1963


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Economics, finance

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THE ROLE OF FOREIGN CAPITAL MOVEMENTS IN THE ECONOMIC DEVELOPMENT OF BRAZIL AND MEXICO, 1947-1960

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy in

The Department of Economics

by

Darrell Richard Lewis
B.A., Luther College, 1960
August, 1963
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TABLE OF CONTENTS

ACKNOWLEDGMENTS ........................................ ii
LIST OF TABLES ........................................ vii
LIST OF FIGURES ......................................... ix
ABSTRACT ................................................. x

CHAPTER

I. INTRODUCTION ....................................... 1
   Rationale for the Study
   Rationale for the Choice of Data
   The Order of Presentation

II. SOME ANALYTICAL ASPECTS OF FOREIGN CAPITAL
    UTILIZATION ..................................... 11

    The Ability to Effectively Utilize
    Foreign Capital
    Time and programming as limiting factors
    The role of complementary factors
    Financial order as the limiting factor
       Prudent monetary policy
       Mobilization of domestic savings
       Cognizance and programming of debt service
    The balanced growth approach
    The pragmatic approach
    In summary
    The Pattern of Foreign Capital Inflows
    Public capital from "official" sources
    Private capital from private sources
       Private portfolio investment
       Direct investment
    Incentives for placement of direct
    foreign investment
Adequacy of demand
Availability of social overhead
Ease of servicing capital
Foreign trade bias
The "investment climate"
Public loan capital from private and other sundry sources
Export credits and medium-term loans
Licensing and technical assistance agreements

The Long-Run Income and Developmental Aspects of Capital Inflows
The "agglomeration effects"
Limitations of underdeveloped economies to modern income analysis
The retention of generated income
The distribution of generated income
The channeling of generated income
The per-capita increase of generated income

In summary

III. MAGNITUDE, EVOLUTION, SIGNIFICANCE AND ECONOMIC CLIMATE OF THE FOREIGN CAPITAL.

Magnitude of the Foreign Capital
Evolution of the Foreign Capital
Significance of the Foreign Capital
Foreign capital as a proportion of domestic capital formation
Foreign capital as a proportion of foreign exchange
Economic Climate of the Foreign Capital
Brazil
Mexico
Concluding observations

IV. FORMS OF INTERNATIONAL CAPITAL FLOWS

Definitional Considerations
Gross Movements and Origin of Private Capital Inflows to Brazil and Mexico
Gross Movements and Origin of Public Capital Inflows to Brazil and Mexico
Public loan capital from governmental sources
The Export-Import Bank
Public Law 480
Other United States agencies
Public loan capital from international agencies
The International Bank for Reconstruction and Development
The International Finance Corporation
Public capital from "official" grants
Public loan capital from private and other sundry sources
Concluding Observations

V. FIELDS AND IMPLEMENTATION OF INTERNATIONAL CAPITAL FLOWS. . . . . . . . . . . . . 152

The Pattern of Private Investment in Brazil and Mexico
Manufacturing
Public utilities
Commerce and trade
Extractive industries and agriculture
Banking and financial institutions
Joint international business ventures
Concluding observations
Public and Quasi-Public Borrowing
Transportation
Electric power
Agriculture
Other
Concluding observations

