

[2]See H. Myint, op. cit., p. 37 and G. Leier, op. cit., p. 83.

over a wide range. Thus it follows that if each laborer is working less than the normal hours of work per laborer, the same total product could be produced by a smaller number of laborers working the normal hours, and part of the labor will be surplus without a reorganization of production through a change in the production techniques or an increase in the supply of another factor.

Empirical studies in this field have led to inconclusive results. Studies by Keller and Stevens in Thailand; by Majumdar and Lewis in India; and by Rosenstein-Rodan in South Italy confirm the existence of surplus agricultural population in the respective countries. However, studies done by Oshima, by Schultz in India and by Pepelasis and Kotopoulos in Greece do not find such a surplus.[1]

This apparent inconsistency in findings may have resulted from a general tendency to overlook the implication of the *ceteris paribus* assumption. Agriculture can release a lot of labor without loss of output and lead to an increase in industrial output at the same time only under such conditions as an increase in the working hours of farm laborers, an improvement in the methods of production in agriculture, an increase in the skill of farm laborers, a change in the social habits resulting in a new spirit and an increased willingness to move to and live in cities and to work in factories, a technological change in industry favoring the employment of unskilled rural laborers, and the provision of capital and other cooperating factors such as entrepreneurial and managerial skills in larger quantities and better

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[1] A summary of these studies has been presented by Inderjit Singh in "The Role of Agriculture in Economic Development: A Survey," mimeo, University of Wisconsin-AID project, May, 1966

quality.[1] All of these changes have happened in the developed economies and have happened to various extents in less developed economies. In fact they constitute economic development. Such changes and improvements can be speeded up by the appropriate policies in the economic, technological, sociological and cultural spheres.

The other challenging aspect of the concept of disguised unemployment, besides the question of its practical or hypothetical existence, is its zero opportunity cost of labor implication. The employment of the surplus labor, if existent, in industry would necessarily entail a variety of costs, the most important of which are the costs of training. It is not unrealistic to assume that a surplus labor factor that was incompetent in agriculture would probably be more so in industry. Other major costs appear as the following: 1) The costs of transferring labor from rural to urban centers; 2) the social cost of the extra resources required for the production of incentives needed for keeping the agricultural output from decreasing; 3) the costs of capital goods that would be used in coordination with labor in whatever productive process they shall be employed; 4) the extra social overhead costs necessary for the accommodation of a larger urban population in terms of housing, public services, etc., and 5) the cost of the extra consumption to result from the increasing wage incomes.

Needless to say, the concept of disguised unemployment should not be confined to the agricultural sector. Evidences of com-

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[1]Gottfried Haberler, "Critical Observations on Some Current Notions in The Theory of Economic Development," L'Industria, No. 6 (1957), pp. 3-5; reprinted in Meier, op. cit., p. 73.

parable states of surplus labor are to be found in varying degrees in the urban areas in such occupations as petty trading, service industries of different sorts including domestic service, and in small scale industries.[1] The essential problem, therefore, ". . .is how to raise productivity and how to transfer labour from less to more productive work, irrespective of whether it is agricultural or non-agricultural."[2]

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[1]H. Myint, op. cit., p. 89. He states that it has been estimated that in India only a tiny proportion of, amounting to 2%, the working force (total) are fully employed in the modern industrial sector.

[2]Ibid.

The Need for a More Dynamic Analysis

Though we reject the previous views regarding the pernicious effects of international trade in leading to a pattern of perverse specialization for the LDC's, the fact still remains that there are certain economic as well as social and political problems existent in the LDC's which render a static application of the theory of comparative advantage unoptimal. The applicability of the comparative cost doctrine, to present day conditions of the LDC's should be viewed within a more dynamic setting to take account of certain market imperfections as well as to incorporate certain growth elements which a static analysis is incapable of handling.

Both the modern Ricardian and the Heckscher-Ohlin versions of the comparative cost doctrine suffer from restrictive assumptions, the deviation from which calls for a more cautious interpretation of their implications. Under the assumptions of full employment, perfect competition, complete mobility of factors of production domestically and complete immobility internationally, the modern Ricardian version states that the opportunity cost of a commodity (which is the value of the factors used in its production in their best alternative employment) is equal to its market value. Market prices of factors and commodities can thus be used to determine comparative advantage under competitive conditions. The trouble, therefore, lies not in the fact that long-term changes are ignored, but in the assumption that they are reflected in current market prices.[1] The Heckscher-Ohlin version,

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[1]Hollis B. Chenery, "Comparative Advantage and Development Policy," American Economic Review (March, 1961) p. 19.

stating that a country will specialize in the production of those commodities which make the most intensive use of its relatively most abundant factors of production, suffers from the limiting assumptions of identical production functions and qualitative similarity of all factors of production for all countries. Furthermore, both versions abstract from any social or political considerations.

