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DISSERTATION

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Degree Doctor of Philosophy in the Graduate School of
The Ohio State University

By

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* * * * * * *

The Ohio State University
1965

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Studies in Public Finance. Professor Francis Woodard

Studies in Economic Planning. Professor Meno Lovenstein

Studies in Sociological Theory. Professors Roscoe Hinkle and Alfred Clarke
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CHAPTER I
THE PROBLEM OF TRADE AND DEVELOPMENT

In the development of the theory of international trade one of the most important generalizations is that free trade, with some exceptions, will provide not only gains from specialization and division of labor but also a stimulus to the economic development of nations. Economic development implies "both more output and changes in the technical and institutional arrangements by which it is produced." The resultant of economic development is a rising real per capita national income. Historically the relationship between international trade and economic development has been an important subject of inquiry in the study of international trade. John Stuart Mill in his *Principles of Political Economy* states that foreign trade "sometimes works a sort of industrial revolution in a country whose resources were previously underdeveloped." Bertil Ohlin states, "international trade ... cannot fail to affect in a thousand and one ways the factors governing the output of labor and capital." Alfred Marshall notes,

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"the causes which determine the economic progress of nations belong to the study of international trade." The statements of Mill, Marshall, and Ohlin are illustrative of the generalization that international trade contributes to the economic development of nations.

The conclusion that unrestricted international trade is an important factor in the process of economic growth has not been without its critics. Among the early critics were Fredrich List and M. Manoilesco. Both List and Manoilesco argued that nations should use protective tariffs and quotas in selective cases. However, with the recent concern and emphasis on the economic development of underdeveloped nations, a new type of criticism has emerged. Outstanding economists of this new group of dissenters are Hla Myint, W. Arthur Lewis, Gunnar Myrdal, and Raul Prebisch.

The basic position of the new group of dissenters is that the conclusions derived from static equilibrium analysis of international trade are not relevant to the problems of economic development since the process of economic development is a dynamic process. Under the heading of dynamic modifications to the traditional theory, these writers have proposed theories which generally state that unrestricted international trade among the nations of the world will act as a barrier or an obstacle to the economic development of underdeveloped nations. Their policy recommendations are that tariffs and other trade restrictions are required for
the economic development of underdeveloped nations. This conclusion is counter to the international trade theory of Mill, Haberler, and Ohlin.

Hla Myint advocates protective tariffs for the underdeveloped nations on two grounds. First, Myint believes that the foreign trade multiplier doesn't work for an underdeveloped economy. Second, Myint holds that Adam Smith's "vent for surplus" theory is the one applicable to the underdeveloped nations, not the comparative cost theory. Myint states that the "vent for surplus" theory can be used to justify protection rather than free trade for the underdeveloped nations.

W. Arthur Lewis proposes a theory applicable to underdeveloped nations with surplus labor in the agricultural sector. The existence of surplus labor causes a divergence between real costs and money costs. The distortion in the labor market leads to the wrong products being exported. Lewis advocates a tariff on imports of manufactured goods to neutralize the distortion in the domestic labor market.

Gunnar Myrdal believes that international trade has failed to contribute to the development of underdeveloped nations. Myrdal's theory of social systems, the theory of circular causation, is applied to international trade relations. The general conclusion is that trade has served to enhance the differential between the developed and the underdeveloped nations. The recommendation is that trade
barriers are required to counteract the "vicious circle of poverty" in the underdeveloped nations.

In addition to the theories found in the formal studies on international trade, statements contained in the proceedings of the United Nations Conference on Trade and development provide an up-to-date record of criticisms of the traditional trade theory. Since seventy-seven of the one hundred and twenty nations participating in the conference were underdeveloped nations, the policy statements reflected their opinions on matters of trade policy for developed and underdeveloped nations.

The statements of the less developed nations are based on the assumption that unless changes are made in the trade policies of developed and underdeveloped nations, economic progress in the underdeveloped nations will be impaired. The less developed nations want the developed nations to remove trade barriers on products which underdeveloped countries export to the developed nations. The underdeveloped nations also request that the developed nations abolish internal excise and sales taxes on the items exported to the developed nations. The less developed nations also desire to have the developed nations remove subsidies and price supports on items which are produced in underdeveloped nations. Lastly, the underdeveloped nations have stated that they should be given preferences on their exports of manufactured goods. This redefinition of the unconditional
most favored nation principle is justified by Prebisch as a "logical extension of the infant industry argument."

Trade policy for underdeveloped nations was also a subject considered by the conference. The less developed nations are pessimistic in their appraisal of export prospects of primary products in the future. As a result they wish to export manufactures. In order to attain the objective the underdeveloped nations believe that it is necessary to erect trade barriers on imported manufactured goods. The infant industry argument is used to support protectionism on the part of the underdeveloped nations.

Generally, the theory is that the developed nations have restrictive commercial and domestic policies serving as a barrier to increased exports from the underdeveloped countries. The less developed nations want the barriers abolished. Developed nations are requested to institute a system of preferences and compensatory finance arrangements benefiting underdeveloped nations. Underdeveloped nations believe that their trade policies should be restrictive to encourage economic development.

A conclusion that protection is an appropriate economic policy for underdeveloped nations is derived from the theories and policy statements reviewed. It can be said that a "new autarky"\(^2\) has emerged from the discussion of international

trade and economic development. Since a policy of protectionism is contrary to the conclusions from the comparative cost theory, a testable hypothesis can be advanced.

The proposed hypothesis to be tested is that unrestricted international trade is an activity contributing to the economic development of underdeveloped nations rather than acting as a barrier to retard development. The testing of the hypothesis will initially involve a systematic statement of the theories of the dissenting group of economists and the policy guidelines advanced by the United Nations Conference on Trade and Development. After the formal theories and policy statements have been presented, evidence from recent empirical studies will be examined. The purpose of examining these studies is to determine if they support or refute points raised by the dissenting economists or the United Nations Conference on Trade and Development. Studies of Balassa, Chenery, Kindleberger, Seers, and Baldwin will be mainly utilized.

Lastly, three cases of individual underdeveloped nations will be investigated to determine how international trade has affected the process of economic development. The nations selected for study on the basis of differences in economic structure and the availability of data are Peru, Burma, and Jamaica. After presenting a short history of each nation, its economic growth will be analyzed for the period 1950 to 1962 or later. An attempt will be made to
discover if international trade has contributed to the economic growth of each nation. International trade theory and conclusions from empirical studies will be used to analyze the relationship of trade to economic growth. Since all of the underdeveloped nations selected for study are primary producers, each nation's commercial policy will be analyzed to determine if commercial policy has made any identifiable contribution to the nation's economic development.

Since the subject of international trade and economic development is a very large one, this study will be confined to protectionism and economic development of underdeveloped nations. Economic aid, compensatory finance arrangements, and balance of payments will not be included in the analysis. It is also important to state that the conclusions derived from the study of the relationship of international trade to economic development may not be applicable to all underdeveloped nations as there are many differences among them. The theories of Myint, Myrdal, and Lewis as well as the statements of the United Nations Conference on Trade and Development are not the only criticisms of the comparative cost theory as it applies to underdeveloped nations.\(^3\)

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\(^3\)For summary see Kindleberger, \textit{op. cit.}, p. 295-304; Enke, \textit{op. cit.}, p. 464-482.
CHAPTER II
DUALISM AND INTERNATIONAL TRADE

Reference is often made to a "dual economy" in the economic development literature. It is important to define the concept since there are several definitions of it in the field of economics.

One of the first statements of dualism was that of J. H. Boeke.

social dualism is the clashing of an imported social system with an indigenous social system of another style. Most frequently the imported social system is high capitalism. But it may be socialism or communism just as well, or a blending of them.¹

In Boeke's theory of dualism there are two social systems which clash within a given underdeveloped nation. This clash creates two separate enclaves in the nation. Boeke believes that "Western" economic theory is not applicable to the underdeveloped nations of the world since the indigenous social system will probably prevail. Boeke's policy statements are pessimistic; generally, he believes that the underdeveloped nations should be left alone since nothing can be done for them.

According to Benjamin Higgins the sociological explanation and the pessimistic conclusions of Boeke are conditioned by the fact that Boeke saw the lack of success of the "ethical policy" pursued by the Dutch government in what is now Indonesia. Higgins doesn't doubt that dualism exists in the underdeveloped nations, but rather he is skeptical of the explanation which Boeke gives for its cause.2

The importance of Boeke's theory of social dualism is that it was one of the first to emphasize that underdeveloped nations have two sectors. One sector is associated with agriculture and related activity while the other sector is associated with the extractive and manufacturing activities in the economy. Productivity and income are considered to be low in the agricultural sector and high in the industrial sector.

As was noted above Boeke's explanation of dualism was a sociological one. Higgins rejects the sociological explanation in favor of an economic explanation of dualism.3 Higgins' explanation of dualism is referred to as technological dualism. The theory assumes the industrial sector to be using capital-intensive techniques of production while the agricultural sector utilizes labor-intensive techniques


3 Ibid., p. 280.
of production. Higgins' diagram is useful in illustrating technological dualism in the industrial sector of the economy of an underdeveloped nation.

![Diagram illustrating technological dualism](image)

**Fig. 1. Technological Dualism**

The first assumption is that the industrial sector has fixed coefficients of production and the isoquants $O_1$, $O_2$, and $O_3$ are constructed to illustrate fixed technical coefficients. In this case output can be increased only by utilizing more of both factor inputs in the productive process. The line $EE$ is the expansion path which illustrates the point that as more capital is used, the increase in employment is relatively small as output increases.

If techniques of production are not absolutely fixed but still relatively fixed, the dotted portion of the isoquants can be used. Even in this case the conclusion is that relatively small changes in factor endowments will not induce more labor intensive techniques of production to be used in the industrial sector. The implication is that labor will not flow into the industrial sector of the economy.
because of the assumed fixed technical coefficients of production. It is also implied that disguised unemployment or underemployment in the agricultural sector will be reinforced by the existence of such conditions in the industrial sector of the economy.

Dualism (some even say pluralism) is then an important characteristic of an underdeveloped nation. Although geographically a nation may be defined as one unit, economically there may be at least two dissimilar sectors in the geographic unit of an underdeveloped nation. Dualism must now be related to the primary subject matter of this study, namely, international trade, protection, and economic development.

One theory which relates dualism, international trade, protection, and economic development is that of the "backwash" effects of international trade offsetting the "spread" effects. The main exponent of the "backwash" theory is the Burmese economist, Hla Myint.

Hla Myint has examined the exports of Malaya, Burma, and Indonesia and has stated that although the exports have grown in magnitude over the years there has been no foreign trade multiplier operating to increase per capita national income in these nations. He then asks the question why. The answer given to the question varies slightly depending

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\[Hla\,\,Myint,\,"The\,Gains\,from\,International\,Trade\,and\,the\,Backward\,Countries,"\,Review\,of\,Economic\,Studies,\,Vol.\,XXII,\,No.\,2.\]
upon which article written by Myint one happens to read, although both can be reconciled without too much difficulty. 5

In the first article Myint says that such things as high labor turnover, capital intensive techniques of production, and a "cheap labor policy" exercised in the industrial sector of the economy explain why international trade has not contributed to the process of economic development in the nations which he studied. The general idea is that the wage component of national income was so low that there was little possibility for the economic processes to get started. Myint even falls back on the theory of non-competing groups and states:

Given the cheap labor policy, there is no vertical mobility of labor into the skilled and managerial grades, which keeps these factors at a premium. In some degree or other it can be found wherever European capital and enterprise have opened up backward countries to international trade. 6

Myint's conclusions for policy are to interfere with the process of international trade. However, more attention will be devoted to the policy implications and the theory after examining the "vent for surplus" theory which is also utilized by Myint.

Myint has not only inquired into the "backwash" effects but has also noted that the comparative cost theory is not

5Hla Myint, "The 'Classical Theory' of International Trade and the Underdeveloped Countries," Economic Journal (June, 1958), p. 319-325. This is the most recent article.

applicable to the underdeveloped nations. As a substitute Myint offers the "vent for surplus" theory which is contained in the Wealth of Nations.

First, Myint states that the comparative cost theory assumes resources are given and fully employed before a nation enters into international trade. International trade then reallocates resources more efficiently between domestic and export production since there are a new set of prices introduced into the economic system. With a given state of technology and full employment, production for export can only be increased if production for domestic use is decreased.

The "vent for surplus" theory of international trade as stated by Smith basically says exports can increase without a corresponding reduction in domestic production. Trade is viewed as an "escape valve" for the nation which has surplus output. If the surplus is exported, the nation will be able to import items which it desires. The argument implies that demand for the domestically produced item is inelastic and/or there is a great deal of internal mobility of factors of production.

Myint believes the "vent" theory offers a better explanation of the trade process for underdeveloped nations than does the comparative cost theory. He notes that high rates of expansion in many underdeveloped nations are not explained by the comparative cost theory assuming given
inputs and technology. It is also his opinion that changes in techniques "didn't significantly contribute to the expansion of trade." One is puzzled by this statement since Myint on the one hand says that comparative cost theory is not dynamic and on the other hand notes that technology has not influenced international trade anyway. Finally, Myint concludes that increased exports from underdeveloped nations came about by bringing unused resources into production.

A second reason given for the superiority of the "vent for surplus" theory is that trade between the tropical underdeveloped nations and the advanced nations of the world has grown out of differences in geography and climate, or in other words absolute advantage. Myint says that the comparative cost theory stresses qualitative differences in factor endowments to the neglect of quantitative endowments of factors. This point is confusing when one refers to Ohlin's general equilibrium theory and notes the basis of international trade is the quantitative differences in factor endowments.

Myint gives an example which he feels offers some proof for his statements about the "vent for surplus" theory. For instance, the Union of Burma is an exporter of rice due to the climate and geography, yet India which has the same or relatively the same conditions is an importer of rice. According to Myint the explanation for this situation is simply the difference in population. Myint believes that
The "vent" theory emphasizes the matter of population density as a determinant of exports. This may give the wrong impression however.

First, the statements concerning the similar climate and geography of the Union of Burma and India are questionable. Although India and Burma have the same general climatic features, those essential for growing the high yield "paddy" variety of rice are not the same between India and Burma. India doesn't have the favorable rainfall that Burma has because of the mountain ranges running parallel to the coastal areas. Burma not only has the coastal regions available for the growing of "paddy" rice but also the Irrawaddy region. Thus Burma and India are not identical for the growing of the high yield "paddy" rice. Another item is important too. India has much land not devoted to useable agricultural production because of the existence of the large multitude of cattle which are not consumed because of religious beliefs of the people.

Myint has also overlooked the fact that rice may be produced by several combinations of factors other than the labor-intensive methods used in South-East Asia. Kindleberger states that rice can be produced with capital-intensive methods such as in the U.S. where rice is seeded with

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7 Noted in conversation with Prof. Frank Sewall, April 22, 1965.
A third reason offered by Myint for the superiority of the "vent for surplus" theory is that the Ohlin theory assumes a nation to have a flexible economy which adjusts its factor combinations and production. Myint contends that the economic system of an underdeveloped nation is much "cruder" and can make only "rough and ready" adjustments since there are so many fixed technical coefficients. It is important to note, however, that in the agricultural sector technical coefficients are not thought to be fixed and also not all processes in the industrial sector can be said to have fixed technical coefficients of production.

The important point to remember when evaluating the "vent for surplus" theory is that it presupposes a large degree of resource skewness in the economy. The Ohlin theory also assumes that resources are skewed, and this condition will produce highly specialized trade for the nation. P. L. Yates has observed that the list of nations with a single product being a major portion of exports has been growing longer not shorter in the time period he observed. Finally lack of complementarity of resources in the less developed regions of the world helps explain the concentrated trade. Capital, technology, and labor skills are also necessary to produce output.

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Population, area, and the ratio of foreign trade to national income are related. Countries with a large land area as well as population tend to have small ratios of foreign trade to national income. A middle range is made up of densely populated industrial nations such as the United Kingdom, and relatively lightly populated nations with high incomes. The opposite extreme consists of the densely populated nations which have a small land area.\textsuperscript{10}

In summary, on the matter of resource skewness it can be said that size and resource skewness are related and that the Ohlin theory provides an adequate explanation for industrial and underdeveloped nations. The "vent for surplus" theory is not as well adapted to underdeveloped nations as Myint has stated.

To follow Myint's conclusions something must be said about the policy implications drawn from the analysis of the "cheap labor policy" and the "vent for surplus" theory. Myint believes that underdeveloped nations should use tariffs and quantitative restrictions as the central part of their commercial policy. Myint also believes the use of marketing boards will help to 'correct' the internal economic structure of the underdeveloped nations. This is drawn from his experience in Burma. As shall be demonstrated in another chapter, Burma has had unfavorable results with the rice marketing board.

\textsuperscript{10} Kindleberger, \textit{op. cit.}, 33-35.
Finally it is interesting to note that Myint has not inquired into the distribution of income when trying to answer the question about the lack of effects of the foreign trade multiplier. He should have discovered that in the nations of South-East Asia much of the economic activity in the money economy was centered around the Chinese, Indians, and other "foreign factors." These "foreign factors" remitted a great deal of their income to their home countries.\footnote{J. V. Levin, \textit{The Export Economies} (Cambridge: Harvard University Press, 1960), p. 15-27, 206-215.} Levin has stated that many nationals in these countries were also "luxury importers" which diminishes the size of the net injection into the economies of Burma, Indonesia, and other nations of South-East Asia even more. If this is the case, it cannot be said that foreign trade was the limiting factor such as Myint leads one to believe. Myint has not built a strong case for using restrictive commercial policy and state marketing boards for underdeveloped nations. When his theory is closely examined, the application of the comparative cost theory has none of the drawbacks which could be grounds for its rejection, rather it explains many of the points for which Myint resorts to the "vent for surplus" theory. The important resultant is that a restrictive commercial policy cannot be justified using the analysis of Myint.