VI. THE NATURE AND PROBLEMS OF FOREIGN CAPITAL SERVICE. . . . . . . . . . . . . . . . . . . . 209

Relationship Between Service Payments and Domestic Income and Savings
Relationship to income
<table>
<thead>
<tr>
<th>CHAPTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship to savings</td>
</tr>
<tr>
<td>Relationship Between Service Payments and Balance of Payments</td>
</tr>
<tr>
<td>Growth of external earnings</td>
</tr>
<tr>
<td>The pattern of trade and multilateral adjustment</td>
</tr>
<tr>
<td>The pattern of capital flows</td>
</tr>
<tr>
<td>The pattern of private and public remittances</td>
</tr>
<tr>
<td>Service payments on private account</td>
</tr>
<tr>
<td>Service payments on public account</td>
</tr>
<tr>
<td>Concluding Observations</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VII. SUMMARY AND CONCLUSIONS.</th>
<th>. . . . . . . . . . . . . . . . . . .</th>
<th>264</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Portfolio Replaced by Public Portfolio</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Conflict of Policy and Practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Role of Multilateral Investment Channeling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Necessity of Prior and Simultaneous Expansion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Necessity for Governmental Action</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Servicing Policy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BIBLIOGRAPHY</th>
<th>. . . . . . . . . . . . . . . . . . .</th>
<th>292</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPUTATIONAL APPENDIX</td>
<td>. . . . . . . . . . . . . . . . . . .</td>
<td>315</td>
</tr>
<tr>
<td>VITA</td>
<td>. . . . . . . . . . . . . . . . . . .</td>
<td>327</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Total Amount of Foreign Capital in Brazil and Mexico: 1947, 1952, 1960</td>
<td>78</td>
</tr>
<tr>
<td>II. Foreign Capital as a Proportion of Gross Domestic Fixed Capital Formation</td>
<td>83</td>
</tr>
<tr>
<td>III. Foreign Capital as a Proportion of Foreign Exchange Resources</td>
<td>86</td>
</tr>
<tr>
<td>IV. Movements of Foreign Long-Term Capital, 1947-1960</td>
<td>316</td>
</tr>
<tr>
<td>V. Computation of Aggregate Amounts of Long-Term Foreign Capital in Brazil and Mexico</td>
<td>319</td>
</tr>
<tr>
<td>VI. National Income and Gross Domestic Capital Formation in Mexico and Brazil</td>
<td>325</td>
</tr>
<tr>
<td>VII. Combinations of Types and Forms of Capital Flows</td>
<td>104</td>
</tr>
<tr>
<td>VIII. Yearly Averages and Ratios of Public and Private Capital Imports</td>
<td>107</td>
</tr>
<tr>
<td>IX. Export-Import Operations in Mexico and Brazil: Cumulative 1934-June, 1960</td>
<td>124</td>
</tr>
<tr>
<td>X. Loan Operations Under the International Cooperation Administration of the United States, 1947-1960</td>
<td>128</td>
</tr>
<tr>
<td>XI. International Agency Loans to Brazil and Mexico During the Period 1947-1960</td>
<td>132</td>
</tr>
<tr>
<td>TABLE</td>
<td>PAGE</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>XII. Yearly Averages and Ratios of Public Loans and Grants.</td>
<td>135</td>
</tr>
<tr>
<td>XIII. Estimated Percentages of Private Foreign Direct Investment by Industries in Brazil and Mexico.</td>
<td>155</td>
</tr>
<tr>
<td>XIV. United States Direct Investments and Earnings Ratios.</td>
<td>190</td>
</tr>
<tr>
<td>XV. Estimated Amounts and Distribution of Authorized Exim Bank and World Bank Gross Public Loans in the Period Between 1947-1960</td>
<td>192</td>
</tr>
<tr>
<td>XVI. Proportion of Gross Domestic Savings Absorbed by Service Payments</td>
<td>218</td>
</tr>
<tr>
<td>XVII. Rates of Gross Capital Formation Financed by National Resources</td>
<td>220</td>
</tr>
<tr>
<td>XVIII. Brazilian and Mexican Patterns of Trade</td>
<td>235</td>
</tr>
<tr>
<td>FIGURE</td>
<td>DESCRIPTION</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>1.</td>
<td>Brazil, Foreign Capital Service (Semi-Logarithmic)</td>
</tr>
<tr>
<td>2.</td>
<td>Mexico, Foreign Capital Service (Semi-Logarithmic)</td>
</tr>
<tr>
<td>3.</td>
<td>Brazil, Foreign Capital Service (Cross Section)</td>
</tr>
<tr>
<td>4.</td>
<td>Mexico, Foreign Capital Service (Cross Section)</td>
</tr>
</tbody>
</table>
ABSTRACT

The purpose of this study is to examine the roles of foreign long-term capital in the post-war economic development of Brazil and Mexico. An attempt is made to identify and contrast its evolution, importance and amount, forms and fields of implementation, and balance of payments effects between the two countries, and to compare the complementary measures taken by the two governments concerned.

Chapters I-II provide an analytical discussion of some of the approaches and problems involved in the effective utilization of foreign capital. The factors governing the different forms of investment are different and so also are the criteria applied in their use. The developmental effect of foreign capital is also different depending upon the sectors of the economy into which it flows. Accordingly, Chapters III-V seek to throw light on the factors governing the pattern of foreign capital in the two countries. Chapter VI examines the long and short-run problems of foreign capital servicing in terms of internal and external economic implications. Chapter VII concludes and summarizes the main
findings of this study.

The Brazilian and Mexican cases represented a high degree of dependence on external capital in the post-war era. Net foreign long-term capital increased in Mexico by $1.5 billion and in Brazil by more than $2 billion between 1947 and 1960. Of these aggregate amounts, public and quasi-public borrowing was the most important vehicle of inflow in both cases—ranging from 60 per cent in Mexico to over 70 per cent in Brazil. Grants composed 3.2 per cent of the total inflow in Brazil and 4.8 per cent in Mexico. Private direct investment, which went mainly into the manufacturing sectors, composed almost all of the remaining amounts in both economies. Between 1953 and 1960, foreign capital constituted 21 per cent of domestic fixed capital formation in both countries. In the same period, foreign capital as a proportion of foreign exchange was 24 per cent in Brazil and almost 16 per cent in Mexico. These figures, along with other supporting data in this study, tended to reveal the importance of external capital in the post-war economic development plans of the two countries.