In discussing trade theory versus growth theory, some economists have noted that "since trade theory is at bottom a theory of how income increases by means of international trade, it is really nothing more than a special case of growth theory which purports to explain how income increases by whatever means."[1] Growth theory does not so much ignore comparative advantage and the possible benefits from trade, as it is mainly concerned with the dynamic aspects, such as the stimulus that an increase in exports provides to the development of related sectors or the function of imports as a carrier of new products and advanced technology. Within this sort of framework, growth theorists may suggest investment criteria which are to varying extents in opposition to those derived from considerations of comparative advantage. Chenery suggests that the conflict between those two approaches to resource allocation may stem either from differences in assumptions or from the inclusion of factors in one theory which are not present in the other.[2] Four such assumptions relevant to growth theory are often cited as being inherently different from those underlying the

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[1]Joseph E. Haring, "Dynamic Theory and Growth in Poor Countries," Kyklos, Vol. XVI (1963), p. 334.

[2]Chenery, op. cit., p. 20

the comparative cost doctrine:[1]

1) Current factor prices do not reflect opportunity costs.

2) Change in the quality and quantity of factors of production over time, partly as a result of the productive process itself.

3) The importance of economies of large scale production.

4) Complementarity among commodities may be dominant in both producer and consumer markets.

Chenery further adds, that these four assumptions of growth theory lead to the following requirements for an analytical framework to be used in determining comparative advantage in a growing economy:

1) Recognition of the possibility of structural disequilibrium in factor markets.

2) Inclusion of indirect (market and non-market) effects of expanding a given type of production.

3) Simultaneous determination of levels of consumption, imports and production in interrelated sectors over time when decreasing costs result from the expansion of output.

4) Allowance for variation in the demand for exports and other data over time.

It may be worthwhile, at this point, to summarize some factors believed to be in existence in the majority of the less developed countries, and which call for modifying the direct implications of the theory of comparative advantage. These can be classified as real and monetary economic factors, and social, political and cultural factors.

Real Economic Factors

The analysis of these factors points to the need for some form of government intervension to remedy the existence of domestic distor-

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[1] Ibid. and Haring, op. cit., p. 376.

tions effecting a divergence between domestic prices and domestic opportunity costs. Although the actual prevalence of such considerations is still the subject of some debate, a wider area of disagreement regarding the proper and precise measures to be followed to remedy such distortions by individual less developed countries characterizes the state of debate and practice. Many economists would prefer redressing these disturbances by such measures as education,[1] retraining, strengthening capital markets and transportation, and land reform systems to deal with factor immobility, especially labor, rigidity of factor prices, and external economies and diseconomies. There is also preference for recourse to subsidies and taxes, ideally at the production level, as against tariffs and import restrictions. In his treatment of this subject Harry Johnson[2] limited the definition of protection to policies which "create a divergence between the relative prices of commodities to domestic consumers and producers, and their relative prices in world markets." Within the wider concept of protection including subsidizing domestic production, Johnson demonstrates that protection by subsidies may be economically desirable in certain cases of domestic distortions as opposed to protection by tariffs.

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[1]Margaret C. DeVries in "Trade and Exchange Policy and Economic Development: Two Decades of Evolving Views," Oxford Economic Papers (March 1966). On page 24 the author cites Viner, Haberler and Meier as advancing these views.

[2]Harry G. Johnson, "Optimal Trade Intervention in the Presence of Domestic Distortions," Trade, Growth and the Balance of Payments: Essays in Honor of Gottfried Haberler, by Robert E. Baldwin, et.al, eds. (Chicago: Rand McNally and Company, 1965), p. 6.

1.) External Economies and Diseconomies[1]

The presence of such distortions in the markets for commodities leads to a deviation between social and private costs and benefits. This may stem from the existence of cost raising or cost reducing factors which would come into play if one industry expanded and another contracted, factors which for some reason are not, or not sufficiently, allowed for in private cost calculations. Johnson, however, proceeds to demonstrate that where a country specializes in the wrong direction the new point of production will necessarily result in a low value of output at the international prices with trade than with no trade. Yet through the possibility of exchange the point of consumption may be on either a higher or lower indifference curve than that of the closed economy. He further demonstrates that the gain the value of a country's output at world prices resulting from the imposition of a tariff on imports to raise their prices above the world prices--to compensate for the distortion where the private cost of domestically produced importables is above their social cost--may be outweighed by a consumption loss thus leading to a lower level of economic welfare.[2]

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[1] $p = G(X_1, I_1, C_1, \ldots X_2, I_2, C_2, \ldots)$. This general expression of external economies provided by Scitovsky includes both direct or non-market interdependence among producers and interdependence through the market mechanism..., i.e., includes both technologied and pecuniary externalities. Strictly interpreted, it states that the profits of one firm depend not only on its own output and factor inputs but also on the output and factor inputs of other firms. Tibor Scitovsky, "Two Concepts of External Economies," in Economics of Underdevelopment, ed., by Agarawala and Singh (New York: Oxford University Press, 1963), p.300.