A second theory relating dualism to international trade, protection, and economic development is the "surplus
labor theory" whose originator was W. A. Lewis.\(^\text{12}\) Lewis believes that the underdeveloped nations conform to the Classical model in that the supply of labor is perfectly elastic at the current wage.

There are three assumptions necessary to understand Lewis' theory. He assumes the wage in the industrial sector of the economy to be larger than the wage or marginal productivity in the agricultural sector by a fixed amount. Investment in the industrial sector is not large relative to the growth rate of population. Finally the cost of training labor is assumed to be constant through time. Not only is there a high population density but there is also assumed to be disguised unemployment in the agricultural sector of the economy, disguised unemployment being defined as a marginal productivity in agriculture which is either zero or very near to zero for the labor force. The economy is then one which conforms to the use of labor intensive techniques in agriculture and capital intensive techniques in the industrial sector.

The two sectors are related by the growth and expansion of the industrial sector. When the industrial sector expands, it will take labor from the agricultural sector of the economy, where according to Lewis there is a great amount of labor available for the expansion of the industrial sector.

sector. The next thread of the theory is that the wage rate paid by entrepreneurs in the industrial sector of the economy is somewhat higher than the wage rate in the agricultural sector to induce the labor to enter the industrial sector. Lewis offers a rough estimate of the size of the differential when he notes it is usually about 30 per cent. So he makes the statement then that the supply of labor is perfectly elastic at the going wage rate.

Generally Lewis states that the capitalist in the industrial sector will receive the benefits of technical change since even if productivity is improved in the industrial sector of the economy, the wage will remain the same.

The theory is then applied to international trade. Country A is a developed nation and country B is an underdeveloped nation with a labor surplus economy.

1 man day of labor in A produces 3 Food 3 Steel
1 man day of labor in B produces 1 Food 1 Rubber

Given the above, the exchange ratio will be 1 food equals 1 steel equals 1 rubber. If productivity increases in the rubber industry to where one man day of labor produces 3 units of rubber, one unit of steel will exchange for 3 units of rubber. This benefits the consumers in country A but not in country B according to Lewis. The workers in country B

\[\text{Ibid.}, \ p. \ 182-191.\]
will not receive any benefit since the real wage rate will still be equal to one unit of food which is the wage in the agricultural sector of the economy.

The implication of the above analysis is that foreign investment in the export sector of country B will perhaps provide some additional jobs, but per capita income will not be increased. The benefits of foreign investment according to Lewis go to the consumers in other nations. Lewis also states:

We have here the key to the question why tropical produce is so cheap. Take the case of sugar. Output per acre has trebled over the course of the last 75 years... Nevertheless workers in the sugar industry continue to walk barefooted and to live in shacks while the workers in wheat enjoy among the highest living standards in the world.14

Lewis then assumes that one man day of labor in country A and country B give the following results:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B (unlimited labor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>3 units</td>
<td>2 units</td>
</tr>
<tr>
<td>Cotton goods</td>
<td>3 units</td>
<td>1 unit</td>
</tr>
</tbody>
</table>

These figures are in terms of average product and they give the wrong answer as to which nation should specialize in what product. He says if we put the above data in marginal terms the following will result:

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Cotton goods</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

14 Ibid., p. 182.
Here it is important to see the only difference between the first and the second model is the productivity of agriculture in country B. The assumption of disguised unemployment in the agricultural sector of B will mean that marginal productivity will be zero or perhaps even negative.

The conclusion then is that country B should specialize in cotton production and import food. While "in practice wages will be 2 food in B and between 3 food and 6 food in A, at which levels it will be cheaper for B to export food and import cotton." The above according to Lewis is the wrong resultant. As was noted before when the marginal productivity figures were used, B should import food and export cloth. Lewis also says:

The fault is not that of the law of comparative costs, which remains valid if written in marginal terms, but of those who have forgotten that money costs are entirely misleading in economies where there is surplus labor at the ruling real wage.

Finally Lewis notes the following in his conclusion:

The Law of Comparative Costs is just as valid in countries with surplus labour as it is in others. But where as in the latter it is a valid foundation of arguments for free trade, in the former it is an equally valid foundation of arguments for protection.

15 Ibid., p. 184.

16 Ibid., p. 185.

17 Ibid.
The implication which is left from reading Lewis is that due to the distortions of the average productivity measure, the economy specializes in food output when it should be importing food and exporting industrial output of some type. The case for protection is one for import substitution to "correct" the domestic distortion. The tariffs and quotas would be applied to imports of industrial output. Basically there is a distortion in the labor market which makes the private cost of labor greater than the social cost or the marginal labor cost in agriculture. The goal is then to increase per capita national income by protecting the industrial sector and making the price of imported manufactured goods higher. Also part of the goal is to redistribute the labor force from the agricultural sector of the economy to the industrial sector.

An evaluation of the "unlimited labor" theory must initially examine the validity of the assumption about the labor surplus economy. Although there are economies where there is a labor surplus, many underdeveloped nations of the world do not have this problem. Such nations as Libya, Burma, and some of the Latin American nations do not have characteristics of a labor surplus economy.

Lewis assumes the training cost of labor to remain constant or at least not to be a significant long-run problem. Many nations have found a "bottleneck" in their economic growth simply because of the lack of skills in the
work force. In recent years there has been emphasis on such things as manpower planning for underdeveloped nations. Before examining the advice on commercial policy, one more thing can be said about the surplus labor theory. It assumes that what is produced by the economy can be sold. This overlooks the aggregate demand theory entirely. Also it is implied that labor-intensive techniques in the industrial sector will produce goods that are competitive in the world market. This may also be something to be concerned about since there are many ways to produce output and a capital-intensive process may still be the cheapest way to produce output.

With respect to the matter of commercial policy there are several points that should be made. The first issue is that the distortion of the labor market is a problem of domestic economic structure while the remedy for the problem influences the process of international trade. Ranis and Fei conclude after a lengthy analysis of the labor surplus economy that domestic policy should be used, not international commercial policy.\(^\text{18}\)

Could domestic policy be used instead of commercial policy? The question has lead to much discussion, most of it centering on the idea that either a tariff or a subsidy

could be used. Hagen has provided the basic analysis on this matter. The diagram below illustrates the case where the money costs are greater than the real costs.

![Diagram showing money costs greater than real costs]

**Fig. 2.** Money costs are greater than real costs. Source: Hagen

It is assumed there are constant costs and only one factor of production is being used, day labor. Line AM is the real transformation curve for the economy while APD is the money transformation curve. The world price ratio is APE which falls between the real transformation curve and the money transformation curve. Thus, the economy will produce an output mix of A and will consume the product mix such as C along APE assuming there is international trade taking place. AB units of good A will be traded for BC units of good S. Here it is important to note that good A is produced in the agricultural sector and good S is an industrial good. The above product mix is not a "best" since

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the real transformation curve is above point C and it is possible to reach a higher social indifference curve.

If Lewis' advice is followed, a tariff or quota will be used to prevent the industrial good from entering the country. This will allow the economy to start producing the industrial good (where its comparative advantage at the margin is supposed to be). It is possible to arrive at a higher level of well being such as point D. It is important to note the warning indicated by Enke. The domestic tax and subsidy policy must be such that a point like D' is not the consumption mix since this is inferior to point C.²⁰

Enke states that the solution with the tariff or quota is still not a "best."²¹ It would be more advantageous for the economy to subsidize the production of good S. In this case the economy will produce the output mix M and consume an output mix such as E, which is a larger real income than either C or D. Although tariff policy will serve to "correct" the distortion, domestic policy may still be the superior one to use.

It is significant to raise the question concerning the nature of the general case. The Lewis argument assumes the international price ratio to lie between the real transformation curve and the money transformation curve. Two other


²¹ Ibid.
possibilities exist. The international price ratio may lie to the right of the real transformation curve, and it may lie to the left of the money transformation curve. Thus even though the money costs may be out of line with the real costs, for the tariff policy to work, the international price ratio must lie between the real transformation curve and the money transformation curve.

Finally it is important to note that although some objection can be raised to the use of commercial policy, Lewis has presented a case where commercial policy will work out to improve the real income of the economy. The analysis using the social indifference curves is not without its problems also. Perhaps it may be politically a better thing to use tariffs in underdeveloped nations rather than domestic policy.

A third theory relating dualism, protection, and economic development to international trade is advanced by Gunnar Myrdal, the Swedish economist. It is a theory of social systems which when applied to international trade has the thesis that trade doesn't have the tendency to equalize productivity and income for the advanced and underdeveloped nations.

The analysis of the process of trade and development is inferred from the theory of social systems. The following

22 The social indifference curve is an expository device, not one with empirical content. As a result many international trade theorists don't use social indifference curves.
statement is important in connection with the theory of social systems:

My starting point is the assertion that the notion of stable equilibrium is normally a false analogy to choose when constructing a theory to explain the changes in a social system. What is wrong with the stable equilibrium assumption as applied to social reality is the very idea that a social process follows a direction—though it might move toward it in a circuitous way—toward a position which in some sense or other can be described as a state of equilibrium between forces.23

It is also explained that there is no tendency to move toward an equilibrium but to continually move away from it.

The idea of circular causation is then stated as follows:

in the normal case a change does not call forth countervailing changes, but instead, supporting changes, which move the system in the same direction as the first change but much farther. Because of such circular causation a social process tends to be cumulative and often to gather speed at an accelerating rate.24

Given the above theory of circular causation in social systems, Myrdal then assumes it applies to all areas of social action. He also states "it should be the main hypothesis when studying economic development."

In applying the circular causation theory to international trade Myrdal states that the movements of labor, capital, and goods do not counteract "the natural tendency

24 Ibid.
toward international inequality" rather they are "the media through which the cumulative process evolves--upward in the lucky regions and downward in the unlucky ones." Generalizing, Myrdal feels there is a strong bias in favor of the rich nations against the poor nations of the world. The remark indicates Myrdal doesn't believe in the mutual gains resulting from international trade and it would be interesting to find out his explanation of why trade takes place in the world.

Myrdal attempts a rough empirical test of his theory by referring to the Economic Survey of Europe in 1954 by the United Nations. Two conclusions are important. First the regional disparities of income are greater in the poor nations than in the more prosperous ones. Secondly regional inequality is increasing for the poor nations. The conclusion derived is that the higher the level of economic development, the greater will be the "spread" effects of international trade and the less will the "backwash" effects be. The statement about the "backwash" effects is made on the basis that developed nations have more social overhead capital as well as social values consistent with an industrial system. One wonders at this juncture why Myrdal uses social overhead capital and social values to support his thesis after developing the theory of circular causation.

25 Ibid., p. 27.
The summary statement of Myrdal's analysis of international trade for underdeveloped nations is the following:

The main positive effect of international trade on the underdeveloped nations was to make them produce primary products which are the bulk of their exports. The demand in the export market is inelastic...as technological change in their export production will transfer the advantage to the rich nations...capital will on the whole tend to shun the underdeveloped nations.26

The analysis in the above quotation is certainly at odds with both empirical study and international trade theory. Many of the underdeveloped nations export primary products because they have a comparative cost advantage. The demand for all primary production in the underdeveloped nations is not inelastic, although it is for some items.27 Also there has been technological change in the export industries of underdeveloped nations which has acted as a stimulus for development. Peru is a good example on this matter. The statement about capital tending to "shun" the underdeveloped nations is open to question. The underdeveloped nations have been receiving both unilateral and multilateral aid.

Myrdal states that the theory of circular causation has four conclusions for commercial policy for underdeveloped

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26 Ibid., p. 54.

nations. Tariffs and quotas should be used to protect local industry since protection will aid the change in economic structure. Also "almost every industry yields benefits for the economy as a whole in the form of external economies." A third reason for protection is simply that a tariff or a quota will aid in the transferring of labor from the agricultural sector to the industrial sector. Finally these interferences with the process of international trade are designed to "recondition the price system in such a way that a cumulative process toward economic development is engendered."

An evaluation of the theory just reviewed must center on the concept of circular causation on which Myrdal rests his conclusions for commercial policy for underdeveloped nations. Myrdal argues "the vicious circle of poverty and stagnation it implies constitutes an important example" of circular causation. This remark can be refuted by observation. Poverty can certainly exist along with conditions of rapid economic growth when the growth starts from a low level of income. In fact Myrdal seems to identify poverty with a zero rate of economic growth.

The concept of the vicious circle of poverty is an invalid one for several reasons. The first reason is that

\[28^{\text{Ibid.}}, \text{p. 96.}\]

\[29^{\text{This evaluation of the circular causation theory relies upon P. T. Bauer, "International Economic Development," \textit{The Economic Journal} (March, 1959), p. 107-123.}\]
the underdeveloped nations of the world are experiencing some economic growth. For that matter those nations which are now called developed countries were once underdeveloped. There have also been frequent changes in the commercial and industrial leadership in the world. The following quote is attacked by Bauer:

I have chosen to focus attention on one particular aspect of the international situation, namely the very large and steadily increasing economic inequalities as between developed and underdeveloped countries...these inequalities and their tendency to grow are flagrant realities.

Bauer states that Myrdal offers no evidence himself or in the articles he cites because national income data doesn't exist for any Asian or African nation before WWI and there are only a few estimates for the interwar period. On this matter Myrdal doesn't even discuss the national income data of developed and underdeveloped nations. Bauer's observation that "references to the ever-widening inequalities, retrogression, stagnation, and bottomless misery are obiter dicta, based on an axiomatic and inadmissible identification of low per capita incomes with stagnation" seems to be a good one.30

This writer finds it interesting to note that while Myrdal stresses cumulative processes, his analysis is still static since little or no reference is made to time or the length of the time period of the process. Finally Myrdal

makes the mistake of treating all underdeveloped nations as if they were homogeneous which is an over simplification adding to the distortion of his analysis.

SUMMARY

Three theories which relate international trade and economic development have been examined in this chapter. Since all of the writers assume private enterprise, their criticisms are not valid in the case of state trading. Myint's "backwash" theory generally states that the comparative cost theory is not applicable to underdeveloped nations, but rather the "vent for surplus" theory should be used. A restrictive commercial policy is advised since the "vent" theory can be used to justify protection or free trade. The analysis of the "vent" theory noted that it was not superior to the comparative cost theory at all. In fact the comparative cost theory explains more about the process of international trade with the underdeveloped nations than the "vent" theory does. Thus the case of free trade was shown to be as strong as ever.

The "labor surplus" theory of W. A. Lewis produced the strongest case for using tariffs and quotas of the three examined. The basis of the theory was that money costs were higher than the real costs which resulted in a situation where the nation specialized in the wrong type of production. Even in this case, however, objections can be raised. Commercial policy is used to solve a domestic
problem of economic structure. Also the theory doesn't apply to all underdeveloped nations. The theory only applies to those which have surplus labor in the agricultural sector of the economy.

The third theory examined was G. Myrdal's circular causation theory applied to international trade and economic development. The theory is a sociological theory from which inferences are made which are supposed to apply to the analysis of trade and development. Because of the "vicious circle of poverty" a restrictive commercial policy was advised for underdeveloped nations. The circular causation theory was strongly criticized on the basis of Myrdal's not being able to empirically demonstrate his theory and on the fact that some underdeveloped nations (as well as the ones which are now developed) are experiencing economic development from low levels of per capita national income. Since the theory of circular causation is the mainstay of Myrdal's theory, doubt is cast upon his recommendations for a restrictive commercial policy for underdeveloped nations.
CHAPTER III
UNDERDEVELOPMENT AND INTERNATIONAL TRADE

In the late 1950's and the 1960's there has been considerable concern about the relation of trade and growth for the underdeveloped nations of the world. Several economists as well as many members of the United Nations have made the inquiry into the process of trade and growth for the underdeveloped nations the basis of arguments for the use of restrictive commercial policies. It is the purpose of this chapter to set forth the views of these writers as well as those of the United Nations to discover the merit or lack of merit which is contained in them.

A common starting point is the question, how has the process of international trade and economic development worked in the past? The analysis of Ragnar Nurkse is very representative as an answer to the question as well as being the basis for much of the writing in the literature. Thus some of the points presented by Nurkse are worth reviewing.

In the nineteenth century the areas such as North America, some nations in South America, and Australia were those of recent settlement in the temperate latitudes outside of the continent of Europe. These regions of recent
settlement were the recipients of large capital and labor flows from the European countries. The main stimulant to economic development was the demand for food and raw materials of the United Kingdom. Nurkse says "growth at the periphery was induced by growth in the rising industrial center." This is then a demand theory of growth stating that trade in the nineteenth century was not only a device or process for optimum allocation of resources but also an "engine of growth."

In the twentieth century conditions are different than they were in the nineteenth century. The primary difference is the nature of demand for primary products as well as the "center" nations using technology which results in import substitution of the products produced by the underdeveloped nations. Nurkse has the following important statement:

The transmission of growth from a dynamically expanding center is rather a different story, in which the demand for imports of primary products is the decisive feature which in its turn generates the outflows of productive factors. How my point is that the case for specialization is as strong as ever, but the forces making for the transmission of growth from the advanced to less developed countries may not be as powerful as they were 100 years ago.2

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Nurkse is referring to the idea that the demand of the advanced nations for primary output produced in the underdeveloped nations is price and income inelastic.