It is also concluded that while private portfolio investment has declined, three important new sources of such investment have emerged to fill the gap: (1) intergovernmental
loans and grants, (2) loans by multilateral lending institutions, and (3) medium-term credits and loans advanced by private enterprises but guaranteed by the governments.

The post-war expansion in public capital to both countries revealed a conflict between the official policy and practice of the lending sources. The evidence in this study revealed significant increases in public and quasi-public capital flows to the underdeveloped countries. Notwithstanding, most of the important capital exporting nations and institutions still tend to "officially" favor greater reliance on private capital.

It was found that a certain degree of prior development and expansion proved helpful in facilitating a further inflow of capital. Moreover, the cases illustrated that a certain degree of governmental action proved helpful and at times necessary for capital importation, capital servicing and long-run growth. Public domestic action was found to be necessary in such fields as provision of social overhead capital, tariffs and quotas, diversification and expansion of exports, mobilization of domestic savings, proper monetary control over the money supply and at times the direct undertaking of industrial and agricultural projects. The case of Mexico, contrasted with Brazil, clearly illustrated a relatively
successful pattern of domestic action.

Finally, it was shown that the satisfactory servicing of foreign capital was a function of not only exports but also of positive monetary, fiscal and exchange policies.
CHAPTER I

INTRODUCTION

RATIONALE FOR THE STUDY

A comprehensive treatment of the international movement of capital as a transfer of productive power and as a "vehicle of growth" is rather inadequate in the traditional body of international economics. The literature on the subject has concentrated heavily on such problems as the mechanism of transfer, the adjustment of the balance of payments, and the role of foreign capital as a contracyclical device to stabilize employment in developing economies. It is only with growing interest in recent years that the role of foreign capital as a "vehicle of growth" has been recognized as being in need of systematic analysis.

A great deal of attention has been devoted to the estimation of foreign capital requirements for the economic development of under-developed economies. However, it would seem that a logical approach to the problem of foreign capital, vis-à-vis economic development, would be to undertake at the
outset a treatment of the process of effective utilization of the various types of foreign capital and the important considerations governing them, since capital requirements would be a function of these multiple "capacities to absorb."

This problem and the role of foreign capital in an underdeveloped economy extends beyond the problem of the creation of an import surplus, which in the past has constituted the main core of the traditional analysis of the transfer problem and the balance of payments adjustment. It requires an analysis of the conditions and criteria governing the magnitude and productive utilization of the different forms of capital inflow. As a United Nations study points out:

... the adequacy of a given capital flow from the point of view of economic development does not depend on its amount alone but on several factors including, in particular, the form it takes and the fields of activity in which the capital is applied. It should not be assumed that capital which, because of prevailing conditions, does not flow between nations in one form or for one type of activity will be available for investment in another form or for other activities.¹

In offering further rationale for a study of this nature, the National Planning Association states:

On the basis of the NPA's studies of U.S. private investment abroad and its influence in stimulating the growth of enterprise in underdeveloped countries, we believe that the factors affecting the development of indigenous enterprise in different types of countries, . . . merit more systematic and intensive investigation. . . . Comparative studies of the development of the spirit of enterprise in different societies . . . would be extremely useful.2

Further highlighting the necessity of such detailed studies on capital flows, the U.N. Sub-Commission on Economic Development pointed out that before a body of specific conclusions regarding the role and methods of foreign financing and a code for international investment can be intelligently considered, a full discussion of the past experience on movements of capital must be undertaken. A study of this nature should be made especially from the point of view of the borrowing countries, including such questions as volume and direction of investment, and the terms of investment and their effects.3

This study is an attempt to analyze a few such aspects

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in the light of the past experiences of two selected countries, i.e., Mexico and Brazil. This is done by focusing attention on certain aspects of the trends and distribution of long-term foreign loans, investments, and grants to these countries in the period 1947-60. The experience of these years should throw light on the nature of a significant part of the flow to these countries of foreign funds which have influenced their economic development. Apart from the "pure research" interest in the problem, it is useful from the standpoint of economic policy to examine in some depth the movements of foreign funds to underdeveloped countries. Many industrial countries have, in recent years, undertaken to expand their economic aid to underdeveloped countries. New financial institutions have been created for this purpose, and the lending capacity of others has been expanded.

In evaluating the nature and contributions of these foreign flows to the underdeveloped areas under study, this study will try to answer a number of questions. The scope of this study is suggested by the following queries:

What has been the trend in the flow of long-term loans, investments and grants to these underdeveloped countries since the beginning of the postwar period?

How has the flow of public or official funds compared with that of private?

How has the movement of loans and investments
compared with that of grants?

What direct and indirect roles have these foreign flows played in effecting economic development in Mexico and Brazil?