[2] Ibid.

In the case where a country specializes in the right direction, but with the level of international trade less than the optimal, an export subsidy on the commodity whose price exceeds its comparative cost is often recommended to overcome the distortion.[1] Maximum welfare, however, is attainable through subsidizing production[2] thus eliminating any discrimination between domestic and foreign markets.[3]

2) Factor Immobility Coupled with Rigid Factor Prices

In the case where there is immobility of factors of production alone, international trade can still be demonstrated to be beneficial. Factor immobility by itself does not constitute a distortion of the first-order conditions of Pareto optimality, so long as prices are flexible and will reflect the alternative opportunity costs of factors to the economy.

In his graphical exposition[4] Harry Johnson agrees with Haberler that depending upon the degree of factor immobility and factor price rigidity production will fall to some level within the production possibility curve, generally producing less of B and possibly no more of A than in the no-trade point P. Yet he maintains that

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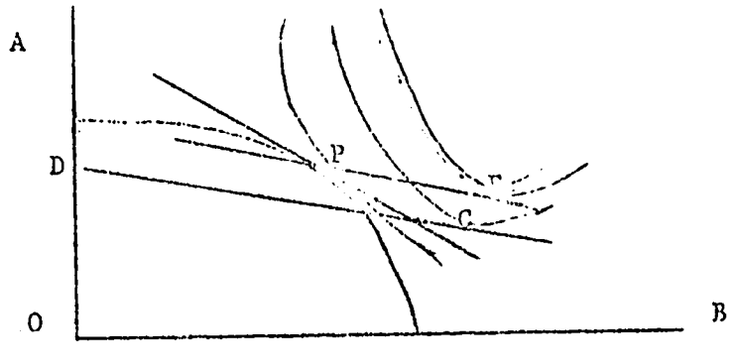
[1]Johnson emphasizes that to be effective the subsidy on exports rather than on production has to be accompained by measures to prevent reimportation. Ibid.

[2]In the case of distortions in the factor market, e.g., where the price of a factor does not reflect its opportunity cost, a policy of subsidizing the production of the commodity overpriced by the distortion or taxing the production of the other commodity would maximize welfare subject to the inefficiency of factor use. Correction of the distortion requires a subsidy on the use of that factor in the industry in which its marginal productivity is required to be higher or a tax on its use in the other industry. Johnson, Ibid., pp. 24-25.

[3]Johnson, ibid., pp. 20-21.

[4]Ibid., p. 16.

the country may be better off with trade than with no trade even in the extreme case where the production of B ceases (point D), for via exchange



the country may reach a higher indifference curve than under no trade. The country's welfare may, however, be maximized by subsidizing the production of the original output level of B thus permitting the payment of the minimum factor prices desired as well as allowing for the possibility of international exchange.[1]

It is important to note here that Harry Johnson's treatment rests purely on analytical grounds, and thus abstracts from the administrative and political costs of the alternative forms of government intervention. The wider resort to tariff imposition, rather than a structure of subsidies, by less developed countries may be a reflection of the limitations of their administrative capacities, as well as the appropriateness of tariffs versus subsidies, and the requirement of levying taxes to finance them, in terms of political costs.[2]

3) <u>The Infant Industry Case</u>

The case for the infant industry argument is almost as old as

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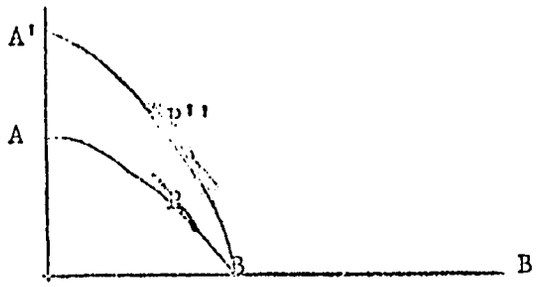
[1] <u>Ibid.</u>, p. 18.

[2] Tinbergen defends protection on similar grounds, e.g., where it is difficult or impossible to organize subsidies for industries below their optimum size or vital industries such as agriculture which have to be operated even at a loss to prevent an interruption of supplies. Also where it is impossible to finance measures designed to enhance the mobility of capital and labor.

Jan Tinbergen, <u>Shaping the World Economy</u> (New York: Twentieth Century Fund, 1962), pp. 42-43, 64-66, and 1939-42 cited from Margaret DeVries, <u>op. cit.</u>, p. 29.

old as the free trade argument. The infant industry argument basically calls for temporary protection to speed the establishment and development of potentially profitable industries. Its essence with regard to international trade and development, however, centers in the implication that a movement along the production possibility curve of a country brings about an irreversible shift of the curve itself.