The relationship of international trade to economic growth involves three problems according to Nurkse. Economic growth is possible by expanding exports to the center nations, but Nurkse feels this will play a limited role with the exception of those nations which are oil producers and exporters. A second possibility is to manufacture goods for export to the advanced nations. Finally Nurkse notes that expansion of output for the domestic markets by the export industry can take place.

Nurkse states his theory is not a case for autarky since it is his opinion there is plenty of room for expansion in the home market of the underdeveloped nations. One important variable he singles out in particular is transportation costs which are most basic. He says,

> the case of import substitution is a well worn subject which I am reluctant to take up but I can not avoid it altogether. In my opinion the restriction of imports may sometimes help but should never be relied upon. Actually it is always apt to be overdone because it is a relatively easy thing to do.  

Nurkse also notes there is a tendency to reduce trade among the advanced and the underdeveloped nations to a two

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3 Ibid., p. 322.

4 Ibid., p. 255.
country model which overlooks the trade flows within each respective group of nations.

The position taken by Nurkse on the matter of trade and development has been adopted by many writers in some degree or other and also the United Nations Conference on Trade and Development whose analysis and policy statements will now be examined.

The United Nations was on record as early as 1961 in making statements on the matter of international trade and economic development of the underdeveloped nations of the world. The U.N. noted "international trade is a primary instrument for economic development." The resultant was to activate measures for the United Nations Conference on Trade and Development which was held in Geneva during the Spring and Summer of 1964. The basic premise of this conference was that the economic and social development of the underdeveloped nations depends "in large measure on a steady expansion in international trade." The conference states that the economic progress of the underdeveloped nations will be impaired if international action is not taken to modify certain existing arrangements as well as taking some new actions.  

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5 General Assembly Resolution 1707 (XVI), December 19, 1961.

The U.N. notes that although world trade has expanded since 1950 by 50% (to 1962), the underdeveloped nations didn't share proportionately in the expansion. The share of underdeveloped nations in world trade declined from 1/3 in 1950 to somewhat more than 1/5 in 1962. The main reason for the decline according to the United Nations is the fall in the value of exports of the underdeveloped nations. It is noted that the underdeveloped nations have a trade "gap" on their current account which has to be made up by capital imports. These capital imports acting as a trade adjustment are not satisfactory since the payment of interest and other invisibles places a burden on the developing nations of the world.

Several points are made with reference to the fall in exports for the underdeveloped nations as a group. The point which R. Prebisch has been making for many years on the deterioration in the terms of trade is given full play. A second reason offered is the dependency of underdeveloped nations upon their sales to the industrial nations to purchase capital equipment. Thirdly, "measures having discriminatory or protectionist effects applied by certain developed nations have hampered the development of the

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7 B. Balassa, op. cit., disagrees with the Prebisch conclusion on the basis of his empirical work, which incidentally relied heavily on the statistics published by the United Nations. Bo Sodersten, A Study of Growth and International Trade (Stockholm: Almqvist & Wiksell) also takes issue with the Prebisch thesis. Those wishing more information are advised to see the above books as well as the writing of Prebisch.
trade of developing countries and of world trade in general."

A fourth reason for the fall in exports is that primary products are being replaced by substitutes and synthetics as well as the increased output of primary products by the developed nations. A fifth reason offered for the lack of export expansion in the underdeveloped nations is that advanced countries have price support programs, excise taxes and fiscal charges, and export subsidies for many of the primary commodities of importance to the underdeveloped nations. A sixth and final reason is the use by the advanced nations of higher tariffs on the processed forms of products relative to those forms which are imported in their natural state. These six conditions are said to be the fundamental problems of the developing nations concerning international trade and economic growth. What is now needed is to take action on an international basis to increase the exports of the underdeveloped nations and to accelerate their economic development.

The process of international trade is given the job of developing the underdeveloped nations. Here it is important to note the implication (statement in the Final Act of UNCTAD) that the developing nations are themselves doing all they can in terms of exerting effort for domestic measures to stimulate the process of economic development. This assumption is certainly a questionable one. Many writers on the problems of underdeveloped nations as well as
the United Nations continue to emphasize that problems such as land reform, tax reform, and population growth are major barriers to economic development which require domestic action rather than international action. Why should international trade be expected to solve all of the problems of development?8

Before examining the recommendations for commercial policy it is worth while to note briefly some of the conclusions about the status of primary commodity production and export as well as the production and export of manufactures and semi-manufactures for the underdeveloped nations as a group.

The U.N. study group which analyzed commodity trade in the world as it affects the underdeveloped nations states that from 1928 to 1960 the rate of growth of world manufacturing output was 3.4 per cent per year while the rate of growth of primary commodity output was 1.7 per cent per year. At the same time world exports of manufactures expanded at a rate of 3.1 per cent per year while exports of primary commodities expanded at a rate of 1.4 per cent per year. The conclusion was made that primary commodity output and exports were lagging behind the pace set by manufactures.

When the underdeveloped nations are treated as a group their exports of primary commodities rose in value by .9 per cent per year (not considering mineral fuels) between

8Nurkse, op. cit., p. 328, says "unfounded expectations may be due to the influence of a certain historical association."
1955 and 1961. In the same period of time the share of the underdeveloped nations in the exports of primary commodities declined from 44.5 per cent to 40.5 per cent.\textsuperscript{9}

In the future the representatives of the 77 underdeveloped nations believe that they will still be dependent on the exports of primary products for the foreign exchange needed to finance imports necessary for economic development projects. Accordingly if the trend of the past continues in the future, the trade gap will continue to grow for the underdeveloped nations.

Such pessimistic conclusions on the matter of primary commodities influenced the statements on trade in manufactured goods.\textsuperscript{10} Many nations referred to the primary commodity problems and the resultant trade gap as being among the primary reasons why trade in manufactures should be increased for the underdeveloped nations. The feeling was that more industrialization is essential for future development. Also it was stated that industrial diversification and export of industrial goods was to be an important manner of achieving balance in the external accounts of the underdeveloped countries. A few comments on the background of the Geneva conference are necessary to place the policy recommendations in perspective.

\textsuperscript{9}United Nations Conference on Trade and Development, \textit{International Commodity Problems. Report of the First Committee (E/Conf.46/13)} (Geneva, 1964), p. 5-8. This is the source of all the data presented above on primary commodities.

The United Nations sponsored the conference where 77 underdeveloped nations presented a unified view on international economic policy and economic development. The resolutions, general principles, and special principles were adopted with the large voting power of the underdeveloped nations since there were 115 participants in the conference. The unity of the underdeveloped nations which was outstanding was lacking among the developed nations participating in the conference. Developed nations were divided on many issues.11

The most important issue of the conference was the one nation—one vote issue relating to national sovereignty for all the conference participants. The basic problem was that developed nations didn't want to subject their future policy actions to the massive majority possessed by the 77 underdeveloped nations which were not required to take action in response to the voting in most cases.

A second pertinent observation on the conference was the operation of the triple standard. Underdeveloped nations made few demands on each other, perhaps assuming they are doing all that is possible now. Although demands were made of centrally planned economies, they were not insistent.

The demands made of developed private enterprise economies were unyielding. Weintraub believes the demands on private enterprise economies were unyielding because the underdeveloped nations judged them to be more responsive to pressure and their markets are more important.\textsuperscript{12}

Weintraub's analysis of the conference is that the records of the conference give only official conclusions and "these are not the stuff of which future policy is made." The significance of the recommendations on commercial policy is that the Group of 77 will be a force in the future of international economic relations somewhat similar to the first Geneva conference concerning the General Agreement on Tariffs and Trade. Many of the issues will receive more attention in the future and no doubt be made clearer. The policy recommendations for developed nations will be reviewed first, then those for the underdeveloped nations.

The developed nations of the world have erected tariff barriers against the imports of many primary products originating in the underdeveloped nations. Many of the developed nations also have graduated tariffs making the processing of raw materials difficult for the less developed countries. If these duties could be eliminated, the less developed countries would be able to add more value to their output which in turn would serve to earn for them more foreign exchange.

\textsuperscript{12}Ibid.
It is also noted that developed nations have quantitative restrictions on such items as cotton, jute, tobacco, preserved fish, coconut fiber items, cereals, milk products, and vegetable oils. In addition the United States has restrictions on the imports of lead, zinc, and petroleum products while the nations of Western Europe levy duties on petroleum products which compete with their coal. Finally, mixing regulations and administrative agreements prohibiting re-export of certain items are also a barrier limiting the exports of primary products from the underdeveloped nations.

On the basis of the import restrictions which developed nations have created, the less developed nations desire removal of the restrictions in order to be able to sell more of their products in the developed nations. The first recommendation contained in the Final Act for trade policy of developed nations was that there be a tariff standstill with respect to the commodities mentioned above, and that no existing tariffs should be increased. Tariffs on the items should be reduced with the goal of eliminating them at the end of the United Nations Development Decade. Where tariff-free quotas exist on items produced in the underdeveloped nations, the quotas should be progressively enlarged until the tariff is eliminated. In addition it is noted that some


of the developed nations have internal excise taxes on some of the products coming from the less developed nations which should be eliminated.

The former policy guides apply to primary production. Since it was the opinion of the conference that primary production was not sufficient for the growth of future exports, promotion of manufactures and semi-manufactures was emphasized. If the underdeveloped nations are to start industrial production for export, they must receive similar favorable treatment as in the case of primary products. So for manufactures and semi-manufactures the same measures were recommended for future policy of the developed nations. The general goal was to eliminate tariffs and quotas on manufactures exported from the developing nations since they deem it necessary to have access to the markets of the developed nations.

The developing nations also noted that technological change in the developed nations can produce synthetics which displace the natural products they export. In this case the recommendation was that developed countries should "avoid giving special encouragement to the production of new synthetics which may displace other natural products exported by the developing nations" as well as "to avoid investment in the production of synthetic materials competing with natural products especially when such investment can be employed"
more effectively in other fields." What the advice amounts to is the suppression of any anti-trade innovations in the developed nations. Such an asking price is certainly large since technological change is an important ingredient of growth for the developed nations as well as the under-developed nations. What the conference failed to recognize is that import substitution many times produces an item which is not the same as the natural one. The case of synthetic rubber is one where the synthetic has several superior characteristics to the natural rubber. The same is also true for certain pharmaceuticals which are superior in their synthetic form. Finally this whole idea is one which assumes that a national government should take measures to retard innovations. This assumption is not warranted if the United States is taken as an example, where there has been anti-trade innovation taking place, some of which is backed by government funds.

In referring to the future conduct of international economic relations, the conference wanted to redefine the unconditional most favored nation principle of trade negotiations. The preference issue created was one of the most debated points at the conference. The redefinition is evident in General Principle Right:

Trade should be conducted on the basis of most favored nation treatment. However, developed countries should grant concessions to all

15 Final Act, Annex A, p. 54.
developing countries and extend to developing countries all concessions they grant to each other and should not in granting these or other concessions, require concessions from developing countries. New preferential concessions, both tariff and non-tariff, should be made to developing countries as a whole and such preferences should not be extended to developed countries. Developing countries need not extend to developed countries preferential treatment in operation amongst them. 16

The preferences singled out include elimination of duties and quotas with immediate emphasis on cottage industry production and semi-manufactures which contain materials originating in underdeveloped nations. It has also been suggested that a graduated system of preferences be used to account for differences among the underdeveloped nations. 17 More preference would be given to the poorest of nations than to those higher up on the development scale. Here a test such as per capita national income would have to be used. Prebisch thinks a quota should be assigned to each of the less developed nations which couldn’t be exceeded. Apparently the Latin American Free Trade Association has set a precedent for this type of concession.

The redefinition of the most favored nation principle is a “logical extension of the infant industry argument” according to Prebisch. The theory is that preferences are

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16 Final Act, Annex A, p. 11.

needed because of the high initial costs of production in the underdeveloped nations. It is also assumed as the market grows larger, presumably by exporting to developed nations, the costs of production will fall and the less developed nations will be able to compete on the world market without additional preferences.

It is important to note that the theory of preferences assumes a nation's costs will fall as the size of the production units increase. The thing which must also be carefully watched is the factor endowment of the nation. In addition, the economies-of-scale argument is very similar to that used in the theory of economic integration. Although economies of scale may exist, differences in national tastes must be given proper attention. National tastes with respect to size, shape, and other qualities can and do differ on many items.

Prebisch notes that commodity-by-commodity negotiations are unsatisfactory as the commodity list is "likely to become the lowest common denominator of all national lists." Rather it is suggested that preferences be granted to all exports from underdeveloped nations. If the preference theory is a logical extension of the infant industry argument, the argument is all but destroyed since it assumes all industries in the underdeveloped nations are infants. This assumption is most heroic and certainly not substantiated.
How long should the preferences be extended to the underdeveloped nations? Prebisch has the following statement:

at the end of a ten year period preferences would be withdrawn unless it could be shown to the satisfaction of an appropriate international authority that special circumstances warranted their continuation.\(^8\)

There is no scientific basis for making ten years the time period. Prebisch fails to state how the ten-year time period is determined.

The domestic price support policies of developed nations were also a matter of concern of the conference. Special Principle Five of the Final Act states that price support actions in developed nations should be formulated and applied as not to stimulate uneconomic production in such a way as to deprive developing nations of the opportunity, on a dependable basis and at remunerative prices, of supplying a fair and reasonable proportion of the domestic consumption and the growth of such consumption of these commodities in developed countries.\(^9\)

It is impossible to use a price support policy without stimulating surpluses on the market, since more will be supplied than is demanded of the commodity. What is more important is the justification of the use of price support policies in the developed nations. The main justification

\(^8\)Ibid.

is the social value judgement that the income of a certain group of producers is not high enough. This is a non-economic argument which is a matter of national sovereignty for the nation which has the price support policy. It is doubtful that any nation will attempt to support the world price of a commodity since both the United States and the Common Market are reluctant to take any kind of action of the type suggested. The U.S. does, however, give aid to the underdeveloped nations through the Public Law 480 sales of surplus agricultural output.

The conference also recommended policy actions for underdeveloped nations. The character of the tariff policy is set by Special Principle Four. Special Principle Four states that "developing countries have the right to protect their infant industries." This argument is selected since it is their intent to diversify their economic structure particularly in manufacturing. Although the infant industry argument is a valid one, there are problems in the selection of the industries to be protected. The conference made general recommendations for selecting industries with export potential. It advised a demand survey as well as an investigation of cost elements taking special note of resource endowments. It also suggested that nations give attention to their ability to develop technical skills, a trained labor force, and managerial ability. If the industry is thought to have a comparative advantage in the
future, it will be established. Protection is given only temporarily, however. The main problem with all infant industry protection is the removal of tariffs and quotas.

It was also noted in several places in the Final Act that developing nations should form regional groups where possible which could make tariff concessions to stimulate trade among the less developed nations. These concessions would not be extended to developed nations.

With reference to trade negotiations on tariff reduction, Prebisch states that the idea of reciprocity should not apply to the underdeveloped nations. If the developed nations grant concessions to the less developed nations, there is an "implicit element of reciprocity" contained which is often overlooked. The element is that once concessions are granted to the less developed nations, their exports will increase to developed nations which will in turn stimulate an increase in imports from the developed nations. Prebisch also states that if reciprocal concessions are made by the underdeveloped nations, it will have an unfavorable effect on the economic growth of the country. His reasoning is the necessity to have continual change in the composition of imports and a duty concession may interfere with the process of change. As a nation grows its import composition will change, but is the change in

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import composition a causative element of growth or does the process of growth change the import composition? Although noting the effects are indeterminate, Kindleberger has put together evidence suggesting that the import composition is more strongly influenced by economic growth. 21

The infant industry argument as applied by Prebisch and the United Nations (no doubt because of Prebisch’s influence on ECLA and UNCTAD) is a different one than the valid one referred to in the standard works on international trade and finance. The infant industry argument is assumed to apply to the whole economy and what is more important the protected infant is to be an export industry. The argument is not the infant industry argument but something else (infant economy?). As was previously noted in the discussion of preferences, the infant industry argument as modified was used as a basis of commercial policy for developed nations also. Thus one has grounds to suspect the "infant industry argument" as used by the less developed nations is another name for simple protectionism which is not in the interest of better economic efficiency.

In this chapter the present revolt of the less developed nations has been reviewed as represented by the policy conclusions of the United Nations Conference on Trade and Development. The significance of the conclusions are that

21 Kindleberger, op. cit., p. 177-193.
they are representative of issues which will arise in the future as well as the resultant of the dissatisfaction with the present state of affairs.

Policy recommendations for developed nations applying to primary commodities rest on the fact that developed nations have restrictive tariffs which if removed would provide more exports for the less developed nations. The recommendations applying to primary commodities certainly have merit. Policy recommendations applying to manufactures, particularly the preference concept, are beset with difficulty. Generally they are based on an unproved assumption equating increased economic growth with industrialization. More specifically the preference theory still is not compatible with world economic efficiency. If developed nations lower their trade barriers, concessions should be extended to all, not just the less developed nations. These policy recommendations on domestic matters such as production of trade displacing synthetics, price support policies, and excise taxes severely conflict with national sovereignty and presume international cooperation which is not present at this time.

Commercial policy for underdeveloped nations rests on a distorted form of the infant industry argument. Although the infant industry argument is a valid one for any nation, the arguments for tariff protection advanced by Prebisch and the United Nations are different than the
infant industry argument. The possibility then exists for the less developed nations to use their general "infant industry" argument as a license for general protectionism.

In conclusion the basic premise behind the official policy conclusions of the United Nations Conference on Trade and Development is that international trade is the means for increasing the rate of economic growth for the less developed nations. Nurkse has questioned the validity of the assumption years before the conference was held. Kindleberger in assessing the relation of international trade to economic growth notes the export led economic growth is only one of three possible models. By making only the one assumption the United Nations has biased its policy conclusions for developed and less developed nations alike.