What implications do these roles hold for future development?

Can we identify the initial foreign sources of capital formation which may tend to set in motion a process of sustained economic growth?

Are these sources similar in both countries and do they have similar results?

How dependent is economic growth in its various phases on access to foreign capital?

What have been Mexico's and Brazil's ability to meet debt service payments on foreign capital?

What has been the effect of foreign capital on domestic saving, enterprise and investment?

Although scattered attempts in recent literature have been made in an attempt to answer a number of these questions and to lay down guide lines, it would seem worthwhile, in the context of this study, to attempt a co-ordinated and comprehensive analysis of the relevant factors in the two selected economies and to examine their mutual consistency and interrelations relative to development.

RATIONALE FOR THE CHOICE OF DATA

The availability of statistical data on this subject is notoriously scanty and has been an important consideration
in the choice of the countries to be studied. The usefulness of the selection of these two countries for the purpose of this study rests on two additional considerations: (1) The selected countries have important characteristics in common with other underdeveloped countries, and (2) the recent course of their development may hold important implications for other countries.

Insofar as characteristics are concerned, Mexico and Brazil are typical of the general pattern. Although both countries are making great strides in recent industrialization, they are both still predominantly agricultural and both have an overwhelming dependence on primary exports for the import of necessities and development goods. Another characteristic common to many of the underdeveloped countries is the recent acceleration and present high rate of population growth in both Mexico and Brazil, a condition aggravated by the fact that an expansion of agricultural land is possible only with the help of sizable capital expenditure. Still another characteristic is the generally primitive level of techniques, excepting only the most recent ventures and the metropolitan industrialized areas. These conditions must be attributed both to the scarcity of capital and to the scarcity of skills. This brief inventory of symptoms of backwardness constitutes,
as it were, the lowest common denominator of characteristics which Mexico and Brazil share with other underdeveloped countries; the list could be greatly expanded and refined, but this is left to the text of this study.

Turning to the second consideration, the course of development, it is found that recently both countries have entered an era of deliberate advance. On many fronts they have produced the fastest rates of progress observed in modern times. Moreover, both countries have, in the post-war period, absorbed significant amounts of foreign capital. Finally, choice of the two countries is based on the fact that, although each lies in the generally underdeveloped Latin American area and each has recently experienced an unusual growth rate, each of the two is quite different from the other in terms of its relative stage in economic development and in terms of its capital absorptive abilities. These facts may be expected to reveal important differences and to widen the range of alternatives for the future.

The time period covered in this study will relate for the most part, except for background material, to the period beginning from the end of World War II (1947) up to the end of 1960. These fourteen years (1947-1960) comprise a period in which international capital flows have undoubtedly influenced economic development in the two countries under study. There is a second important reason for the choice of this period. It is thought desirable and necessary to limit the time-span of the study to a period for which relevant data is likely to be relatively more adequate, accurate and accessible. The fourteen years are the maximum span of years for which the data covered in the basic sources are comprehensive. For the years immediately prior to 1947, data are not available for Brazil. Third, because the Great Depression and War years represent economically abnormal periods of time, the time-span would have had to be extended back to the turn of the present century in order to constitute an effective long-run sample. Therefore, this study only concerns itself with and draws conclusions from the relatively short, but dynamically changing, time-span of 1947-1960.

THE ORDER OF PRESENTATION

This study is divided into four main parts. Part I, which includes Chapters I-II, provides an analytical
discussion of some of the approaches and problems involved in the effective utilization of foreign capital. Such problems include time and programming; financial order in consideration of the inflationary impact of capital importation, and its relevance in relation to domestic savings; the role of complementary factors in the form of technical skill, entrepreneurship, and other available domestic resources; and the long-run effects of foreign capital investment in accelerating or encouraging domestic capital formation and enterprise. The factors governing the different forms of investment, portfolio or direct, private or public, are different and so also are the criteria applied in their use. The developmental effect of foreign capital is also different depending upon the sectors of the economy or fields of activity into which it flows. Accordingly, Part II, which includes Chapters III-V, seeks to throw light on the factors governing the pattern of foreign capital—including both the forms and uses of such investment—in both Brazil and Mexico. Part III, which includes Chapter VI, examines the long-run problem of foreign capital service and repayment in terms of its internal economic implications, and in terms of the external economic circumstances of a debtor country in the context of a changing pattern of trade and balance of payments.
The short-run problems of meeting regular service payments abroad, vis-à-vis the fluctuating state of the balance of payments, is also examined. Part IV, which includes Chapter VII, concludes and summarizes the main findings of this study.
CHAPTER II

SOME ANALYTICAL ASPECTS OF FOREIGN CAPITAL UTILIZATION

There has come to be a general understanding of the economic processes by which development can be achieved. This does not mean that in practice these processes have ever been met in their pure analytical state. Guesswork, intuition, strategic interests, national prestige, and political gambles all play their part in shaping the actual growth of any particular economy. But modern economic analysis does permit isolation of a number of essential factors which may be expected to play some part in any successful scheme of economic progress.