Thus if industry A is protected and expands, methods of production will improve, and the short run curve AB will assume the long run shape A'B shifting the production point to P''. Haberler maintains that in this new situation trade may or may not take place, and the country may export either A or B, i.e., the trading point may be on either side of P'' depending upon the 'demand conditions.' [1]

The infant industry argument, however, should be qualified in so far as the selection of the infant industries may be arbitrary, that protection may become widespread and permanent, that protection may delay development of the industry as it insulates it from the dynamic forces of foreign competition, and that the industry may not be successful in the first place.[2]

Professor Baldwin, similarly, warns against a simple inter-

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[1]Haberler, op. cit., p. 239.

[2]Jacob Viner, "Gains from Foreign Trade."

pretation of the infant industry argument for protection. He states that if a temporary duty is to be effective in permanently raising social welfare the spillover--in the form of technological knowledge--must create an irreversible change in factor of market conditions. Also that the spillover must not benefit other firms in the same industry, if the domestic market is large enough to support more than one firm. In the absence of these conditions, a duty protecting all firms in the industry will prove ineffective in bringing about an increase in social welfare due to the existence of costs connected with acquiring knowledge that cannot be internalized by a firm.[1]

Thus, as the case in some less developed countries, due to the existence of market imperfections, the government acts as the entrepreneur to initiate production in industries which are believed will become successful in the long run. In fact, Harry Johnson maintains[2] that where the social returns on the learning process exceed the private benefits, the government may appropriately subsidize the learning process through financing or sponsoring pilot enterprises and making the techniques and experience developed accessible to all potential producers. The government may also subsidize on-the-job training through direct financing or establishment of training institutions.

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[1]Robert E. Baldwin, "The Case Against the Infant Industry Argument," mimeo, University of Wisconsin, 1966 (September).

[2]Harry Johnson, op. cit., p. 28

Long-term Economic Problems

1) Instability in Export Earnings

Although some fluctuations in prices and export earnings for all commodities are to be expected as normal phenomena of trade, the prices of primary products in international trade have been believed to vary more sharply from year to year than those of the majority of manufactured goods. According to a U.N. study, "Instability in Export Markets of Underdeveloped countries,"[1] year to year fluctuations in prices for the period 1901 to 1951 averaged about 14 percent. The products which showed the widest range of price fluctuations were copra, cotton, hemp, linseed, rubber and shellac. The annual rate of cyclical fluctuations amounted to 13 percent thus almost equalling the year to year price movements, and the long term price movements, determined on a seven year average, ranged between 4 and 5 percent per year.

The volume of exports of primary products according to the same study exhibited greater fluctuations on a year to year basis than the price movements. Ranging between 13 and 19 percent, the average year to year fluctuations in the volume of exports was believed to have contributed more to instability of earnings for primary producers than changes in prices.

The fluctuations in export proceeds from primary products were shown to be even greater than either price or volume changes. The average year to year fluctuations in export proceeds averaged 23 percent between 1901 and 1950. The cyclical fluctuations amounted to

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[1]United Nations, "Instability in Export Markets of Underdeveloped Countries," in Morgan, Metz, and Choudhry, op.cit., p. 250.

an almost equal percentage of 22 percent per year, and the long run fluctuations amounted to 6 percent per year.[2]

Table 1

Summary of Year to Year, Cyclical and Long-Term Fluctuations in Export Proceeds from Major Primary Commodities, 1901 to 1950
(average percentage fluctuation per year)

Commodity	Year-to-Year		Cyclical		Long-Term	
	Money Value	Real Terms	Upswing	Downswing	Rising Phase	Falling Phase
Cocoa	20	24	24	23	6	4
Coffee	21	19	18	20	5	5
Copper	21	21	26	20	5	6
Cotton	26	23	25	24	6	4
Hemp	22	22	12	27	5	8
Jute	22	20	20	24	7	6
Linseed	23	27	24	27	6	7
Petroleum	19	19	16	11	7	6
Rice	21	23	13	17	5	3
Rubber	36	35	26	28	9	8
Silk	19	12	24	19	6	6
Sodium Nitrate	22	21	26	32	5	7
Sugar	23	27	21	23	6	7
Tea	15	15	14	13	5	6
Tin	25	23	20	24	5	7
Tobacco	18	18	13	18	5	6
Wheat	33	32	42	33	8	7
Wool	15	16	16	15	4	6
Average, 18 Commodities	±22.6	±22.0	+21.7	-22.1	+5.8	-6.1

Source: U.N., op. cit., p. 254

LDC's have, thus, often been advised to adopt a policy of diversification as a means of redressing the unfavorable occurence of export instability. In a more recent study by B.F. Massel,[2] however, an attempt was made to investigate the possibility of whether diver-

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[1]Ibid., pp. 252-254.