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22 Kindleberger, op. cit., p. 195-211.
CHAPTER IV

INTERNATIONAL TRADE AND DEVELOPMENT

In the last chapter the policy recommendations of the United Nations Conference on Trade and Development were reviewed and evaluated. One of the important policy guides was that the developed nations should lower their tariffs and quotas on items produced in the developing nations. Certainly in the interest of world economic efficiency any lowering of trade barriers will be important since the volume of international trade will increase. Of particular importance, however, is the matter of placing heavy reliance on the developed nations' lowering their trade barriers as an important means of increasing exports from the underdeveloped nations. There are several questions which must be answered. First, what items are protected by the developed nations? Second, what type of protection is employed by the developed nations? Third, what is the nature of the gain to the underdeveloped nations?

Bela Balassa has done an empirical investigation on the future prospects of international trade for the underdeveloped nations. Although his analysis is primarily econometric projections for the goods produced by the
underdeveloped nations, evidence of trade barriers by commodity groups is presented in several places.1

The temperate zone foods category includes the following: livestock, meat, fish, eggs, cereals and feeding stuffs, fruits (other than bananas and vegetables), and tropical beverages. The developed nations employ a variety of protective measures on temperate zone foods such as tariffs, quotas, and import licenses as well as price support programs. It is also important to state that the United States, while having a price support program on several items, also gives away several agricultural items in its foreign economic aid programs.

Balassa notes that the European Economic Community's agricultural policy will serve to hamper mean exports from the less developed nations. The United Kingdom also has a system of support payments. The European protection is very significant since 90% of the mean exports from the underdeveloped nations move to Europe. The nations which are the significant exporters and would gain from a lowering of trade barriers on meat are Argentina, Uruguay, and Mexico. It is also important to note the establishment of a meat quota in the United States which will continue to impede imports from the Latin American countries.

The cereals group is subject to the variable import levy in the case of the Common Market on wheat, maize, and

barley. Both the United Kingdom and the United States have domestic price support programs. The Food and Agricultural Organization estimates that exports of oranges will increase to the Scandinavian nations and perhaps the Common Market depending upon the influence of Italy, the major orange producer in the Common Market.

Balassa's appraisal is that the lowering of trade barriers on the temperate zone foods' category will result in only minor gains for the less developed nations since most of the trade in these items takes place between developed nations (especially in the fruit and vegetable group).

The competing tropical foods' category is made up of vegetable oils and fats, sugar, and tobacco. Although oilseeds have no duty placed on them in Western Europe, mixing regulations and price supports on rapeseed production stand in the way of increased exports from the developing nations. The most significant protection is the price support program in the United States for soybeans. This has made the U.S. the largest exporter of soybean oil and oil seeds. Finally the use of synthetics is diminishing the use of oils in the production of detergent soap and synthetic resins are replacing oil drying agents in other preparations. For sugar, the United States has a quota under the Sugar Act, and Japan also uses quota restrictions. The United Kingdom and the Common Market have domestic price support programs for beet sugar. Balassa notes that cane sugar is still cheaper to
produce than beet sugar so if protection is dropped, many of the tropical island nations will benefit. This may produce some redistribution of export earnings since the United Kingdom, France, and Portugal have preferential agreements also. Finally if trade barriers were lowered on tobacco, the large producers will gain the most. The United States, Greece, and Turkey are the large tobacco exporting nations.

The non-competing, tropical foods' group includes tropical beverages, bananas, coffee, tea, and cocoa. Several of the developed nations have duties and internal excise taxes on these items. Having trade barriers on these items is uneconomic for the developed nations and the less developed nations alike. If trade barriers were abolished on this category, coffee would probably get most of the gain since it is the second most important export from the underdeveloped nations. This would benefit Brazil, Costa Rica, Colombia, Guatemala, and El Salvador and several African countries. Lowering trade barriers on cocoa would benefit the African nations of Ghana, Nigeria, and the Ivory Coast. Abolishing trade barriers on tea will be significant for Ceylon (tea exports make up over 60% of the total) and India. Major gains from lowering tariffs on bananas will accrue to Ecuador, Honduras, and Panama. Some minor gains will also go to the nations of Central Africa. Cutting restrictions on spices will greatly benefit the nation of Zanzibar and the island of Granada.
The agricultural raw materials' category includes: wool and cotton, hides and skins, timber and lumber. The United States and Japan have import restrictions on wool which if lowered would benefit Australia, New Zealand, Argentina, and South Africa the most. The cotton item is very significant to the underdeveloped nations as 55% of world cotton exports come from Mexico, Brazil, Peru, Egypt, Syria, Sudan, and Uganda. The benefit to the cotton exporting nations will be limited as the development of synthetic fibers continues. Synthetics are also acting to replace the natural variety of rubber. Several nations have duties on hides and skins which must be related to the livestock industry for each nation in most cases. Finally the Common Market has a tariff on timber and lumber imports.

In the fuels' category the United States has a quota limiting the imports of petroleum products. Western Europe uses a variety of trade barriers to protect its coal industry. Certainly as depletion of the hydrocarbon fuels continues in the developed nations the fuel exports from the Middle East and the Caribbean nations will increase to the developed nations.

The significant protection in the non-fuel minerals' and metals' group is on lead, zinc, and aluminum. The United States has quotas on imports of lead and zinc ores and concentrates. The Common Market levies a 6% duty on zinc, a 7% duty on lead, and an 8.5% duty on aluminum.
The United Kingdom has duties on all three metals imported from outside the Commonwealth. Gains from lowering duties on aluminum would go to the West Indies and some nations in Africa.

In the manufactured goods' category Balassa notes that textiles are subject to formal and informal quotas in the developed nations. In addition France, West Germany, and the United Kingdom have quota restrictions to protect domestic manufacturing of jute items. Several developed nations have import restrictions on sewing machines, bicycles, and sporting goods. Especially significant are the graduated tariffs on the following items: hides and skins, rubber, cotton, jute, metallic items, and processed foods. Table 1 illustrates the Common Market's external duty on cocoa items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cocoa beans</td>
<td>5.6%</td>
</tr>
<tr>
<td>Cocoa butter</td>
<td>22.0%</td>
</tr>
<tr>
<td>Cocoa paste</td>
<td>25.0%</td>
</tr>
<tr>
<td>Cocoa powder³</td>
<td>25.0%</td>
</tr>
</tbody>
</table>

³Source: Balassa.

The significance of such graduated tariffs is that an additional barrier is placed in the way of establishing processing industries in the less developed nations.
Just what would be the total gain for the underdeveloped nations if duties were lowered on all of the items mentioned above? There would be an expansion of exports from the less developed nations but since the price elasticities of supply and demand for the developed nations are not known, no exact money figure can be obtained without being subject to considerable error. Balassa does make an estimate for the non-competing tropical foods' group since there is no domestic production in the developed nations. The once-and-for-all gain from lowering import barriers in the developed nations is estimated to be either $34 million or $77 million depending upon whether tariffs are abolished or lowered 50% by 1970.2

It is also important to state that if the United Kingdom and the Common Market abolish their preference arrangements, a redistribution of export earnings could take place within the less developed nations as a group. Generally the exact effects of lowering trade barriers for many of the categories are uncertain because of the difficulty of estimating domestic supply and demand elasticity. The estimated gain in the non-competing tropical foods' category is not large. Gains to the oil producing nations from liberalization of trade will go to nations which already have favorable trade balances. Lowering trade barriers on the metals' group will have effects similar to those of

2Ibid., p. 112.
lowering duties and quotas on oil with the exception that
different nations will receive the gains. Many of the oil
and metal producing nations are also in a favorable posi-
tion to attract foreign investment of the direct type.
Major reliance on the lowering of trade barriers by the
developed nations shouldn't be the sole policy of the less
developed nations since the gains are uncertain in many
categories and quite small in areas where the error possi-
bilities are small. Lastly, major gains would be made by
those underdeveloped nations which have favorable export
prospects currently.

The analysis of the lowering of trade barriers on the
part of developed nations is only one aspect of the problem
of international trade and economic development of under-
developed nations. It is also necessary to examine empiri-
cal studies of the relationship of international trade to
the economic growth of an underdeveloped nation.

EMPIRICAL STUDIES OF TRADE AND GROWTH

A theory of economic growth must have a theory of
demand as well as a theory of supply. Although no single
model of economic growth has yet been devised that will in-
clude both a theory of demand and supply. H. B. Chenery
has formulated a model including a theory of supply and
demand. The model was utilized to study the effects of
growth on international trade. The methodology was to take
a sample of 51 nations to determine if there were any common
patterns emerging as economic development progressed. On the demand side of the model, national income per capita was used. On the supply side, capital stock per worker, education, and skills of the labor force were key variables.

The cross section analysis of the 51 nations is the basis for several important conclusions. First, when income increased from $100 per capita to $1000 per capita, industrial production more than doubled as a fraction of total output. Production of primary products diminished by almost a multiple of three. Chenery explains the change in output composition by attempting to measure the economies of scale. He estimated that about one-fourth of the change in industrial production is attributable to economies of scale.

Economies of scale relative to market size were found to be significant or substantial in all cases except in the production of non-metallic minerals. Thus the economies of scale account for the high levels of imports at low per capita national income. As per capita national income increased, imports began to diminish. Chenery estimates that the economies-of-scale variable explains one-half of the decline in imports for the sample studied.

Import substitution is stated to be a cause of growth in the intermediate and capital goods industries. The

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3 Ibid., p. 637-640.
capital goods included in the study were machinery, transport equipment, and metals. Intermediate goods included chemicals, paper, rubber, and textiles. Substitution of domestically produced consumption goods for imported consumption goods was only of minor importance.

Chenery states that his analysis demonstrates the point that as national income increases comparative advantage can change because of changes in the costs of factors. The most important factor was the capital factor. The following statement is made concerning income changes and comparative advantage:

If there is an income change with no change in comparative advantage, only about 1/3 of the normal amount of industrialization will take place. Changes in supply resulting from changes in factor costs as income rises, causes substitution for imports and to a lesser extent factory goods for handicraft goods.\(^5\)

Chenery believes that supply changes are more important than changes in demand in the explanation of industrialization.

The second important conclusion concerns the natural resource endowments. The study demonstrates that nations having relatively large amounts of natural resources, such as New Zealand and Costa Rica, have low output of capital and intermediate goods. Exports of primary products finance the imports of capital and intermediate goods. Nations having

\(^5\)Ibid., p. 644.
relatively small amounts of natural resources, such as the United Kingdom, Italy, and Japan, do just the opposite.\(^6\)

The third important conclusion from the study is that manufacture of machinery is "most sensitive" to resource endowments. A large amount of it can be supplied more economically by imports for a nation with a comparative advantage in primary production.

Although the Chenery analysis gives some important empirical results, it is subject to criticism. Innovation, population changes, and the effects of international trade on economic growth are not considered in a detailed manner.

A different methodology is used by D. Seers who confines his analysis to the underdeveloped nations which are producing primary products. Seers generalizes on the experience of 17 underdeveloped nations so that a general model of primary producing economies can be inferred from his analysis.\(^7\)

According to Seers the level of exports of the resource intensive economies is the most important magnitude of demand. Seers states that exports are not only the largest element of aggregate demand but also they fluctuate more than investment spending.\(^8\)

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\(^6\)Ibid., p. 649.


\(^8\)Ibid., p. 5.
The creation of real capital, particularly plant and equipment, depends mainly on the profits of exporters, or on the revenues of government export duties in the case of government investment. Inventory investment is largely involuntary because the high rates of interest make holding of large inventories expensive. Seers states that investment is largely an endogenous variable explained within the model.

Exports in the short-run are "almost a wholly exogenous factor" for the primary producing nation. The major exceptions to exogenous export determination are those nations which export staple foods or textiles with significant domestic markets. In these cases export volume in the short-run will depend partially upon internal demand. Mexico, a cotton producer and exporter, is given as an example by Seers. Burma would be another example.

Several remarks are made about the imports of the primary producing economies. Seers notes that investment usually means imported capital goods. Several types of manufactured goods must also be imported. Generally, Seers believes that the supply of inventories in the short-run is inelastic because import restrictions will create a lag in replenishing depleted inventories as well as the fact that inventories are small.

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9Ibid., p. 6.
Government spending in the primary producing economy is closely related to international trade. Export duties are a common means to generate revenue for government. Other taxes may be closely related to the export sector. Although Seers doesn't give any indication of the types of taxes, they are probably income taxes on foreign owned or foreign operated firms. Income taxes on foreign firms can be collected with a minimum of difficulty. Government spending is small unless there are large service or military expenditures. Where military spending is large the nations usually receive aid from other nations such as the United States or the Sino-Soviet Bloc.

An important relationship of the foreign sector to the government spending is suggested by Seers' remarks on "marketing board monocultures." At present the Union of Burma has a marketing board for rice, and Ghana has a marketing board for cocoa. If the economics of monopoly are understood, it is possible for the government marketing boards to earn a profit which can then be paid to the treasury of the government. Here is the commercial principle of government finance applied to international trade for underdeveloped nations. More will be said about the marketing board in the Union of Burma in a later chapter.

The significance of the Seers investigation is that it provides a view of the relationship of international

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10 Ibid., p. 16.
trade to the domestic economy of primary producing underdeveloped nations. Particularly significant is the attempt to include government finance in the explanation.

EXPORT LED DEVELOPMENT

Although the empirical investigations of Chenery and Seers provide important results concerning the relationship of international trade and economic growth, neither details the effects of international trade on development. Kindleberger has noted the three possibilities. The export sector of the underdeveloped economy may provide the main stimulus for economic development. The experience of the United Kingdom and Canada conforms to the export led development model. Exports may be a balancing sector where they don't lead growth but "provide close support." Kindleberger cites Japan as an example of foreign trade acting as a balancing sector. The third case is where foreign trade is a lagging sector in the economy. Foreign trade will lag behind the growth of the domestic economy because of the low demand for exports on the part of developed nations and the fact that the underdeveloped nations must import from the developed nations. Foreign trade as a lagging sector is a view taken by the Economic Commission for Latin America, as applied to Latin America.

11 Kindleberger, op. cit., p. 195-211.
The skewness of the resource base will generally determine which of the patterns of trade and development noted above will apply to a given nation according to Kindleberger. If the resource base is highly specialized, the gain from trade will be large. If the natural resource base contains a large number of different types of inputs and the skills of the labor force are applicable over a wide range, the gain from foreign trade is not as great as in the former situation.

It is possible to go one step further, however. The nature of the production function of the export industry will provide basic information about the relationship of growth in the export sector to growth in the domestic economy. Baldwin's analysis of the technological nature of the production function will support the former statement. Baldwin states that a mineral industry exploiting some natural resource will have a low labor coefficient. Although little labor is required in terms of quantity, skill requirements will be quite high. An example of this type of situation would be petroleum production as well as the open pit and "strip" mining operations.


Three significant statements can be made about the effects of the mineral industry on the domestic economy of the underdeveloped nation. Since the quantity of labor required is low, the effect on the demand for consumer goods is likely to be small. The factor endowment must be such that the cost of the resource is low to offset the cost of capital equipment which has to be imported. This point was made by Seers previously. Finally there is a chance that as time goes on, domestic workers can be trained to replace any foreign workers. This assumes that the foreign workers will not have any monopolistic practices ensuring their jobs. If domestic workers are trained to replace foreign workers, the quality of the domestic labor force is increased. Another benefit is that foreign workers are likely to remit a great amount of their income to home countries and replacement of these workers will leave more demand in the domestic economy.

If the export industry is one which produces agricultural crops, the quantity of labor required will be large according to Baldwin. The skill requirements are quite low. The demand for consumer goods is likely to be high since the requirement of labor is substantial. Baldwin believes that the domestic labor force will not receive much training from the foreign workers since they are likely to be supervisory people. This fits the plantation economies.

16 Ibid., p. 86.
growing tea crops for example. Also Baldwin's analysis seems to describe the "single plantation monocultures" in Maylasia, Liberia, and Honduras where there is a one-commodity-one company relationship which is quite rare according to Seers.15

Baldwin's thesis is that the nature of the production function of the export industry determines the extent of the spread of new techniques to other sectors of the economy. Baldwin includes not only labor skills but also production technology of all types. A.K. Cairncross would partially dispute Baldwin's analysis on a point or two. Cairncross believes that technology is transferred not only by foreigners in person but also by learned journals, technical advice from foreign governments, and technical assistance from international organizations.16

The "spread effects" of the export sector are not confined to those noted above. The staple theory of economic growth provides additional keys to the puzzle. Although the staple theory applies only to the "atypical case of the new country," important inferences can be made from the theory since it describes a process of diversification about an export base.17

15Seeers, op. cit., p. 27-28.


One "spread effect" from the export industry is that additional domestic industries can be established which use the output of the export industry as an input. A processing industry is a possibility. Whether a processing industry can be established to add value to the output of the export industry depends on the technological nature of the production function of the processing industry and the commercial policies of foreign nations. Baldwin has the following comment on the production function of the processing industry:

When processing required relatively large amounts of skills and specialized capital goods and did not significantly reduce the weight of the product, it was usually cheaper to undertake these activities in advanced nations where the main markets existed.\(^{18}\)

Baldwin also states that where input requirements are quite different in the processing industry from those of the export industry, "the changes of further production were poor." The Chenery analysis notes that the importance of the economies of scale are important and must be watched in the capital and intermediate goods industries. The domestic market must be large enough otherwise goods will be imported.