The basis of pre-industrial society is, of course, agriculture, and usually static agriculture based upon unchanging, traditional farming methods. An indispensable step in economic development is to introduce new methods of farming which encourage increasing productivity. This in turn provides a margin of resources for transfer to other activities and releases manpower from the countryside. Japan after
1870 is the classic example of a successful agrarian revolution along these lines.

But no other activities will be developed without a second factor: investment in what the French call "infrastructure." This term covers such basic needs as ports, transportation, urban housing and power development which are the preconditions of more varied economic advance. And it should also include the human "infrastructure" of education, technical training, health, and social services which help to provide the trained minds, healthy bodies, entrepreneurial abilities, and stable social conditions needed for an expanding, confident, and well-managed economy.

This "infrastructure" is in turn related to the type of industrialization which local conditions permit. Local processing of materials depends upon the presence of the materials and the availability of power. Heavy industry depends upon ores and fuels. But most economies can envisage at least a modest expansion of light industry, producing consumer goods for the expanding local market. Textiles, glass, containers, soap, salt, industrial alcohol, and cement are all products which most emerging economies have at hand or in preparation.¹

These four factors—agricultural transformation, physical social overhead, basic social services and the beginnings of industry—have one thing in common. They all require capital. They all involve the postponement of immediate consumption, and their rate of expansion depends finally upon the amount and type of capital that can be secured and allotted to them. Stagnant economies are characterized by low rates of investment, and, although it may be difficult to establish any absolute investment rate which virtually ensures growth, it is generally agreed that economies devoting less than 10 per cent of their national income to productive investment are not likely to achieve much advance.² By investing more than that figure they have a chance of achieving what Rostow would term a "take-off into self-sustained growth"—in other words, the achievement of enough dynamism that the process of high investment becomes self-sustaining, simply because year by year, the resources available to make possible savings over and above popular consumption are tending to increase.

One way to help accelerate this development is to draw upon external capital in order to supplement and reinforce available domestic means. It is common knowledge that external

assistance and foreign capital figured significantly in the
development of some of the present-day developed countries.
In similar fashion, most present-day underdeveloped countries
look to foreign capital as an avenue of help toward attain­
ment of the development they desire.

THE ABILITY TO EFFECTIVELY UTILIZE FOREIGN CAPITAL

On the basis of the above capital needs for develop­
ment, estimates of capital requirements for underdeveloped
nations have been made by a number of various institutions
and individuals. However, these estimates of capital re­
quirements for the various underdeveloped countries have
often been criticized because they did not take adequate
account of the various country's "capacity to absorb
capital." This concept is only vaguely defined; its meaning
is sometimes indicated by hypothetical or actual limiting

\[\text{3U.N. Department of Economic and Social Affairs,}
\text{Measures for the Economic Development of Under-Developed}
\text{Countries (New York: United Nations, 1951), p. 79; see also}
\text{M. F. Millikan and W. W. Rostow, A Proposal: Key to an Ef­}
\text{fective Foreign Policy (New York: Harper and Brothers, 1957).}
\]

\[\text{4For a discussion of capital absorptive capacity see}
\text{Millikan and Rostow, op. cit., Chapters 6 and 10; see also}
\text{Charles P. Kindleberger, Economic Development (New York:}
\text{McGraw-Hill Book Co., 1958), pp. 262-65; and Walter Krause,}
\text{Economic Development (San Francisco: Wadsworth Publishing}
\text{Co., 1961), pp. 253-59.}\]
factors. These factors, which limit a nation's capacity to absorb capital during any period, have been included and stressed in a number of different approaches. This study will consider briefly five of these approaches to the concept of capital absorptive capacity: (1) the "time and programming" approach; (2) the "complementary factor" approach; (3) the "financial order" approach; (4) the "balanced growth" approach; and (5) the "pragmatic" approach, which incorporates the above four and emphasizes the mutual interdependence between alternative costs and capital formation. Although any one of the five approaches may include any one of the other four in its analysis of the problem, they differ in the stress placed on one all-pervading consideration as being the limiting factor.

**Time and Programming as Limiting Factors**

This approach emphasizes the fact that it takes time to formulate projects, make the necessary geological, economic or other surveys, prepare blueprints, negotiate contracts, hire managers, assemble workers and generally organize the investment project. Thus, at any one moment of time there is "insufficient time . . . to put unlimited amounts of capital
Moreover, "absence of well planned projects in terms of market surveys and the systematic appraisal of costs and benefits widens the gap between the concept of development potentialities on the one hand, and the formation of practical propositions designed for the realization of these potentialities on the other." 6 This has been, according to the International Bank for Reconstruction and Development "perhaps the most striking single lesson which the Bank has learned in the course of its operations." That is, how really "... limited is the capacity of the underdeveloped countries to absorb capital quickly for really productive uses." 7 "... The principal limitation upon Bank financing in the development field has not been lack of money but lack of well-prepared and well-planned projects ready for immediate execution." 8

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7Ibid., p. 8.