[2]B.F. Massell, "Fluctuations in Export Earnings," American Economic Review (March 1964), pp. 47-63.

sification was likely to furnish a greatly increased measure of stability in export earnings. This was done via an empirical search with a sample of 36 developed and less developed countries to determine the extent to which fluctuations in a country's export earnings tend to be associated with the level of concentration of a country's exports.[1]

The measure of instability, the average annual percentage rate of change, trend corrected, showed some higher tendencies for those countries in the sample belonging to the LDC's group,[2] yet the overall distribution was believed to be relatively uniform. The measure of concentration[3] turned out to be higher for LDC's as a whole.

Regression analysis of the relationship between instability and concentration of exports, however, yielded positive but low coefficients of determination thus indicating, contrary to popular doctrine, a low correlation between instability and concentration. This contradiction may be explained by the large differences in the volability of different commodities resulting from both supply and demand

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[1]The model used was a linear regression with export instability as the dependent variable, and explanatory variable being mainly the country's concentration (for that purpose measures of primary products and geographical concentration of exports were utilized).

[2]The highest value was that for Malaya.

[3]Known as the gini Coefficient

$$C = \sqrt{\sum \left(\frac{x_i}{X}\right)^2}$$ where x_i = the value of exports of commodity i in some specified year, and $X = \sum x_i$.

Thus a country producing a relatively larger number of products is expected to have lower values of C (this will, however, depend upon the classification scheme utilized greater aggregation generally leading to higher values of C).

forces and particularly accentuated in the case of primary products in which production LDC's are mainly specialized. The returns in terms of increased stability of export earnings to be reaped from diversification, nevertheless, will be largely dependent upon the degree of statistical independence among annual changes in earnings from the different products.[1]

The implication of the results of this and other similar studies seem to point to the fact that the pursuit of diversification as a policy for the purpose of achieving more stability of export earnings may prove to be of little advantage. This should not lead, however, to underestimating the adverse effects of any degree of fluctuations in the export earnings of LDC's in introducing repercussions in their economy in the form of: a) instability in the income from export industries; b) general instability in money income and prices; c) instability in external purchasing power; and d) instability in real expenditure, especially real investment.[2]

Diversification is, therefore, more rational in terms of particular countries and particular commodities. It is still more rational as an argument for taking advantage of better prospects for production and trade of different commodities. As such policies may promote further economic development, the disadvantages of a given

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[1]The return from diversification is expected to be inversely related to the degree of inter-correlation, for where the cross elasticity of demand for any two commodities is high, a shift in demand for one would generally lead to a comparable shift in demand for the other.

[2]International Monetary Fund Staff Papers, "Fund Policies and Procedures in Relation to the Compensatory Financing of Commodity Fluctuations," (November 1960), p. 14.

degree of fluctuation of export earnings will be necessarily lessened.

2) The Foreign Exchange Constraint

It is increasingly being recognized that foreign exchange stringency may represent a bottleneck limiting the development efforts of the less developed countries. The frequency of the existence of shortages in foreign exchange in the typical less developed country has made it a central issue of policy. Such shortages may arise as a consequence of a deficiency in supply or an increase in demand, and in the case of the less developed countries both forces are believed to be in operation. Three factors can be singled out as acting to limit the supply of foreign exchange: a) the fluctuations in export proceeds, a reduction of 20 percent or more in a year from a previous level can represent a real hazard to the development policy in any less developed country; b) the lag in the exports of primary products, since 1938 world trade in manufactures has doubled while that of primary products has increased by almost two-thirds only;[1] c) a leveling off of the amount of foreign aid forthcoming to the less developed countries and a rise in debt obligations.

Table 2

Debt Obligations of LDC's

	Actual		Projected	
	1956	1963	1970	1975
Debt Outstanding (in billions of dollars)	9	23	61	87
Debt service as percent of:				
Free world assistance:[a]	24%	48%	-	-
Free world assistance plus private long-term capital flow:	13%	34%	-	-
Exports of LDC's	3%	9%	13%	14%

[a]Free world is 15 industrial OECD countries

Source: AID, "Loan Terms, Debt Burden and Development," 1965 and Dragoslav Avramovic, "Economic Growth and External Debt," 1964.

[1]U.N., The Developing Countries and World Trade (New York: U.N.,1963)

This table actually demonstrates that external debt and debt obligations of less developed countries are large and are rising rapidly.

On the demand side, there are two main forces which exert an upward pressure for the demand for foreign exchange. a) The magnitude of the development programs and growth targets. The import component of many of the development projects in terms of capital goods is often high, in addition, there is constant need for the import of service parts and replacement items. b) The extent of population pressure. In the case of overpopulated less developed countries there has been growing need for the import of foodstuffs.