The whole argument above assumes that the domestic economy will be able to supply all of the needs or at least most of the needs of the processing industry. If these needs can't be supplied domestically, processing will have to be done elsewhere.

\(^{18}\)Baldwin, op. cit., p. 88.
A second possible "spread effect" is the inducement to invest in the domestic production of certain inputs for the export sector. Certain plants are adaptable to underdeveloped nations. Particularly, small-size units that can produce high transport cost items. Timbers, bricks and concrete building blocks would fit the requirements. Building blocks have many uses such as building storage facilities, public buildings, and dwelling units. Watkins suggests that a transportation system might also be an important possibility. In any case the fundamental determinant of using domestically produced inputs in the export industry will depend on the relative prices of the inputs.

A third possibility is that industries producing consumer goods for the export industry may arise. Watkins calls these industries, "final demand linkages." There is some support for the statement concerning demand since Seers has noted that the demand generated in the export sector of the primary producing economy is the largest influence on aggregate demand. Chenery also has noted that the economies of scale are not as significant in the production of consumer goods as they are in the production of capital and intermediate goods.

Whether any of the "spread effects" will be found in the economy of an underdeveloped nation depends upon the

19 Baldwin, op. cit., p. 88.

20 Watkins, op. cit., p. 145.
many relationships already explained. Growth as diversification about the export sector is far from being an automatic process. However, some summary statements can be made.

As foreign demand for the export increases and if the spread effects are present, the domestic economy will grow with the foreign trade sector. As income grows in the domestic economy the economies of scale become important as Chenery has noted in his empirical study. Comparative advantage will change in a systematic fashion as the supply of factors, particularly the capital factor, increases.

In the growth process Haberler's dynamic benefits from trade will also be important. Capital goods and raw materials not domestically produced will be imported. Technology, skills, and managerial talent will also cross national frontiers. International capital flows can be of aid in the accumulation of capital. Finally, "trade benefits a country indirectly by fostering healthy competition and keeping in check inefficient monopolies." Trade-fostering competition assumes that the underdeveloped nation will not have a restrictive commercial policy to achieve the maximum gains. Generally the dynamic benefits from trade will serve to change the production functions in the underdeveloped nation over time. In terms of the comparative

cost theory, the transformation curve will be pushed outward from the origin.

Economic growth over long periods of time will depend upon the ability of the economic system to adapt itself to change. Economic structure must transform since natural resources will experience depletion over time, products will be subject to competition from synthetics, and there may be dynamic changes in demand in the world. According to Kindleberger change in the economic structure may not have to be encompassing, rather change at the margin will be the most important. 22

Investment must be made in other sectors of the economy in addition to the foreign trade sector to ensure the presence of the spread effects. If investment is not made in other sectors, the economy can develop an "export bias." Foreign trade can't be relied upon wholly to generate economic growth for the economic system.

Barriers to transformation can develop. The "export bias" is one such barrier. Other barriers to transformation may be such things as the static monopoly market structure and policies followed by government. Non-economic factors such as religion, cultural institutions, and social values may either aid or hinder transformation of the economic structure of the underdeveloped nation.

The main difficulty in analyzing the effects of trade on economic growth is that no dynamic model of trade and growth has yet been constructed. Dynamic trade theory has mainly been inferred by extending the conclusions of the comparative statics type of trade theory. The Swedish economist, Bo Sodersten, has constructed a comparative statics model which traces the effects of trade upon economic growth in a rigorous theoretical framework. Sodersten realizes that a truly dynamic model where time is a variable may result in somewhat different conclusions. He believes that the imperfect state of economic analysis doesn't permit a dynamic model to be used.

Sodersten's model is a two-country-two-good model assuming partial specialization so that each nation consumes some of each good it produces. Resource and commodity markets are assumed to be competitive and transport costs are assumed to be zero.

Economic growth is assumed to be an increase in productive capacity for the particular nation. This is done to state the relationships between trade and growth in the clearest possible manner. Although the analytical focus of the model is on the terms of trade, Sodersten notes the "effects of growth on the volume of exports and imports are


analytically similar to the effects on the terms of trade."
The terms of trade are the equilibrating mechanism for the
model. Since economic growth effects the supply and demand
curves in the sectors of the two nations, disequilibrium
can arise and the terms of trade restore the equilibrium.
An example may be helpful. If the demand in Country 1 for
imports increases more than the supply, the price of the
good will increase, or the terms of trade for country 1
will deteriorate. Country 1’s imports will increase and
Country 2’s exports will increase. Thus Sodersten states
that factors that increase the volume of imports mean in-
creasing terms of trade.\(^{25}\)

The factors influencing the terms of trade (and the
volume of exports and imports) are the growth rates in the
sectors of the two economies, the marginal propensities to
consume, and the price elasticity of demand and supply.
At this juncture it is important to state that each nation
has a two-sector economy, one producing export goods and one
producing import-competing goods. The exports of Country 1
are the imports of Country 2, the imports of Country 1 are
the exports of Country 2.

To investigate economic growth and the effects on ex-
ports and imports, Sodersten assumes that economic growth
will push the transformation curve outward from the origin

for the particular country. To demonstrate how Sodersten arrives at his conclusions it is necessary to use geometry.

**Figure 3. Trade and Growth**

*Source: Sodersten*

In Figure 3 the nation is assumed to have economic growth over time so the transformation curve shifts from $T$ to $T_1$. If the terms of trade are unchanged, the price ratios will be unchanged so line $P$ will be parallel to line $P_1$. The distance $AB$ (measuring the outward shift of the curve) represents how much more of the import competing good can be produced given the production of the export good. When time is considered, $AB$ represents a growth rate of import-competing production. The distance $AC$ (measuring a change in curvature) shows how much more of the export good can be produced given the unchanged terms of trade. When time is considered, $AC$ represents a growth rate of export production.
Export-biased growth is illustrated in Figure 4. Export-biased growth is defined to be the case where economic growth takes place only in the export sector of the economy of the nation under consideration. As is shown on the graph the transformation curve is pushed out from the origin only along the horizontal axis. AB, the growth rate of import-competing production, will always be positive since economic growth is defined as an outward movement of the transformation curve from T to T'. AC, the growth rate of export production is positive (extending to the right of A) in this case. AC can be negative, however, as Figure 5 illustrates (or a decline in exports).

Import-biased growth is illustrated in Figure 3. AB is again positive while AC, the growth rate of export
production, is negative (i.e., extending to the left of A). Sodersten explains the negative growth rate of export production for Country 1 by Country 2 having economic growth in its importing competing sector. Since Country 2's imports are Country 1's exports, growth in Country 2's import-competing sector can fill an increase in demand without an increase in exports from Country 1.

The last case is illustrated in Figure 6. Economic growth has shifted the transformation curve in such a manner as to have the price-ratio line tangent to $T_1$ directly above the point $A$, the tangency point on $T$. If this is the case, there will be no growth of export production for the particular nation. Sodersten explains this case by noting that an increase in income will result in more of both goods being consumed in the particular country.\footnote{Ibid., p. 44.}
One conclusion derived by Sodersten is that the more dependent upon trade a country is, the greater will be the risk of having no growth of real income. If Country 2 has growth in its import-competing sector while Country 1 has economic growth in its export sector, Country 1's prospects for future economic growth are not very favorable. Future growth will depend upon the capacity to transform the economic structure in Country 1. The extreme of this pessimistic case is that of "immiserizing growth" described by J. Bhagwati and H. G. Johnson.

"Immiserizing growth" is a curious case where after a nation has experienced economic growth, deterioration of the terms of trade more than offset the gain from growth. Sodersten concludes that "if the two trading partners
produce and consume both goods it is almost impossible for a country to be damned by growth." Since it is usual to expect partial specialization rather than complete specialization, the "immiserizing growth" is almost out of the question for any nation.

A second conclusion derived from the model is that the greatest prospects for growth will result when economic growth is import biased. The extreme of this case is where there is large positive growth in the import-competitive sector in Country 1 and growth in the export sector of Country 2, and where there is negative growth in the export sector of Country 1 and in the import-competitive sector of Country 2. If these conditions exist, Country 1 will experience a very large economic advance.

The two extremes have been described above. In the real world growth will be experienced between the extremes. The case of "immiserizing growth" is not likely according to Sodersten.

Although the Sodersten model is cleverly devised, it is subject to some criticism. The model only has two countries. If a third country were introduced, the conclusions may be different on the matter of negative export growth. The use of pure competition in the resource and

27 Ibid., p. 17.

28 Ibid., p. 49.
commodity markets may differ from conditions actually existing. Finally, as was noted previously, the model is in the form of comparative statics.

This survey of empirical studies has illustrated several points. Commercial policies of the developed nations are obstructing the growth of exports from the less developed nations. However, reliance on the reduction of trade barriers shouldn't be the sole policy of economic development for the less developed nations.

Empirical studies of the relationship of international trade and economic growth indicate that changes in supply as well as changes in demand are important in explaining import substitution as a nation develops. Generally resource endowments and economies of scale were shown to be most significant for import substitution. Skewness of the resource base, the nature of the production function in the export industry, and the capacity of a nation to transform its economic structure are the major determinants of the relationship of trade to economic growth. In the following chapters these results will be applied in the analysis of Peru, Burma, and Jamaica.
CHAPTER V

TRADE AND GROWTH IN PERU

Peru and Her People

The history of the country of Peru is similar to that of many nations in South America. In 1531-1533 the nation was invaded and conquered by Francisco Pizarro for Spain. Independence from Spain was proclaimed in 1821, but the Spanish were not defeated until 1824. There followed a one hundred year period of frequent revolutions, another two-year war with Spain, and the War of the Pacific which wasn't settled until 1883 when Chile gave the guano islands back to Peru.

Peru is not a new nation in the conduct of international trade. Peru had a thriving export business as early as 1843 when the guano exports provided fertilizer to much of the world. The "guano age" lasted for forty years finally ending in the early 1880's. During the forty year period many foreigners came to Peru to exploit the guano, particularly the Asians.¹

Today Peru has a population of approximately 11 million making it the fifth largest nation of South America by

¹Levin, op. cit., p. 115.
population size. Of the 11 million persons only a little more than 3.5 million can be said to be part of the money economy.\textsuperscript{2} Thus the size of the market is limited. About 46\% of the population is made up of Indians while the white and mestizo group make up about 53\% of the population.

Geographically the nation can be divided into three parts. Along the coastal region there is an arid area extending inland for a distance of 50 to 100 miles. Along the northern part of the coast there is cultivation of sugar cane, cotton, and other crops. Agriculture along the southern part of the coast is confined to the valleys because of the serious lack of water. In the highlands area, or the Sierra, mineral resources are found. As the Andes are crossed the Selva region is entered. The Selva is an extension of the tropical forest and jungle which drains into the Amazon River. It is interesting to note that about 60\% of Peru's land area is in the relatively inaccessible Selva region. As yet the Andes continue to act as a natural barrier to the Selva although the area is rich in timbers and other useful tropical vegetation.

The Economy of Peru

Peru is truly representative of an underdeveloped nation since agriculture is the dominant industry. The U.S. Department of Commerce estimates that about 80\% of the

\textsuperscript{2}U. S., Department of Commerce, \textit{Resources and Trade Development Mission to Peru, 1961.}
of the population depends upon agriculture for a living. Especially important in agriculture is cotton growing. The cotton output is of good quality and second only to the long staple variety grown in Egypt. Both cotton and sugar are produced mainly along the northern coast of the country. Peru also has the largest oil field on the West Coast of South America. In the southern part of the country wool production is important with the vicuna and alpaca being specialties.

Most authorities believe that Peru has vast mineral resources. Copper, lead, zinc, and vanadium are mined in several locations. However, mining is secondary to agriculture in importance.

In recent years fishmeal production has been very important in the economic development of the country. More will be said about this industry later.

As was noted earlier more than 2/3 of the population lives in a rural environment. From 1945 to 1950 the population growth rate was 1.9% per year. From 1950 to 1960 the growth rate increased to 2.6% per year. Early marriage and public health measures have been important factors accounting for the increased population growth. Although the growth rate of population is large, the death rate per thousand persons is about double that of the United States.

\footnote{Ibid.}

Generally health conditions are improving but there are still shortages of physicians and hospital beds. The United Nations estimates there are only 4.7 physicians per thousand persons, and only 2.2 hospital beds per thousand persons.

Peru has a high rate of illiteracy. About 58% of the population over 15 years old is illiterate.\(^5\) Government spending on education is about \$4 per person, yet 2.9% of the gross national product was spent on education in 1960.

The United Nations cites the per capita national income in 1961 dollars for Peru as being \$268 while the per capita average for all of Latin America is \$420.

Although this brief sketch of the economic base of Peru lacks detail, it is obvious that Peru is an underdeveloped nation by the test of per capita national income, population growth, health conditions, and education. The intent of this study is not to examine the development of Peru in detail, but rather to assess the matter of trade, economic development, and commercial policy since 1950.

**Economic Growth in Peru**

Peru has experienced economic growth during the period 1950 to 1963. During this period the average annual growth rate of real gross national product was 5.4%. As indicated

\(^5\)Ibid., p. 60.
in Table 2 the rate of growth of population also increased in the 13-year period. The rate of growth of real income has been less than the rate of growth of money gross national product because of inflationary financed development expenditures by the government. The inflation has not been as severe as in other South American nations such as Brazil and Argentina.

TABLE 2
PERU'S GROWTH OF REAL GNP AND POPULATION

<table>
<thead>
<tr>
<th>Period</th>
<th>Rate of Growth of GNP</th>
<th>Rate of Growth of Real Income</th>
<th>Population Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1945-1950</td>
<td>4.4%</td>
<td>5.2%</td>
<td>1.9%</td>
</tr>
<tr>
<td>1950-1955</td>
<td>5.1%</td>
<td>4.4%</td>
<td>2.2%</td>
</tr>
<tr>
<td>1955-1961</td>
<td>5.3%</td>
<td>4.2%</td>
<td>2.6%</td>
</tr>
<tr>
<td>1960-1963</td>
<td>7.8%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


The rate of growth of investment in the domestic economy is one of the significant contributory elements to economic growth for the nation. Public investment has been very important in the growth of total investment. However, private investment has continued to grow as the nation experiences economic development. The quality of entrepreneurship is highly important in explaining the recent growth
of the fishmeal industry as well as other types of economic activity. The government of the nation has been instrumental in stimulating economic growth not only by channeling its spending to development projects but also providing a favorable climate for investment in the mining, electrical, and petroleum industries. Although there has been inflationary financing of development expenditures in the past, government policy makers have recognized the problem and fiscal policy in 1965 is reported to be directed towards a balanced budget by increasing tax collections instead of borrowing from the central bank.

**Trade and Development in Peru**

All authorities agree that exports have been the leading sector for the economic growth in Peru. In fact exports have been greater than investment spending since 1950. The ratio of exports to gross national product is quite large and it has been increasing as shown in Table 3. This is typical for primary producing nations. That the ratio has been increasing indicated the increasing importance of international trade to Peru.

The data in Table 3 indicate that not only are exports a large fraction of gross national product but also that the rate of growth of exports is larger than the rate of growth of gross national product for all but three years. In fact export growth between the period 1955-1959 to 1955-1961
TABLE 3
PERU’S RATIO OF EXPORTS TO GNP

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports</th>
<th>GNP</th>
<th>Ratio of exports to GNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>5447</td>
<td>34214</td>
<td>16%</td>
</tr>
<tr>
<td>1951</td>
<td>5315</td>
<td>36165</td>
<td>14.7%</td>
</tr>
<tr>
<td>1952</td>
<td>6507</td>
<td>38165</td>
<td>17.0%</td>
</tr>
<tr>
<td>1953</td>
<td>7211</td>
<td>40572</td>
<td>17.8%</td>
</tr>
<tr>
<td>1954</td>
<td>7754</td>
<td>42192</td>
<td>18.4%</td>
</tr>
<tr>
<td>1955</td>
<td>8161</td>
<td>43708</td>
<td>18.7%</td>
</tr>
<tr>
<td>1956</td>
<td>9011</td>
<td>44469</td>
<td>20.3%</td>
</tr>
<tr>
<td>1957</td>
<td>9147</td>
<td>46625</td>
<td>19.6%</td>
</tr>
<tr>
<td>1958</td>
<td>9654</td>
<td>47043</td>
<td>20.5%</td>
</tr>
<tr>
<td>1959</td>
<td>11015</td>
<td>48929</td>
<td>22.5%</td>
</tr>
<tr>
<td>1960</td>
<td>13686</td>
<td>54233</td>
<td>25.2%</td>
</tr>
<tr>
<td>1961</td>
<td>15898</td>
<td>59533</td>
<td>26.7%</td>
</tr>
<tr>
<td>1962</td>
<td>17233</td>
<td>63737</td>
<td>27.0%</td>
</tr>
<tr>
<td>1963</td>
<td>17076</td>
<td>66296</td>
<td>25.8%</td>
</tr>
</tbody>
</table>


has been greater than the growth of real income, gross investment, consumption, and imports.6

6 Ibid., p. 95.
TABLE 4

PERU'S CHANGING COMPOSITION OF EXPORTS

<table>
<thead>
<tr>
<th>Good</th>
<th>1950</th>
<th>1956</th>
<th>1962</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cotton</td>
<td>35</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>Sugar</td>
<td>15</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Lead</td>
<td>6</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Petroleum</td>
<td>13</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Silver</td>
<td>4</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Iron Ore</td>
<td>0</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Zinc</td>
<td>5</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Fishmeal</td>
<td>3</td>
<td>5</td>
<td>23</td>
</tr>
<tr>
<td>Coffee</td>
<td>1</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Copper</td>
<td>5</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>


The nature of the export growth in Peru in recent years is significant as a leading sector in general development. The export composition has changed over the 13-year period as shown in Table 4. The traditional exports of cotton, sugar, and petroleum accounted for 63% of exports in 1950 while they accounted for only 30% of total exports in 1962. It is also important to note that the absolute
amounts of the traditional exports have increased over the period. Copper is a good illustration. It expanded from 5 per cent of total exports in 1950 to 17 per cent of total exports in 1962. International direct investment (from the U. S.) in the Toquepala Copper Mine is largely responsible.  