8Ibid., p. 9.
The Role of Complementary Factors

This approach stresses that in order for a country to make effective use of foreign capital there must exist trained and mobile local labor; responsible and respected governments; and suitable land and material resources with which the financial capital can be combined for real capital formation. The exponents of this more general approach stress that the role of responsible government, literate populace, entrepreneurial ability, and technical and managerial skill is probably the most important factor in complementing economic development vis-à-vis foreign capital flows. Although direct foreign investment often brings a few of these cooperating factors along with it, "... more fundamental changes in the system of values and motivation relevant to a fully developed industrial economy are effected only slowly and often the modernizing agents bringing about these changes in milieu are governments or indigenous groups of individuals

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Financial Order as the Limiting Factor

Although this approach considers the above role of complementary factors, it stresses the fact that "... a poor country's capacity to absorb capital is limited by the need to restrain the tempo of development to what can be handled without inducing excessive inflation and pronounced balance-of-payments disequilibrium."^{11}

Prudent Monetary Policy

Among the immediate effects from the introduction of foreign capital in an underdeveloped economy is the possibility of an accentuation of inflationary trends which seem to arise and persist in such economies owing to a host of other reasons. This is more likely in the case of portfolio and public investment, especially when the initial impact of a transfer of foreign capital results in a net addition to the foreign exchange reserves of the banking system as a

^{10}Moore, op. cit., p. 176.

whole and also in a net addition to the cash reserves of the commercial banks. This increase in reserves may encourage the commercial banks to expand bank loans in the short period. The individual banks have neither the means nor the incentive for foreseeing in quantitative terms the ultimate effect, on the balance of payments and exchange reserves of the whole banking system, of their expansionary policy. Such inflationary financing of investment may eventually cause an increase in demand for imports in excess of the net addition to the foreign exchange reserves and then lead to balance of payment difficulties after an interval of time. Here it is contended that a vigilant watch must be held by the monetary authorities on the magnitude and direction of total investment activity, including those related to foreign investment, in order to avoid an accentuation of inflationary trends.¹²

Mobilization of Domestic Savings

Any investment program requires expenditure on local resources, materials, labor and other matter. If supplementary domestic savings are available to finance the domestic

component of an investment program, the foreign exchange available under foreign loans, grants and direct investment can be used to finance exclusively the import contents of the investment and then to support a subsequently larger investment program. Otherwise a part of the foreign capital would have to be used in financing increased imports of consumption goods to meet the increased demand of the recipients of income flowing from the investment projects. The income received by labor and other suppliers of resources would cause a secondary demand for consumer's goods. The domestic price level of consumer's goods would go up and cause an increase in imports from abroad which would be financed in part by the foreign funds, and at the same time give rise to a weakened position in the pricing of exports. Thus it is pointed out that the financing of the domestic component of the total investment expenditure by means of new money rather than by domestic saving or foreign loans would not only aggravate inflation and tend to create further balance of payments difficulties, but it would greatly limit the country's ability to absorb foreign capital and to develop economically. To quote from the Fourth and Fifth Annual Reports of the I.B.R.D.:

"In the long run, international capital in any form can provide only a minor part of the capital needed"
for development. The larger share must come from domestic sources through the increase and productive investment of local savings.\textsuperscript{13}

One of the most essential tasks facing the less developed countries is to take more effective measures to channel their limited savings into the most productive investment projects. The Bank accordingly feels that a major objective of its efforts should be to persuade and help its member countries to carry out these necessary measures, and that, where financing foreign exchange requirements indirectly resulting from local currency expenditure might in effect encourage the postponement of such measures, the financing should be undertaken. Thus, where it is reasonably possible for a country to defray the local currency part of its investment programme from its own resources without inflationary effects, the Bank believes that it should do so; indeed, the Bank is prepared to aid its member countries in the organization of their capital markets and financial institutions to this end. The Bank recognizes that a country may be in a position where its domestic savings are reasonably fully employed in productive investment and where the most advantageous kind of additional investment for it to make would be in such projects as roads, irrigation, or housing which call principally for expenditure in domestic currency. If this investment is likely to lead in a few years to correspondingly higher levels of domestic savings, the provision of foreign exchange to finance the indirect foreign exchange requirements would serve to tide the country over the period of expansion without inflation.\textsuperscript{14}


Cognizance and Programming of Debt Service

The problems and prospects of debt servicing will be discussed in more depth and detail in Chapter VI; however, brief mention is necessitated here of the demands placed on foreign exchange for the servicing of foreign capital inflows. Awareness of such factors as loan terms, amortization schedules, export earnings, import substitution, and future anticipation of capital imports all play an important part in preventing balance of payments disequilibrium, which, if it becomes pronounced and uncorrected, can rapidly hinder all plans and progress for economic development.