Thus to the extent that foreign exchange represents a constraint, different countries have tended to emphasize the foreign exchange impact when setting up criteria for the selection of development projects. The foreign exchange contribution may even become a key consideration and any enterprise that is foreign-exchange earning or foreign-exchange saving would be considered to have merit. The eased foreign exchange situation as a result of this policy helps a country to sustain additional foreign exchange commitments associated with further development, hence a process of growth may be fostered.[1]

It is also believed that in view of the nature of their economies less developed countries have little scope for reducing imports either by exchange depreciation or by direct controls without causing a large decrease in their GNP. Low elasticity of demand for imports, at least in the short-run may render exchange depreciation for the pur-

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[1]Walter Krause, "The Impact of Foreign Exchange," in Morgan, Betz, and Choudhry, op. cit., p. 397.

pose of bringing about equilibrium in the balance of payments an undesirable policy. Thus an investment program designed to produce such equilibrium may in some cases be more preferable.[1]

3) Inflationary Pressures

Although inflation is not a necessary concomitant of economic development, it is to be found in varying degrees of intensity in a number of less developed countries. In view of the current need for capital accumulation coupled with the low level of voluntary savings and the limits to taxation in such countries, forced savings through inflation may be regarded as a feasible solution. The extent and duration of inflation in such a case will depend upon the increase in productive capacity resulting from investment. If the investment needed is of a long term nature, production may increase with a time lag during which inflationary pressures would tend to be perpetuated. Other factors tending to propagate inflation in the less developed countries may be recent experience with inflation which leads to hoarding and speculation, an uncoordinated monetary policy,[2] the existence

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[1]For that purpose, Chenery applies a Social Marginal Productivity Criterion for the allocation of investment resource incorporating the balance of payments effects on GNP:

$$SMP = \Delta U + \Delta Y + r\Delta B$$

$$\left(r = \frac{\Delta Y}{\Delta B}\right)$$

Where "r" represents the amount of increase in national income which would be equivalent to an improvement of one unit in the balance of payments under specified conditions. It may, thus, be interpreted as a premium attached to foreign exchange earnings or savings. Hollis Chenery, "The Application of Investment Criteria," Quarterly Journal of Economics (February 1953), p. 81.

[2]Martin Bronfenbrenner, "The High Cost of Economic Development," in Readings in Economic Development, op. cit., p. 395.

of a non-monetized sector, structural bottlenecks which impede factor and product mobility, and the existence of strong pressure groups such as trade unions asking for higher wages. Any divergence that results between the wage rate in the urban sector and the opportunity cost of labor in the rural sector which cannot be explained in terms of productivity differentials in the two sectors results in a distortion in market prices.

The importance of this problem with respect to trade policy in the less developed countries has been emphasized and various policy recommendations have been advanced to deal with it.[1] The presence of such wage differential between the urban and rural sectors is believed to be unfavorable to manufacturing and hampers the export of manufactured goods by making the less developed countries less competitive in the world market, and hence invites greater concentration on production for home market rather than for export.

Strict avoidance of inflation, however, would require the establishment of a high priority for price stability in the framing of policies, the acceptance of a higher level of spare capacity and possibly a wider range of fluctuations,[2] and such costs need to be tolerably acceptable as a prerequisite.

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[1]See Robert E. Baldwin, "Exchange Rate Policy and Economic Development," Economic Development and Cultural Change (July, 1961); and E.E. Hagen, "An Economic Justification for Protection," Quarterly Journal of Economics (November, 1958).

[2]E. Victor Morgan, "Is Inflation Inevitable," The Economic Journal (March, 1966), pp. 14-15.

Social, Political, and Cultural Factors

It is increasingly being recognized that mere emphasis on the economic aspects of development is a case of oversimplification. Poverty in material possessions is often accompanied by poverty of knowledge, aspirations, and innovating dispositions. This situation is often perpetuated by the persistence of social, political, and cultural impediments to development.

To the extent that the promotion of economic development by deliberate economic policy, in many LDC's, is associated with nation-state building and aroused by sentiments of nationalism, there will inevitably be greater emphasis on economic self-sufficiency. The most appealing route to self-sufficiency is through import substitution as it lessens the dependence upon external sources of supply of what are considered to be strategic raw materials or products as well as offers the opportunity to prove national competence by replacing foreign producers by nationals. Nationalist objectives may provide the motivation as well as the force for mobilizing a society for economic development.[1] This, however, must be weighted against the fact that the relative limitation of the domestic market as well as the existence of bottlenecks in the form of shortages of skills and capital equipment often result in import substituting industries having high costs and lead to the imposition of a complex of trade protection regulations. There need

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[1]Harry G. Johnson, Economic Policies Toward Less Developed Countries, op. cit., p. 67.

also be realization that the scope for import substitution in many LDC's diminishes as industrialization proceeds, and imposes further foreign exchange restraints on account of raw material and capital good imports.