The most notable development in exports for Peru is the fishmeal exports which are now the nation's largest single export. The export of fishmeal has been leading the development of the economy of Peru in the last few years. The rate of growth of fishmeal exports since 1958 has been over 1400 per cent.  Since the last century fish have played an important part on an irregular basis in the growth of the economy of Peru. The fish in the cold waters of the Humboldt Current were the food for the guanay birds. The exploitation of guano during the late 1800's led to a boom in Peru. Today the "Guano Age" is over but the fishmeal age has replaced it. Peru is now the world's largest fishing nation. The catch of 7.7 million tons in 1964 surpasses that of Japan.  

Anchovies and other fish are scooped out of the Humboldt Current which flows from the Antarctic along the coast of South America. Boats can bring in the fish within  

7U.S., Department of Commerce, Resources and Trade Development Mission to Peru, op. cit.  


9Business Week, February 20, 1965, p. 6b.
sight of land. Once the fish are caught, they are pumped into storage tanks at the processing plants along the coast. The fish are then cooked with steam and dried in rotary ovens. After drying, the mixture is ground up into a brown powder which is then put into sacks for export. The industry employs 15,000 persons in the operation of some 1500 fishing boats and another 18,000 persons are employed in the processing plants.  

The average break even point for plants producing fishmeal is about $90 per ton. Prices in the world market for fishmeal have been as high as $132 per ton with an average of about $110 per ton in 1964.

The reasons for Peru's development of a fishmeal industry are by no means clear cut. The fishing season off the coast of Peru lasts from October to May which is relatively long. Favorable oceanographic conditions also play an important part since the water is cold, plankton abound and fish have an abundant supply of food. The long fishing season and favorable oceanographic conditions are not sufficient to explain Peru's comparative advantage by themselves, however. Chile, which has access to the same cold ocean current, has only a very small fishmeal industry. One answer, or at least partial explanation, may be that Peru has provided a suitable climate for direct investment on the part of foreigners. Such firms as W. R. Grace & Co., Cargill, Inc., and Wallace Evans, Ltd. have invested in the

\[10\] Ibid., p. 68.
fishmeal industry in Peru. Firms in Japan, Europe, and South Africa are also considering investments in Peru's fishmeal industry. Although there has been a great deal of international investment in Peruvian fishmeal, the industry is still largely owned by Peruvians. Thus the entrepreneurship existing in Peru is also of some importance. Finally the government of Peru has maintained a stable exchange rate and has put no restrictions on the transfer of capital and interest to foreign entrepreneurs. Lastly, Peru pursues a very liberal import policy through its industrial development act which permits importing of necessary items for the production of fishmeal. Apparently this is not the case with Chile.

As in every new development there have been some failures. One authority states that there has been "financial strain" in the industry because of its rapid expansion with makeshift equipment in some cases. There has also been growing competition for the fish catch among the processing plants. Speculators have driven the price of fishmeal down a couple of times in the last few years. This has resulted in the formation of a marketing cooperative, Conscorcio Pesquero del Peru, which has been successful in stabilizing the price of fishmeal by using an export quota.

Since Peru is the major world supplier of fishmeal, the efforts of the cooperative are effective.

The fishmeal industry has also acted as a linkage in creating other industries along the lines of the staple theory of Watkins. Several boat building plants have been established, a chemical plant constructed to supply the fishmeal industry with certain items, and a plant has been established to make centrifuges to extract a by-product, fish oil. These plants are producing inputs for the fishmeal industry as well as making it possible to derive the valuable fish oil as a by-product. Several government agencies in Peru are attempting to discover means of using fishmeal as a protein food for human consumption. Currently some research is being done on the possibility of turning the fishmeal into a pellet form of animal food rather than the powder form.

Some comments concerning the significance of the fishmeal industry's impact on the growth of the whole economy of Peru should be made. The fishmeal industry has made it possible for the nation to earn foreign exchange to service its foreign borrowing as well as to keep the balance of payments in equilibrium.\(^{12}\) In addition the fishmeal industry has aided by increasing investment in the economy as well as being a new source of revenue for the government. As was noted previously the industry employs several thousand

persons which contributes to the aggregate demand in the money economy. The size of the aggregate demand is important in establishing new industries in the country. The economic growth has not been dispersed through the whole nation, however. The Indians living in the shadows of the Andes still live in poverty and for the most part are still outside the money economy. The economic growth in the labor-intensive industry along the coast will act generally as a basis for additional growth of the economy of Peru.

**Commercial Policy**

Generally Peru has a liberal commercial policy. All dutiable goods have an *ad valorem* duty levied on the c.i.f. value of the imports. The c. i. f. value is computed as 120 per cent of the f. o. b. value at the port of embarkation. The rates range from 7.66 per cent to 23.66 per cent of the c. i. f. value of the imported goods with most of the imports falling into the brackets of 11.66 per cent or 13.66 per cent. An additional surcharge of 2 per cent of the c. i. f. value is levied for the Navy Fund Tax. If the imports are from nations which are members of the General Agreement on Tariffs and Trade, the surcharge is reduced to .833 per cent of the c. i. f. value. Some dutiable goods also have a specific duty placed on them in addition to the *ad valorem* duty.

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The duties are the highest on imports of consumer goods which are termed luxury items and lowest on imported primary materials with capital and intermediate goods falling between the two extremes. That the duties represent an attempt to prohibit imports of consumer goods is indicated by the duty on imported automobiles. The rate of automobiles varies directly with the value from 7 per cent to 45 per cent. Additional duties on luxury items amounting to 10 per cent, 20 per cent, or 25 per cent of the c. i. f. value of the particular item were established by Law No. 13199 of April 6, 1959. These additional luxury duties didn't apply to over 500 items covered in GATT negotiations in 1951 but the concessions were withdrawn until further notice on August 19, 1964.

 Preferential duties apply to GATT concessions on iron and steel items, typewriters, refrigerators, radio equipment, and electrical appliances. The Latin American Free Trade Association concessions consist of a uniform ad valorem duty and surcharge. There are also trade concessions applying on trade with Chile. In any case import licenses are required only for military items, drugs, and those items where sanitary regulations apply. Internal

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Excise taxes are levied on imported jewelry and other items for personal use at 10 per cent of the C.I.F. value.

All exports pay a 1 per cent ad valorem charge paid to the unemployment fund. Additional export duties apply on exports of petroleum, cotton, wool, sugar, fish products, rice, and minerals. Government export monopolies control exports of rice, rubber, guano, and cocoa.

An industrial development act (Law No. 13270) exempts imports of equipment and machinery from tariffs and internal taxes if they don't compete with items produced in Peru. Semi-finished goods and raw materials not found in Peru receive the same treatment. 16

Generally Peru's commercial policy is considered to be liberal. It is designed to stimulate economic development, encourage regional integration, and provide revenue for the government. There are indications that the duties on some items are of the infant industry type. Duties on imported consumption goods remain relatively high to discourage the imports of the goods.

Summary

Several things can be learned from the analysis of the export-led development of the Peruvian economy. Peru has demonstrated that a nation can still have export-led growth contrary to the often expressed position that foreign trade

will only serve to hinder a nation's economic development. In addition, restrictive commercial policy is not necessary to establish new industries or to increase the output of the traditional ones such as the copper mining industry. By pursuing a liberal economic policy with a minimum of trade restrictions and a stable exchange rate, Peru has created conditions favorable to attract international investment. No special concessions were needed from the developed nations.

The export-led growth has provided foreign exchange to service borrowing in addition to keeping the balance of payments in equilibrium. Export taxes collected by the government will provide a means to finance expenditures in the future. Since Peru has had some inflation, increased proceeds from export taxes provide a more satisfactory means of financing expenditures than does borrowing from the central bank.

Although there is considerable optimism expressed in the above evaluation, Peru's high rate of economic growth still hasn't eradicated some of her serious problems. Especially important is the problem of the Indian population. However, economic progress is serving to aid in the solution of the problems and will probably continue to do so in the future if the Peruvian economy retains its dynamism.
CHAPTER VI
BURMA'S EXPERIENCE WITH FOREIGN TRADE

History

As early as 1612 the British East India Company sent agents to the nation of Burma. For a period of over 100 years the Burmese people resisted the efforts of the British, Dutch, and Portuguese to establish trading posts on the Bay of Bengal. British rule of Burma dates from 1826, and in 1886 Burma was annexed to India. Finally in 1937 Burma was separated from India and made a crown colony with its own legislature and British governor.

Burma was a key battleground in World War II because of the 800-mile Burma Road supply link to China. By 1942 Japan had occupied Burma. Three years after the Japanese capitulation Burma was made an independent nation. One authority notes that the independence of Burma in 1948 marked the start of many problems for the nation. The creation of a new state was a prelude to a series of rebellions which failed mainly because of poor coordination.1 By 1950 the economy of Burma was devastated by war since wars had been fought in the country for an eight year period.

In the early 1950's politicians and other leaders decided to transform Burma from an agricultural nation to an industrial one with a diversified economy. The desire is explained by Cady as a resultant of wartime shortages and the young Socialist leaders who wanted to "end the stigma of colonial economic status and to have Burma blossom as a modernized state." The whole process resulted in the crystallization of a welfare state, or Pyidawtha program in 1952. The socialism of Burma has its beginning in the Pyidawtha program.

The Economic Base of Burma

Burma has an area of 261,789 square miles and a population estimated at 23 million in 1962. The population growth rate has been estimated at 1.8 per cent per year. Of the 23 million, 15 million are native Burmans while the remainder of the population consists of Shans, Karens, and Kachins. As of 1962 a little less than half of the population was considered to be illiterate.

In 1962 the gross domestic product of Burma was $1336 million. The per capita gross domestic product was $58. Burma is an underdeveloped nation with a relatively low per capita income but also one which doesn't have a population problem.

\(^2\)Cady, _op. cit._, p. 616. According to Cady "welfare state" is the loose translation of Pyidawtha. The more correct meaning is "cooperation between people and government for the happiness of the country."

Agriculture is the dominant economic activity of Burma with rice being the cornerstone of the economy. Rice accounts for 60 per cent of the value of agricultural output. Other important agricultural goods are cotton, peanuts, tobacco, and teak. Although the fishing is apparently good off the coast of Burma, the industry hasn't developed as yet.

The U. S. Department of Commerce states that Burma has not been adequately surveyed for minerals. However, mining of lead, tin, and tungsten is found as well as some petroleum extraction. All mining and petroleum activity has been nationalized by the government.

Manufacturing is generally keyed to the processing of agricultural output with rice milling being the most important activity. Considerable cottage industry exists making a variety of labor-intensive items. The government operates several industries such as sugar, cigarettes, drugs, and cement.

Economic Growth in Burma

The national income has increased in the period 1951 to 1962 as shown in Table 9. The annual average growth rate for the period is 5 per cent per year. The growth rate for the Burman economy is less than the growth rate for the Peruvian economy for the same period of time. It is also less than the growth rate of national income for the economy of Jamaica.
TABLE 5
BURMA'S NATIONAL INCOME GROWTH
(Billions of Kyats)

<table>
<thead>
<tr>
<th>Year</th>
<th>National Income</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951</td>
<td>3.20</td>
<td></td>
</tr>
<tr>
<td>1952</td>
<td>3.52</td>
<td>10%</td>
</tr>
<tr>
<td>1953</td>
<td>4.03</td>
<td>14.4%</td>
</tr>
<tr>
<td>1954</td>
<td>3.92</td>
<td>-2.8%</td>
</tr>
<tr>
<td>1955</td>
<td>4.13</td>
<td>5.3%</td>
</tr>
<tr>
<td>1956</td>
<td>4.47</td>
<td>8.2%</td>
</tr>
<tr>
<td>1957</td>
<td>4.60</td>
<td>2.9%</td>
</tr>
<tr>
<td>1958</td>
<td>4.54</td>
<td>-1.3%</td>
</tr>
<tr>
<td>1959</td>
<td>4.76</td>
<td>4.8%</td>
</tr>
<tr>
<td>1960</td>
<td>4.93</td>
<td>3.5%</td>
</tr>
<tr>
<td>1961</td>
<td>5.25</td>
<td>6.5%</td>
</tr>
<tr>
<td>1962</td>
<td>5.46</td>
<td>4.0%</td>
</tr>
</tbody>
</table>


The economic growth of Burma has not been steady as illustrated in Table 5. Several factors are significant in explaining the erratic behavior. The years of war and internal rebellion severely impaired the economy. Output of the agricultural sector was less than it had been before the outbreak of World War II. Communications, power
facilities, and transport were devastated as well. Generally poor and inefficient management on the part of government has been responsible for many bottlenecks which have developed during the eleven year period. The introduction of the Pyidawtha program in 1952, although directed towards economic recovery and development, failed to provide government policy makers with clear objectives and methodology for accomplishing them. The "Burmanization" program resulted in shortages of skilled personnel since few Burmans were participating in economic activity outside of agriculture. The agricultural sector was also disrupted by the land reforms and land nationalization policies of the government in the first part of the 1950's. Added to the basic difficulties of the Burmese economy was the disposal of surplus rice and wheat by the United States after the Korean War. The disposal had the effect of accelerating the decline in Burma's export price of rice.

In the latter half of the 1950's inflation became a problem which was accelerated by mismanagement of import licenses for consumer goods in particular. In 1958 the climate took an unfavorable turn causing a poor rice harvest. Since rice is so vital to the economy, the poor harvest seriously affected exports as well as imports of consumer and manufactured goods. The 1962 revolution

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exerted its disrupting effects when the military government of General Ne Win deposed the government of U Nu. Generally poor government management is the largest single barrier to economic development in Burma according to Walinsky. Inadequate transportation facilities, lack of skills, electrical power, and lack of knowledge of the location of minerals are important secondary barriers to development of the nation.

**International Trade and Growth in Burma**

As was noted previously rice is the most important commodity produced in the Burmese economy. Rice is also the commodity which dominates Burma's foreign trade. Before examining the foreign trade in rice, however, the relationship of trade to growth of the economy must be discussed.

The ratio of exports to gross national product indicates the importance of international trade to the Burmese economy. The ratio was higher in the earlier part of the period than in the later part of the period as shown in Table 6. The proportion of rice exports to gross national products starts declining in 1953-1954, the period when the export prices of rice began their long-term decline. Production of rice in this instance is declining in economic

---

### TABLE 6

**BURMA'S RATIO OF EXPORTS TO GNP**

<table>
<thead>
<tr>
<th>Period</th>
<th>Ratio of total exports to GNP</th>
<th>Ratio of Value of Rice Exports to GNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949-1950</td>
<td>21.6%</td>
<td>19.0%</td>
</tr>
<tr>
<td>1951-1952</td>
<td>30.2</td>
<td>22.0</td>
</tr>
<tr>
<td>1952-1953</td>
<td>33.3</td>
<td>26.0</td>
</tr>
<tr>
<td>1953-1954</td>
<td>26.4</td>
<td>20.7</td>
</tr>
<tr>
<td>1954-1955</td>
<td>26.0</td>
<td>20.9</td>
</tr>
<tr>
<td>1955-1956</td>
<td>26.2</td>
<td>19.7</td>
</tr>
<tr>
<td>1956-1957</td>
<td>24.0</td>
<td>18.2</td>
</tr>
<tr>
<td>1957-1958</td>
<td>18.9</td>
<td>14.1</td>
</tr>
<tr>
<td>1958-1959</td>
<td>19.7</td>
<td>14.2</td>
</tr>
<tr>
<td>1959-1960</td>
<td>22.0</td>
<td>15.0</td>
</tr>
</tbody>
</table>


importance yet it is still the most important export commodity for the nation. In fact the importance of rice in Burma's exports has been increasing as illustrated in Table 7.

Foreign trade is highly important to the economy of Burma. This is usual for a primary producer according to Seers. The economy is an agricultural economy which must import consumer goods and manufactured items. The imports
### TABLE 7
**BURMA'S EXPORT COMPOSITION**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>70.6%</td>
<td>75.5%</td>
<td>87.6%</td>
</tr>
<tr>
<td>Non-Rice Foods</td>
<td>15.2</td>
<td>15.0</td>
<td>9.8</td>
</tr>
<tr>
<td>Timber</td>
<td>7.4</td>
<td>2.8</td>
<td>1.9</td>
</tr>
<tr>
<td>Minerals</td>
<td>3.0</td>
<td>5.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Other</td>
<td>2.6</td>
<td>1.3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

*Included in non-rice foods*

*Source: Computed from Walinsky, p. 660-661.*

Necessary for consumer needs as well as economic development programs depend upon the availability of foreign exchange which in turn depends upon the exports of rice. Since rice exports have declined relative to gross national product while at the same time increased as a proportion of total exports, the foreign trade sector is a lagging sector in the economic development of the nation.

**Rice and the Foreign Trade of Burma**

Since Burma can be termed a "marketing board monoculture" it is worthwhile to analyze the rice industry.