The Balanced Growth Approach

The "balanced growth" approach is closely related to the complementarity and financial order approaches above. However, it has been singularly mentioned by a number of authors as constituting the one essential element in the effective utilization of foreign capital for economic development.15 "Balanced growth," like absorptive capacity, is a

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concept which is rarely defined and may mean a number of things. While a full discussion of this problem would require a long excursion into the theory of economic development, several aspects of the problem relative to capital absorption may be mentioned.

It is a widely recognized fact that industry and economic overhead projects are complementary and interdependent. Industries also provide external economies for one another. Thus, the advocates of the "balanced growth" approach contend that, with a simultaneous expansion in a wide variety of complementary fields within a "general-equilibrium" view, the developing country has virtually unlimited capacity to effectively absorb and utilize foreign capital.

The Pragmatic Approach

While all of the above approaches and aspects of capital absorptive capacity contribute to an understanding of the nature of the problem, no one of them provides a fully adequate explanation or criterion for the effective utilization of foreign capital. At the heart of the matter, it is contended by a number of sources, is the fact that the supply of capital is scarce in relation to the many uses to which it

16See Kindleberger, Economic Development, Chapter 9.
might be put. The available supply of capital in each country should be employed in combination with other factors of production, in a manner which will maximize the net return from its employment. Unless the proper decisions are made regarding the profitability of capital investments, it is contended that they may add little or nothing to annual output and to subsequent growth. These decisions for foreign capital investment tend for the most part to grow out of the production process itself and involve alternative costs.17

Most of the foreign investment in industry, agriculture and mining is undertaken by firms already in operation. They decide whether or not additional investment is warranted by demand and cost conditions. Since investment funds are supposedly limited, they determine the direction of investment in accordance with a scale of priorities dictated by prospective net returns—"the profit motive."

From a recent survey taken of the motives for United

States investment abroad, the following statement concluded:

The fundamental business objective of United States venture capital investors, like that of all private businessmen, is to make a rate of return from investment activity that is adequately rewarding in relation to the degree of risk and uncertainty undertaken and the element of service provided for the community at large.

Most of the persons interviewed referred directly or indirectly to this question of the rate of return. Among those who did not mention it, it seemed apparent that they assumed it was clear what their attitude was.  

Additionally, the public sector of the economy is closely integrated with the private sector. In deciding upon economic overhead projects such as power and transportation, governments make—or should make—their decisions for investment outlays on the basis of requirements growing out of current and prospective economic operations. While the government is free to make investment decisions without regard to their financial return, it presumably should be guided by the principle of directing investment expenditures so as to maximize the social product. Such decisions must be made within the framework of the entire economic process, taking into account the alternative uses of all the productive

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factors available to the economy. 19

Large amounts of foreign capital could undoubtedly be employed by both private enterprise and by governments in underdeveloped countries in any given year, but they could not suddenly employ unlimited amounts of capital in a manner which would approximate maximum returns from its use. As indicated in the above four approaches: limited sophistication; limited complementary industries and facilities; limited financial institutions; as well as limited time, limited financial order, and limited supplies of productive factors of all kinds, place limitations on the amounts and types of foreign capital that can be productively employed over a given period of time. Obviously, as indicated above, the cost of capital is a factor in this determination. In the "pragmatic view," the cost of capital is the major point of reference. When capital is borrowed, it "... must not only yield a net return, but that return must be at least high enough to cover the interest charges. Quite apart from the transfer problem, it would not be economical for a country to borrow money from abroad for a project if the annual net increment to the social product did not at least cover the

interest charge."\textsuperscript{20}

The officials of the various international public lending institutions—the International Bank for Reconstruction and Development (I.B.R.D.), the International Finance Corporation (I.F.C.), and the International Monetary Fund (I.M. F.)—are all guided in a general way by this "pragmatic view" of maximizing returns from the use of capital in the underdeveloped countries. Thus, for example, a product in Brazil, which would give promise of yielding a high real return, would ordinarily be given a higher priority than one in Mexico, where net returns may appear relatively lower. This judgment would be made even though the public lending institution is not interested in maximizing its own profits.