The promotion of economic development by deliberate policies is also often designed through the resort to national planning. Along with unemployment targets, balance of payments equilibrium, price stability and aspired rate of growth of GNP, changes in the social, political and cultural spheres are explicitly defined as developmental targets in the national plans. In most LDC's the idea is firmly established that development planning can be effective only if it includes basic institutional reforms.[1] However, as soon as we acknowledge the fact that some of the impediments to economic development are beyond the realm of economic relations we run into a difficulty. For social, cultural and political factors by virtue of their being non-economic are incapable of definite incorporation into economic analysis, and quite unquantifiable. At best they can be represented as a set of tight constraints along with economic constraints to development and as such any relaxation of their limitative impact would result in a positive contribution to the developmental potentialities.

In discussing the determination of the optimum level of savings (a discussion which may equally apply to the determination of the optimum

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[1]Albert Waterston, Development Planning: Lessons of Experience (Baltimore: The John's Hopkins Press, 1965), pp. 15-22.

level of specialization, and trade of LDC's). Jose Encarnación[1] emphasized the need for establishing a social utility function embodying the actual policies and decisions of planning commissions in LDC's. The seeming contradiction between theory and practice in the realm of development, he asserts, stems from the disregard for the multiplicity of objectives in development planning. This difficulty in the specification of a social preference function may be resolved by conducting the theoretical analysis of development planning in terms of a lexicographical or L* ordering of objectives--which is built upon a priority ordering of the objectives. By the use of this technique, maximizing national income may become the long-run objective subject to the attainment of a desired level of self-sufficiency, employment, price stability, distribution of income, and consumption. Thus national income would become the absolute maximand only if all the other objectives are satisfied at the desired levels, otherwise other objectives assume nearer importance and become the maximand. Such analysis would cast more rationality on the rejection of a recommended growth pattern which involves restraints in the form of unemployment, low level of consumption, a skewed distribution of income, inflation, devaluation, or a shortage of foreign reserves.

Countries will differ with respect to the priority ordering of the various objectives and targets as well as to the choice among alternatives. The relative importance of objectives and constraints will thus be a function of the socio-policital as well as the econnomic setup of each particular country.

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[1] Jose Encarnacion, Jr., "Optimum Saving and the Social Choice Function," Oxford Economic Papers (July 1964), pp. 216-220.

Conclusion

The state of theoretical debate on free international trade versus protection, though still unsettled, may be characterized by a tendency twoards convergence. Arguments on both sides are presented with major qualifications, and neither seems capable of absolute justification. It has, furthermore, become implausible to try to push either argument to the extreme or to try to seek the triumph of one over the other. The state of debate may thus be safely defined as that of a compromise.

The domain of actual policies, however, seems to be a step removed from that of theoretical debate. LDC's are still more preoccupied with particular policies and details of trade intervention than with substantiating the grounds and degree to which protection need to be imposed. Policies relating to the forms of protection are being designed and implemented everywhere and everyday. The cost of faulty decisions, in either direction, may be great in any case, but is particularly so for the less developed countries. The smaller economies and more limited resources necessarily narrow the area of choice of LDC's, yet render them more susceptible to the disturbing repercussions from undesirable effects of any policy. International trade, constituting a large proportion of their national incomes and exerting a dominant influence on their economies needs more practical considerations. The experience of countries demonstrates that, whereas it is difficult if not impossible to single out a country absolutely adhering to free trade policies, it is generally those countries among LDC's which have achieved a high level of exports growth that have better prospects of economic development as

a whole.

There is a growing emphasis on the desirability of a case by case approach with specific policy recommendations tailored to each country's circumstances and experiences. Such considerations need, however, to be more devoid of dogmatism. Countries will differ with respect to the priority ordering of the various objectives and targets. In some cases pure economic considerations may be superseded by other goals believed to be more socially desirable. Thus policies leading to a higher level of employment, a more favorable distribution of income, or stabilizing the standard of living of the majority of the population may be assigned higher priority over policies basically or solely aiming at the maximum increase in national income. Yet even in this realm there need be more admittance of the possibility for a trade-off. The most relevant criterion, however, will still remain to be a function of the nature of the problems as well as the objectives behind the various policies pursued and hinges upon the explicit recognition of this fact.

Bibliography

AID. Economic Growth Trends. June 1965 and September 1965.

AID. Loan Terms, Debt Burden, and Development. 1965

AID. Gross National Product, Growth Rates and Trend Data by Region and Country. 1966

AID. Selected Economic Data for the Less Developed Countries. 1965

Avramovic, Dragoslav. Economic Growth and External Debt. 1964

Baldwin, Robert E. Economic Development Theory, History, Policy (New York: John Wiley and Sons, Inc., 1963).