On the eve of World War II Levin has the following comment:

The land was cultivated by Burmese peasants—many of them tenant farmers or landless
laborers—but most other economic functions, and the income that went with them, were in the hands of the non-Burmese. Title to much of the land had passed to absentee landlords, many of them aliens, and the burden of debt was so prevalent that probably less than 15% of the Lower Burma rice lands still in the possession of agriculturalists remained unmortgaged.4

The commercial side of the rice industry was mainly in the hands of the Indians, Europeans, and Chinese. Only about 20 per cent of native Burmans were in trade, transport, or commerce.

The effects of the war on the rice industry were two-fold. First, some foreign workers and managers left Burma and didn't come back. Second, the nationalist movement in Burma objected to the alien character of the rice industry in the war-damaged economy. The State Agricultural Marketing Board (hereafter called SAMB) was established in 1946 as a government monopoly existing autonomously under the Ministry of Commerce. By establishing the marketing board the government hoped to "Burmanize" the rice trade as well as to collect some of the profits being made for revenue. Other objectives were to expand rice cultivation by stabilizing the domestic price, to stabilize the entire domestic economy ("paddy is the currency of the country"), and to gain bargaining advantages through the sale of rice to foreigners.5

4 Levin, op. cit., p. 214.
5 Ibid., p. 221.
Generally, all rice not used for domestic purposes is destined to be exported by SAMB. At first sales were made on the basis of government negotiations in Rangoon. Multilateral negotiations fixed the portion going to each nation then bilateral negotiations closed individual sales to each buyer. After 1952 when the rice market changed to a buyers market, SAMB accepted offers directly from the buyers.

The government was able to earn large profits until 1952 when export prices started to decline. The revenue gained from the operation of the marketing board was used to finance the program of economic development.  

The actions of the marketing board are open to question on the matter of their effectiveness. Walinsky criticizes SAMB for operating on the mistaken assumption that excessive inventories of rice could be sold only by making barter deals. He believes that lowering the price would have brought much needed foreign exchange. Since the pricing of rice was done by the Cabinet rather than SAMB, the export price policy is illustrative of the "ignorant monopolist" case in economic theory. Walinsky believes that the ministers were relatively uninformed and hesitated to

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7Burma made one deal with the Soviet Union trading rice for cement. The Soviet Union was slow in delivering the cement, and when it was delivered the monsoon season was in progress.
change prices in response to changing demand. When the buyers' market resulted in 1953, SAMB was forced to accumulate large inventories which put pressure on the already inadequate storage facilities. The learning process took until 1956 when the export prices were lowered.\(^8\) Apparently the learning process wasn't symmetric. When the market temporarily improved in 1959, the ministers failed to increase the rice-export price.

**Commercial Policy**

On the import side Burma used import quotas and licenses in the first half of the 1950's. Later tariff policy was designed to start a process of import substitution and export diversification as well as to provide some revenue for the government. The motivation for wanting to diversify exports is clear. The world export of rice has been declining since 1952 although the United Nations believes that some improvement may be gained by increasing output. More important, however, is that the world's largest rice importer, Japan, will be self-sufficient by 1970.\(^9\) In addition the external tariff of the European Economic Community is likely to stand in the way of any increased exports to the Continent.

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\(^8\) *Ibid.*

The method employed by Burma was to use import licenses as well as exchange control. Imports of luxury items were severely restricted and only Burmans were able to purchase the import licenses.\textsuperscript{10} The trend of restrictive commercial policy culminated in the complete nationalization of foreign trade by the present government of Burma.

As yet export diversification has not occurred in the case of Burma. In fact rice is becoming more important as an export commodity rather than less important. Another interesting fact is that the percentage of imports financed by exports has declined since 1951-1956 to 1957-1962 while the percentage of imports financed by capital inflows has increased.\textsuperscript{11} The capital flows come from governments and multilateral agencies associated with the United Nations.

Some progress has been made in import substitution. The percentage of consumption expenditure on imported goods fell from 21 to 17 over the period 1953-1954 to 1960-1961.\textsuperscript{12} Some additional processing is being done since the ratio of imported finished consumption goods to private consumption expenditure fell by five per cent for the same period of time.

\textsuperscript{10} U.S., Department of Commerce, \textit{Overseas Business Reports-Burma's License and Exchange Controls} (60-33), 1960.


\textsuperscript{12} \textit{Ibid.}, p. 13.
Generally, only small gains in manufacturing have been made by following a restrictive trade policy. The Economic Commission for Asia and the Far East identifies the duty on sugar, 29% of c.i.f. value, and on gunny bags as being protective. If these duties were removed, Burma would import both items. The government has also been successful in establishing a small cement industry in the last few years. Although protective tariffs have made it possible to establish some additional manufacturing industry, the increase in manufacturing has been quite small as shown in Table 8.

TABLE 8
PERCENTAGE DISTRIBUTION OF BURMA'S GNP
1953-1954 TO 1960-1961
(Market Prices)

<table>
<thead>
<tr>
<th></th>
<th>1953-1954</th>
<th>1960-1961</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>45.6%</td>
<td>40.6%</td>
</tr>
<tr>
<td>Mining</td>
<td>1.1</td>
<td>2.1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>10.4</td>
<td>14.3</td>
</tr>
<tr>
<td>Utilities</td>
<td>.4</td>
<td>1.0</td>
</tr>
<tr>
<td>Transport</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Services</td>
<td>37.5</td>
<td>37.5</td>
</tr>
</tbody>
</table>


Manufacturing activity has increased as a percentage of gross national product by 3.9 per cent in seven years.
The basic problem of Burma's foreign trade remains unsolved. Declining demand for agricultural exports is being caused by import-biased growth in Japan and other nations in the region. Burma has chosen a restrictive commercial policy as a means of diversification but has had only minor success. Economic policy directed toward the improvement of existing industries and agriculture is required to increase the adaptability of the economy to change. In any case a restrictive commercial policy has not aided the process of transformation of the Burmese economy.

Summary

Currently the government of Burma under General Ne Win has nationalized all foreign trade as well as other basic economic activity. The Myanma Export-Import Corporation has been formed by the government to conduct the entire international trade relations of the nation. The private sector no longer has any international trade functions with the exception of finding buyers for Burmese goods on a commission basis.

Shortages of cooking oil and rice for domestic consumption have recently been reported as well as a disruption of the nation's rice exports. The apparent cause is the new policy of the government which has eliminated the middleman between the rice cultivator and the government buyers.
Previously the cultivator would sell his output as well as receive credit from the middleman directly at the farm. Now the cultivator must deliver his rice to government depots and the government has failed to provide an adequate source of credit as yet.\(^\text{13}\)

Import substitution has not taken place on any large scale. Machinery, manufactures of metal, and textiles continue to be imported. Food items such as dairy goods and fish preparations still are imported. In addition pharmaceuticals are also being imported. The policy of export diversification has failed. Rice continues to be the most important export of the nation and has been growing more important since 1950. The failure of the nation to diversify its exports is indicative of the fact that complementary resources must exist to establish new industries. Material inputs, capital, and good organizational management are required and Burma has been especially weak on the organization and material inputs.

In conclusion, foreign trade, although vitally important for Burma, has generally proved to be a lagging sector with respect to the relationship of trade to economic development. Restrictive commercial policy has not provided any support for the economic development process that can be identified. The policies of nationalization and "Burmanization* have disrupted economic activity in the nation.

\(^{13}\)U.S., Department of Agriculture, The 1965 Far East, Communist China, Oceania Agricultural Situation (Feb., 1965).
several times. Presently Burma has been displaced as the world's leading rice exporter by Thailand. Indecision, bureaucracy, and frequent internal strife have served to retard development of the economy. Walinsky's opinion that economic development in Burma awaits good government in terms of providing law and order as well as honesty and respectability still applies in 1965. Finally it is worth noting that Burma's experience is illustrative of all the regions in South East Asia except Hong Kong. Hong Kong is the only territory in the region with free trade, yet its manufacturing is making strides forward and a high proportion of the goods produced are exported.\(^{14}\)

CHAPTER VII
FOREIGN TRADE OF JAMAICA

Jamaica, now a member of the British Commonwealth, was discovered by Columbus in 1494 on his second voyage. Spain ruled the island until 1655 when it became a possession of the United Kingdom. Jamaica became a Crown Colony in 1866 and achieved independence on August 6, 1962.

Until World War II Jamaica was primarily an agricultural nation raising staple crops of sugar cane, bananas, and pimento. Currently the nation has a well developed mining industry and is beginning to develop some industries of the labor-intensive type. Jamaica has some characteristics which are different from the usual concept of an underdeveloped nation. A modern banking system exists with the commercial banks making loans roughly equal to their deposits. This local supply of capital is not found in many underdeveloped nations. A second characteristic is that Jamaica has had emigration to act as a check on the growth rate of population in the nation which has been quite high. Presently the population of the nation is 1.7 million persons and the density figure is 347 persons per square mile. Unlike many underdeveloped nations Jamaica has a
well developed system of highways as well as adequate provision of ports and airports.

**Economic Growth in Jamaica**

The period 1950 to 1962 has been one of economic growth in the nation of Jamaica. The growth rate for the economy was very high from 1954-1957, it diminished from 1957-1959, but increased again in 1960 (Table 9). The primary reason for the large growth rate in the 1954-1957 period was investment in the mining sector which also increased the exports of bauxite. The annual increase in per capita gross national product from 1953 to 1961 is about 6 per cent.

**TABLE 9**

**JAMAICA'S RATE OF GROWTH OF GNP AND EXPORTS**

<table>
<thead>
<tr>
<th>Period</th>
<th>Growth of GNP</th>
<th>Growth of Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1954-1955</td>
<td>9.5%</td>
<td>7.0%</td>
</tr>
<tr>
<td>1955-1956</td>
<td>9.0%</td>
<td>15.3%</td>
</tr>
<tr>
<td>1956-1957</td>
<td>11.3%</td>
<td>14.1%</td>
</tr>
<tr>
<td>1957-1958</td>
<td>3.28%</td>
<td>6.8%</td>
</tr>
<tr>
<td>1958-1959</td>
<td>3.65%</td>
<td>8.4%</td>
</tr>
<tr>
<td>1959-1960</td>
<td>6.19%</td>
<td>20.8%</td>
</tr>
</tbody>
</table>

*Note: 1956 prices used*


Although Jamaica does have a good economic growth record, the per capita national income in 1963 was only $368. The
rate of unemployment is also very high. Unemployment is estimated to be between 18 and 25 per cent of the labor force of about 650,000 persons.\textsuperscript{1} The high rate of unemployment is one of the important economic problems for the nation.

Several factors are important in explaining the economic growth of the nation. Although the labor force lacks skills it is fairly young and reputed to be adaptable to new requirements as they arise. The government has provided seminars for the training of managers as well as other programs directed towards the formation of skills for the labor force. The largest single influence on the economic growth of the nation is the growth of investment undertaken in the private sector of the economy. As will be discussed later private foreign investment in the mining industry as well as in the tourist industry are significant influences on the economic growth of the economy. Investment in electrical power generating facilities, transportation, and buildings have closely followed the investment in mining and in the tourist industry.

The government of the nation has had political stability not matched by other nations in the Caribbean region. Inflation has been kept to a minimum because of the policy of government of not borrowing from the central bank.

Generally there is an appreciation of foreign investment in

the nation which is not found in many underdeveloped nations. For any investment project the government is prepared to assist in plant location and location of personnel, obtaining financing, and the development of the plant site itself. Lastly the nation has received technical assistance from the United States Agency for International Development.

Foreign Trade and Development

The economy of Jamaica is illustrative of the case of a primary producing economy. Exports averaged about 20 per cent of gross national product from 1950 to 1953 as shown in Table 10. From 1953 to 1961 exports have averaged about 33 per cent of gross national product. Exports not only have been a large ratio of GNP but they also have been larger than gross investment. Only the consumption magnitude of aggregate demand is larger than exports.

As the gross national product of Jamaica has increased there has been change in the economic structure as well as the nation's comparative advantage. Most notable changes in the composition of exports are the relative decline of agricultural exports and the rise of the mining industry products of bauxite and alumina as illustrated in Table 11. As will be noted later foreign investment is mainly responsible for the development of the mining industry. Exports of both bauxite and alumina have been increasing in absolute value terms as well as relative terms. Sugar exports have also increased in absolute terms during this
TABLE 10

RATIO OF VALUES OF EXPORTS TO GNP FOR JAMAICA

<table>
<thead>
<tr>
<th>Year</th>
<th>GNP(^b)</th>
<th>Exports</th>
<th>Exports/GNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>77.3</td>
<td>18.6</td>
<td>24.1</td>
</tr>
<tr>
<td>1951</td>
<td>89.8</td>
<td>20.6</td>
<td>22.9</td>
</tr>
<tr>
<td>1952</td>
<td>103.8</td>
<td>24.5</td>
<td>23.6</td>
</tr>
<tr>
<td>1953</td>
<td>114.6</td>
<td>31.4</td>
<td>27.4</td>
</tr>
<tr>
<td>1954</td>
<td>127.7</td>
<td>37.0</td>
<td>29.0</td>
</tr>
<tr>
<td>1955</td>
<td>145.3</td>
<td>41.0</td>
<td>28.2</td>
</tr>
<tr>
<td>1956</td>
<td>166.7</td>
<td>45.9</td>
<td>31.6</td>
</tr>
<tr>
<td>1957</td>
<td>199.6</td>
<td>60.2</td>
<td>30.1</td>
</tr>
<tr>
<td>1958</td>
<td>207.0</td>
<td>61.2</td>
<td>29.6</td>
</tr>
<tr>
<td>1959</td>
<td>221.8</td>
<td>64.4</td>
<td>29.0</td>
</tr>
<tr>
<td>1960</td>
<td>240.3</td>
<td>75.5</td>
<td>31.4</td>
</tr>
<tr>
<td>1961</td>
<td>254.6</td>
<td>89.4</td>
<td>35.11</td>
</tr>
</tbody>
</table>

\(^a\) Market prices

\(^b\) in millions of Jamaican pounds


period. Sugar exports from Jamaica fall under the Commonwealth Sugar Agreement which gives Jamaica a quota of 270,000 tons. The United Kingdom purchases 197,000 tons while
TABLE 11
JAMAICA'S EXPORT COMPOSITION

<table>
<thead>
<tr>
<th>Item</th>
<th>1948</th>
<th>1957</th>
<th>1959</th>
<th>1961</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bauxite</td>
<td>0</td>
<td>20.12%</td>
<td>24.28%</td>
<td>21.45%</td>
</tr>
<tr>
<td>Alumina</td>
<td>0</td>
<td>24.94%</td>
<td>20.75%</td>
<td>27.89%</td>
</tr>
<tr>
<td>Sugar</td>
<td>31.25%</td>
<td>26.41%</td>
<td>25.83%</td>
<td>23.43%</td>
</tr>
<tr>
<td>Bananas</td>
<td>20.50%</td>
<td>10.48%</td>
<td>10.82%</td>
<td>8.09%</td>
</tr>
<tr>
<td>Rum</td>
<td>10.18%</td>
<td>2.93%</td>
<td>2.65%</td>
<td>2.15%</td>
</tr>
<tr>
<td>Other</td>
<td>38.39%</td>
<td>15.09%</td>
<td>15.67%</td>
<td>17.00%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Computed from IMF data contained in *Staff Papers* (July, 1963), p. 247.

most of the remainder is sold to Canada at a price above the world price but below the U. K. price.  

Tourism is an important export of Jamaica which is not included in Table 3. In 1961 tourists from other nations spent 13.5 million pounds in Jamaica. The tourist spending is somewhat smaller than sugar exports for the year.

The growth in domestic product as well as the growth of the exports of the economy is explained by foreign direct

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investment in the nation. Foreign investment in the mining industry now totals over 60 million pounds. The rate of investment in the mining industry has diminished from 10 million pounds per year for 1953-1957 to about 2 million pounds per year after 1957. The investment is the result of actions by four United States firms and one Canadian firm. Foreign investment in the economy of Jamaica has recently switched from the mining industry to the building of tourist facilities and construction of textile, cement, and petroleum production units.

To create favorable conditions for international investment, the government of Jamaica has maintained the pound at par with the British pound as well as pursuing a fiscal policy directed at economic stability. In fact the government refuses to borrow from the central bank at all because of the fear of inflation. There are also no restrictions on remitting of profits. In addition several schemes are used to attract particular types of investment. The main incentives used are tax concessions, freedom from exchange controls, and reduction of import duties for certain inputs.

Foreign investment in Jamaica has provided several gains for the nation. The mining industry has been developed which in turn has resulted in diversification of exports away from agricultural goods. In addition the government has received royalties and taxes from the mining
industry. In 1961 the government received over 6 million pounds from the mining operations. Since 1957 foreign investment has spread into other types of economic activity. The largest, most recent investments is that made by Esso Oil for an $18 million refinery which is now in operation. In brief, foreign investments in the economy of Jamaica have been the factor responsible for the development of the economy through the exploitation of the nation's resources, particularly minerals.

On the import side of the picture Table 12 indicates that imports have increased with the growth of national income in the nation. The relative importance of the imported items has changed over the period. Imports of manufactures and machinery have increased in relative terms as well as in absolute value terms. Imports of food have increased in absolute terms but have declined in relative terms for the period. Commercial policy has been the important factor holding imports of beverages and tobacco at approximately 2 per cent of total imports.

The staple theory of trade and growth provides an explanation of the economic development of Jamaica. Before the mining industry was started, Jamaica was an agricultural nation exporting sugar, bananas, and rum. Foreign investment in the mining sector lead to diversification of exports.

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TABLE 12
JAMAICA'S IMPORTS
(millions of pounds)

<table>
<thead>
<tr>
<th>Item</th>
<th>1948</th>
<th>1957</th>
<th>1960</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food</td>
<td>4.7</td>
<td>11.5</td>
<td>14.4</td>
</tr>
<tr>
<td>Beverages, tobacco</td>
<td>0.4</td>
<td>1.3</td>
<td>1.6</td>
</tr>
<tr>
<td>Fuels, lubricants</td>
<td>1.4</td>
<td>6.1</td>
<td>7.7</td>
</tr>
<tr>
<td>Machinery</td>
<td>3.2</td>
<td>15.8</td>
<td>16.3</td>
</tr>
<tr>
<td>Other manufactures</td>
<td>9.0</td>
<td>28.7</td>
<td>32.3</td>
</tr>
<tr>
<td>Raw materials</td>
<td>0.8</td>
<td>2.7</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>19.7</td>
<td>66.7</td>
<td>75.4</td>
</tr>
</tbody>
</table>

Source: Clark and others, p. 270.

to include a mineral which generally has favorable prospects for the future. The bauxite output was used as an input in the alumina manufacturing making it possible to add additional value to the output of the mining sector. Royalties and taxes from the mining sector enabled the government to increase its spending on social overhead capital projects essential for further development. The economic activity surrounding the mining industry was also trade induced. Tourism (particularly from the United States) stimulated foreign investment in the construction of hotels and other facilities which had the effect of increasing the product of banking and real estate.
Commercial Policy of Jamaica

It is now necessary to examine the commercial policy of Jamaica to determine what, if any, influence it has had on the economic development of the nation.

Jamaica has two schedules of duties, the "General Schedule" and the "Preferential Schedule." The preferential rates apply to imports from British Commonwealth nations and are approximately 10 per cent below the rates in the general schedule.\(^5\) The duties are ad valorem and specific duties based upon weight in most cases. The basis of the ad valorem duties is the c. i. f. value at port of entry. The ad valorem duties range from 15 per cent to 50 per cent with the highest duties on the following items: silk, cosmetics, firearms, explosives, coffee, preserved fruits, automobile motors, motorcycles, record players, and central heating apparatus.\(^6\)

In addition to the tariff duties noted above Jamaica has a tonnage tax on most imports and a "customs surtax." The surtax with ad valorem rates of 10 per cent or 20 per cent applies to most imports as well. The 20 per cent rate applies to fruit preparations, cleaning agents, cosmetics, and jewelry. These items are many of the same ones on which the very high ad valorem tariff duty is levied.

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\(^6\) Ibid.
Jamaica has a free list permitting duty free imports of such things as medical supplies, printed matter, electric tools, aircraft, and telephones. Several industrial development laws exist which provide for duty reductions of 50 per cent of 100 per cent. Several types of building supplies as well as machinery for factories enter duty free. Finally firms which manufacture goods which are exported receive concessions on import duties.

Non-tariff barriers fall into three types. Import licenses are required for imports from the Communist nations and from the Republic of South Africa. There is a growing list of commodities, mostly processed foods and consumer goods, requiring a special import license. Jamaica prohibits imports of watches and clocks, whiskey, citrus fruits, coffee, live fish, and shaving brushes. Many of these same items are on the list of items which may not be exported from Jamaica. Finally there are export controls on agricultural goods to provide for domestic needs and to encourage processing in the domestic market.7

Generally the commercial policy is designed to protect certain infant industries, discourage certain types of consumption, and to give preference to the Commonwealth. The high duties, surtaxes, and quantitative import controls are used to protect infant industry (called Pioneer Industries). The free list as well as the concessions granted by

7Ibid., p. 5.
the industrial development legislation also is designed to
do the same thing. Although there is a desire to stimulate
the labor-intensive types of infant industry which is also
potentially an export industry, manufacturing has remained
about 13 per cent of gross national product.\textsuperscript{8} Also, the
export analysis shows that the nation doesn't export manu-
factured items in any significant amounts. According to
the U.S. Department of Commerce some gains have been made
in the production of footwear and textiles.\textsuperscript{9}

Finally the customs duties also yield revenue for the
government. Customs duties make up approximately 33 per
cent of government revenue although the rate of increase
of duty receipts is less than the rate of increase of in-
come tax receipts.\textsuperscript{10}

\textbf{Summary}

International trade relations are important in ex-
plaining the economic growth of the Jamaican economy.
Foreign investment has been instrumental in the develop-
ment of the mining industry in the late 1950's and in
other industries in the 1960's. Foreign investment is
responsible for the change in economic structure with
reference to the mining industry. Currently foreign

\textsuperscript{8}Clark and others, \textit{op. cit.}, p. 248.

\textsuperscript{9}U.S., Department of Commerce, \textit{International Commerce}

\textsuperscript{10}Clark and others, \textit{op. cit.}, p. 262.
investment is aiding the development of the tourist industry as well as petroleum refining. Since Jamaica has now become an exporter of minerals, the problems of declining terms of trade are undoubtedly lessened. However, even the agricultural exports of the nation have not been a serious problem as in some underdeveloped countries. Under quota arrangements sugar exports have received a higher price than the world export price.

The influence of commercial policy on the economic development of Jamaica is mixed. As is common with most underdeveloped nations the receipts from customs duties and charges provide the government with a source of revenue to finance its expenditures. As the duties become more protective, however, this source of revenue will decline and must be replaced by other types of taxes. Indications are that the income tax is replacing the customs duty although customs duties still account for 33 per cent of government revenue. Consumer spending is controlled by the duties on items defined to be luxury items.

The use of commercial policy as well as other domestic economic policy to stimulate infant industries which are export industries is an example of the new variant of the infant-industry argument. Success of the policy isn't indicated by analysis of the composition of exports or by the ratio of manufacturing activity to gross national product. The motivation for stimulation of the infant industries is the high rate of unemployment for the nation.
As was noted in an earlier chapter fiscal and monetary policy are more suitable for solving the unemployment problem than is commercial policy.

"Development tariffs" of the infant industry type can only be justified by referring to the criteria of market size, factor endowments, and the nature of the production function for the particular industry. Using duties to stimulate industry on any other basis invalidates the infant industry argument for protection. In summary the Jamaican economy is a modern example of an "export economy" where the process of international trade and finance have provided much of the stimulus for the economic development of the economy. International trade has not acted to depress the nation or its economy.
CHAPTER VIII
SUMMARY AND CONCLUSIONS

The formal studies on international trade of Myrdal, Myint, and W. Arthur Lewis have been explained and evaluated. The general conclusion advanced by these writers is that protection is required for the economic development of underdeveloped nations. Myrdal's application of the theory of circular causation to international trade has been criticized. The analogy of the vicious circle of poverty is incorrect since some underdeveloped nations of the world are experiencing economic development. Peru, Burma, and Jamaica are examples of underdeveloped nations which have had increases in real per capita national income. Myrdal also identified a zero rate of economic growth with poverty. This contention was shown to be contrary to fact. Underdeveloped nations and developed nations have poverty and economic growth existing at the same time. Peru has a very high rate of economic growth, yet the Andean Indian is considered to be living in a state of poverty. Myrdal also stated that underdeveloped nations are not receiving benefits from foreign investment. This statement can't be made for all underdeveloped nations. Peru and Jamaica provide excellent examples of underdeveloped nations receiving
dynamic gains from international investment. It is also important to note that national governments and organizations affiliated with the United Nations are providing capital for the underdeveloped nations.

The theory of circular causation contains several invalid assumptions. As a result it fails to demonstrate how international trade has operated as a mechanism of inequality for the less developed nations. The policy recommendations for the use of protective tariffs and quotas must be rejected since no support is found in the theory or empirical studies.

According to Hla Myint the international trade multiplier doesn't work for underdeveloped nations. A policy of protectionism is advanced because of this failure. However, this indictment of international trade was shown to be weakly supported. Rather than condemning the process of international trade, Myint should have analyzed the matter further. The distribution of income generated in the foreign trade sector provided an answer. It was noted that the "foreign factors" imported "luxuries" or remitted a large portion of their income. Thus the size of the net injection into the economies of South-East Asia was small, and the resulting change in aggregate demand was small.

Myint's fundamental support for protectionist policies was attributed to the "vent for surplus" theory. The defense of the superiority of the "vent for surplus" theory was criticized. The assertion that trade theory neglects
quantitative differences in factor endowments is confusing. According to Ohlin's general equilibrium theory the basis for international trade is the quantitative differences in factor endowments. The example offered to support the "vent for surplus" theory was shown to be in error. Burma and India don't have similar geography and climatic conditions for rice production. However, the most important point raised in the evaluation of the "vent for surplus" theory was that the theory assumes resource skewness. If resource skewness exists, Ohlin's theory correctly predicts highly specialized trade. It was also noted that Hilgerdt's empirical study demonstrated this point.

Myint's analysis of the foreign trade multiplier and the "vent for surplus" theory doesn't furnish a satisfactory basis for protectionism. His conclusion that protectionism is an appropriate policy for underdeveloped nations must be discarded.

The strongest theory for the use of protective tariffs by underdeveloped nations is advanced by W. Arthur Lewis. However, the case for protection is a highly qualified one. The theory applies only to the underdeveloped nation with surplus labor in the agricultural sector. Given this condition, Lewis notes that the marginal real cost of labor in manufacturing is zero. Lewis argues that in practice the money wage is greater than zero. Thus a distortion exists in the labor market. The assumption concerning the real cost of labor can be questioned. If training is required
for workers in the manufacturing industries, the real cost is greater than zero. However, if Lewis' simplifying assumption is accepted, money costs will be greater than real costs. A tariff on imports of manufactures is recommended to neutralize the distortion. To arrive at this conclusion, it was shown that the international price ratio must lie between the money price ratio and the real price ratio. Given Lewis' special assumptions, a tariff will correct the distortion in the domestic labor market.

A subsidy for manufacturing would be a more acceptable policy, however, consumers would pay lower prices for output. Since the problem is a domestic economic problem, domestic economic policy should be used not commercial policy. Perhaps Lewis believes that a tariff is politically more acceptable than a subsidy. The analysis of Peru, Burma, and Jamaica didn't provide any cases of distortion in the labor market. Jamaica, which approximates a labor surplus economy, was able to start manufacturing of alumina without tariff protection. In any case the objections raised to Lewis' theory are minor compared to those associated with the theories of Kyint and Myrdal.

The policy guidelines offered by the United Nations Conference on Trade and Development applied to developed nations and underdeveloped nations. The assertion that developed nations have restrictive commercial policies applying to exports of the underdeveloped nations was
analyzed. The analysis demonstrated that protection applied to non-competing tropical foods, if removed, would increase exports of the underdeveloped nations. Balassa estimated the size of the gain to be approximately seventy-seven million dollars. If protection on other categories were removed by the developed nations, exports from the less developed nations are also expected to increase. However, the size of the increase is difficult to estimate since both developed and underdeveloped nations produce the output. It was also shown that graduated tariffs applied to some items by developed nations may preclude processing of primary products in underdeveloped nations.

Domestic subsidies for the production of oilseeds, cereals, and sugar are found in the developed nations. If these price support programs were abolished, underdeveloped nations are expected to receive gains. The most significant gain would accrue to the producers of oilseeds. It is doubtful, however, that price support policies in the United States, the United Kingdom, and the European Economic Community will be removed in the near future.

Generally the nations which are expected to gain the most are the ones which currently have favorable export prospects. These nations are exporters of petroleum and minerals. Since the size of the gain is uncertain for many nations and small for those nations where the estimates are
accurate, underdeveloped nations should not rely solely on the lowering of trade barriers.

In order to stimulate exports of manufactured goods, underdeveloped nations requested that they be given preferences for their manufactured products. According to Prebisch, the Secretary General of the United Nations Conference on Trade and Development, this is a "logical extension of the infant industry argument." Prebisch's position was criticized. The only way to implement a scheme of preferences would be to have the developed countries impose tariffs on imports from each other, but admit imports from underdeveloped nations duty free. The important point is that simply desiring to establish manufacturing industry doesn't automatically qualify the industry for preferential treatment. When Prebisch states that the preferences should be extended for a ten year period, he has no scientific basis for making the statement. The infant industry argument for manufacturing is only justified if the nation's factor endowments fits the particular industry. The main gain from infant industry protection is that an industry can be established in a shorter period of time with protection than without protection.

It is noteworthy to inquire why the underdeveloped nations request preferences and justify their request with a distorted version of the infant industry argument. Perhaps the request is a subtle request for additional economic aid.
Certainly economists such as Prebisch are aware of the valid infant industry argument, yet they attempt to justify preferences by invalidating the argument. This is a paradox created by the "new autarky."

The underdeveloped nations also requested the governments of developed nations to suppress technological change affecting their exports. It is doubtful that any government would take such measures. Many governments have policies of stimulating technological change and can be expected to refuse to reverse them. The appropriate policy for the underdeveloped nation adversely affected by technological change is to adapt its economic structure to other types of production. Peru and Jamaica illustrated that this can be done without protection.

Trade policy for underdeveloped nations was also a subject discussed at the conference. Import substitution and creation of industries which are potential exporters of manufactures were the main goals of commercial policy advanced for underdeveloped nations. Tariffs on imported manufactures were advised by the conference. The main justification for protection was the overworked infant industry argument.

The interpretation of "infant industry" is highly important in this case. Generally the infant industry argument was applied to entire economies not to single industries. If protective tariffs are used to encourage manufacturing
without regard to resource endowments, skill requirements, and management ability the valid infant industry argument isn't applicable. The distortion of the infant industry argument into an "infant economy" argument has the effect of giving underdeveloped nations a license for general protectionism. In brief the arguments for protective tariffs rest on economic nationalism not economic theory.

Since the relationship of international trade to economic development is basic to the theories and policy statements analyzed, the case studies provided an opportunity to apply international trade theory. Although each of the nations studied experienced economic growth, international trade was significant in explaining growth in Peru and Jamaica. Both Peru and Jamaica experienced export-led economic growth. The relationship of international trade to economic growth in Burma approximated the situation of trade as a lagging sector.

Peru has had a steadily increasing rate of economic growth since 1945. The average annual rate of growth of real gross national product was 5.4 per cent for the period studied. This performance surpassed that of Jamaica and Burma. As in many underdeveloped nations economic growth has not been evenly dispersed throughout the economy. Less than one-half of the population is part of the money economy at the present time.
Exports have been a leading sector in the economic growth of the nation. The traditional exports of sugar, cotton, and petroleum remain significant. However, the most notable development concerns the fishmeal industry, and to a lesser extent the copper mining industry. Fishmeal is now the largest export of the nation while copper exports rank third in importance. The fishmeal and copper mining industries were established without protective tariffs or special concessions from other nations. The significant factors explaining the development of both industries are foreign investment, entrepreneurship, adaptability of the labor force, and the generally liberal economic policies of the government. It was demonstrated that the fishmeal industry had linkage or "spread effects" associated with it. The main linkages were plants established to supply inputs for the industry. Thus the fishmeal industry is acting as a base from which to diversify the economy of the nation.

Jamaica's experience with foreign trade also provided an example of export-led development. The growth of real gross national product has been somewhat smaller than Peru's, however. As in Peru, economic growth is still not dispersed evenly throughout the economy.

Exports have increased in importance since 1950. In 1961 the ratio of exports to gross national product was over thirty-five per cent. In the late 1950's the establishment of the mining industry transformed Jamaica from a food
exporter to a major exporter of bauxite ore. Later processing plants were constructed to produce alumina from the bauxite output. This diversification illustrates that export prospects for underdeveloped nations can be improved without resorting to protection. It was also shown that the mineral industry provided the impetus for the booming tourist industry since 1960. In both cases direct foreign investments have been important in explaining the export-led development of the nation. Government has generally followed policies to encourage foreign investment in the nation. In addition, government has attempted to provide social overhead capital necessary for further development of the nation.

Burma's record of economic growth compares unfavorably with those of Peru and Jamaica. The growth rate of national income has been erratic, and in some years there has been no growth at all. The primary explanation for this lack of development is the inefficient and corrupt government of the nation.

Burma's experience with foreign trade illustrated the case of foreign trade as a lagging sector of the economy. Rice continues to be the major export of the nation in a time of declining long-term export prices and import substitution by Japan. Instead of diversification of exports, rice exports have increased in relative importance since 1950. It was also noted that government policies precluded
any possible gains from foreign investment similar to those received by Peru and Jamaica.

The analysis of each nation's commercial policy showed that the contribution of commercial policy to economic development was slight. Revenue duties were significant for Jamaica and Peru. However, both nations are currently attempting to use other types of taxes to finance government spending. Marketing board profits were paid to the treasury in Burma. Generally Burma's experience with the marketing boards has been beset with problems and mistakes so that it can't rely on commercial policy to provide adequate government revenues.

Burma's policy of import substitution by means of trade restriction has generally proved to be unsuccessful. Only a few plants were established and they were not able to supply total domestic needs. Jamaica has used "infant industry" protection on a selective basis to stimulate manufacturing. However, the analysis of the situation disclosed no identifiable gains accruing from infant industry protection. Peru has the most liberal commercial policy of the three nations studied. Only a few protective duties were levied. Again in the case of Peru protection has not made any significant contribution to the nation's economic development.

Generalizing on the experience of the three nations, it appears that a liberal commercial policy is entirely
compatible with economic development of an underdeveloped nation. This is illustrated by Peru's experience, and to a lesser extent by that of Jamaica. On the other hand, Burma, which has highly restrictive trade barriers, has had the slowest pace of economic development. The major departure from free trade contributing to the economic development of the nations studied was a tariff for revenue as distinct from a tariff for protection.
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