Baldwin, Robert E. "Exchange Rate Policy and Economic Development," Economic Development and Cultural Change. July 1961.

Baldwin, Robert E. "The Case Against the Infant Industry Argument," Mimeo, University of Wisconsin, 1966.

Brofenbronner, Martin. "The High Cost of Economic Development, " Readings in Economic Development, eds. Theodore Morgan, et. al. (San Francisco: Wadsworth, 1964).

Chenery, Hollis B. Comparative Advantage and Development Policy," American Economic Review. March 1961.

Chenery, Hollis B., "The Application of Investment Criteria. " Quarterly Journal of Economics. February, 1953.

Clark, Colin, The Conditions of Economic Progress (London :MacMillan and Co.,1940)

DeVries, Margaret G. "Trade and Exchange Policy and Economic Development, Two Decades of Evolving Views." Oxford Economic Papers. March 1966

Encarnacion, Jose, Jr. "Optimum Saving and the Social Choice Function." Oxford Economic Papers. July 1964.

Flanders, M. "Prebisch on Protectionism: An Evaluation." Economic Journal. June 1964.

Haberler, Gottfried. "Critical Observations on Some Current Notions in the Theory of Economic Development." L'Industria No. 6, 1957

Haberler, Gottfried. "Some Problems in the Pure Theory of International Trade." Economic Journal. June 1950.

Haberler, Gottfried, The Theory of International Trade (London: William Hodge and Co., 1936).

Hagen, E.E., "An Economic Justification for Protection," Quarterly Journal of Economics (November 1958).

Haring, Joseph E., "Dynamic Theory and Growth in Poor Countries," Kyklos, Vol. XVI (1963).

Imlah, Albert H., "The Terms of Trade of the United Kingdom, 1783-1913," The Journal of Economic History (November 1950).

International Monetary Fund Staff Papers, "Fund Policies and Procedures in Relation to the Compensatory Financing of Commodity Fluctuations," (November 1960).

Johnson, Harry G., Economic Policies Toward Less Developed Countries (New York: Frederick A. Praeger, 1967).

Johnson, Harry G., "Optimal Trade Intervention in the Presence of Domestic Distortions," Trade, Growth and the Balance of Payments Essays in Honor of Gottfried Haberler, edited by Robert E. Baldwin, et.al. (Chicago: Rand McNally and Company, 1965).

Krause, Walter, "The Impact of Foreign Exchange," Readings in Economic Development.

Marshall, Alfred, "Memorandum on the Fiscal Policy of International Trade," Official Papers (London: William Hodge and Company, 1936).

Marshall, Alfred, Principles of Economics (London: MacMillan and Company, Ltd., 1930).

Massell, B.F., "Fluctuations in Export Earnings," American Economic Review (March 1964).

Meier, Gerald M., Leading Issues in Development Economics (New York: Oxford University Press, 1964).

Morgan, E. Victor, "Is Inflation Inevitable," The Economic Journal (March 1966).

Morgan, Theodore, "The Long Run Terms of Trade between Agriculture and Manufacturing," Readings in Economic Development (San Francisco: Wadsworth, 1964).

Myint, Hla, The Economics of the Developing Countries (New York: Frederick Praeger, 1964).

Myrdal, Gunnar, Economic Theory and Underdeveloped Regions (London: Gerald Duckworth and Co., Ltd., 1957).

Nurkse, Ragnar, "Excess Population and Capital Construction," Malayan Economic Review (October 1957).

Prebisch, Raul. "The Economic Development of Latin America." Economic Bulletin for Latin America. February 1962.

Scitovsky, Tibor. "Two Concepts of External Economies." Economics of Underdevelopment, ed. Agarwala and Singh (New York: Oxford University Press, 1963).

Singer, Hans. "The Distribution Gains Between Investing and Borrowing Countries." International Development: Growth and Change (New York: McGraw Hill Book Company, 1964).

Singh, Inderjit. "The Role of Agriculture in Economic Development: A Survey." Mimeo, University of Wisconsin AID Project May 1966.

Tinbergen, Jan. Shaping the World Economy (New York: Twentieth Century Trend, 1962).

United Nations. "Instability in Export Markets of Underdeveloped Countries." Readings in Economic Development.

United Nations. "Relative Prices of Exports and Imports of Underdeveloped Countries." (New York, 1949).

United Nations Statistical Papers. "Per Capita National Product of Fifty-Five Countries: 1952-54." Series E. No. 4, 1957.

United Nations. Statistical Yearbook 1963 and 1964.

United Nations. The Developing Countries and World Trade (New York: United Nations, 1963).

United Nations. Yearbook of International Trade Statistics 1963 and 1964.

Viner, Jacob. International Trade and Economic Development. Free Press, 1952.

Waterston, Albert. Development Planning: Lessons of Experience (Baltimore: The John's Hopkins Press, 1965).