When grants are made simply to supplement consumption rather than as a permanent contribution to the capital stock of a nation, the above principles or maxims obviously do not apply. However, where grants are made in order to increase the rate of capital formation, such funds should be used for investments which will yield an increase in the annual "marginal social product" after allowance for capital consumption. Moreover, since capital is scarce, the investment expenditures should be directed so as to make the maximum

\textsuperscript{20}\textit{Pan-American Union, op. cit.}, p. 54.
contribution to the "marginal social product." This means again that the highest priority should be given to the most socially and economically productive projects.\textsuperscript{21}

Thus, "absorptive capacity" may boil down to the ability of the borrower to convince the foreign lender that the real returns from the use of the capital in the projected program of investments are worth the cost of the borrower and are greater than returns from competing projects of borrowers in other countries, which might be financed out of the limited capital resources available to the lender--public or private.

\textbf{In Summary}

As can be seen from the above approaches, it is valid to argue that every country is limited in some way in its capacity to effectively utilize foreign capital. But whether the relevant appraisal is low or high depends importantly upon the approach and standards one applies in appraising capital absorptive capacity. Moreover, there are two additional considerations for a successful capital absorption program which are, to a considerable degree, beyond the control of the underdeveloped countries and thus were not included in the above approaches. One is the stability of world

\textsuperscript{21}Kahn, \textit{op. cit.}, pp. 56-58.
demand for primary products and its related terms of trade problem, and the other is the trade policies of other countries. Beyond this, one further conclusion can be drawn. Whatever one holds to be the conditions or limit of capital absorptive capacity in the current period, the situation at some future date is certain to be different—if development occurs in the interim. With development comes sophistication in programming projects; improvements in the complement of factors of production with which capital is linked; balanced coordination in decision making; a broadening and strengthening of the total economic base upon which financial order is dependent; and improvements in international credit standings, so that the capacity to absorb capital quickly and efficiently can be expected to rise over time.

THE PATTERN OF FOREIGN CAPITAL FLOWS

Since, as has already been pointed out, the rate and extent of the effective utilization of foreign capital inflows are closely related to the pattern of investment, a detailed examination of the forms and fields of activity and of factors governing them seems relevant.

Historically, the two most important forms of international investment have been direct investment and portfolio
investment; i.e., purchase of foreign bonds by private individuals and institutions. However, recently "multilateral" public institutions and "unilateral" government loans and grants have gained significant proportions.

Public Capital From "Official" Sources

Public financing of loans, grants, and guarantees for the international transmission of capital for economic development is of fairly recent vintage, dating, with few exceptions, from the period of World War II. The primary institution of "multilateral" action has been the International Bank for Reconstruction and Development which evolved in 1944 along with the International Monetary Fund. In addition, there are several other institutions of lesser loan potential or of narrower function which could be included as public long-term investors; i.e., the International Finance Corporation, the United Nations Technical Assistance and Special Fund, the United Nations International Childrens Fund, the International Development Association, and the Inter-American Development Bank. Additionally, "unilateral" public investment has been employed by a number of countries and in a number of forms. The United States Government offers loans and guarantees through the Export-Import Bank and the Development Loan Fund;
grants, and also some loans, through the International Co-
operation Administration; and grants or domestic-currency-
repayment loans under terms of the Agricultural Trade Develop-
ment and Assistance Act of 1954—P.L. 480. Other countries, 
such as the United Kingdom and France, also offer loan funds 
and grants to overseas territories. 22

At the present time, the flow of public investment 
from "official" sources runs quite high in most underdevel-
oped countries. This popularity can be attributed to four 
main reasons.

First, unlike the flow of private capital which is 
motivated by prospects of profits, economic factors have 
played a less significant role in influencing the flow of 
public capital. "Public capital is inevitably linked with 
political and other non-economic factors." 23

22 Robert E. Asher, Grants, Loans and Local Currencies: 
Their Role in Foreign Aid (Washington, D. C.: The Brookings 
Institution, 1961), pp. 51-54. In 1961 the International Co-
operation Administration was supplanted by the Agency for 
International Development. Message of the President to the 
Congress, "Foreign Economic and Military Assistance Program 
for Fiscal Year 1963," Department of State Bulletin, XLVI 

23 U.N. Department of Economic and Social Affairs, 
p. 66.
such as long-term balance of payments problems, stable and responsible governments with effective diplomatic and technical missions, and threatened flirtations with the communist block all have held an influence. The United Nations states in its World Survey for 1960 that:

... while the level of private capital flow has been mainly determined by the nature of commodities exported and the stage of development, the flow of public funds has been affected to a large extent by political and other considerations. Public capital flows have, in fact, tended to be related to relative investment needs, and have been larger as a proportion of gross product in the lower income countries than in those at a more advanced stage of development.24

Secondly, public investment does not easily result in foreign control, or in direct foreign interference. In the case of loans to the private sector, no direct rights of control spring from the internationally financed bonds. In the case of government bonds, similarly, the possibility of outside pressure is largely precluded when sales of the bonds are widely scattered among a foreign public. This would be the case when such institutions as the I.B.R.D. and the I.F.C. refinance the loans in the private markets. However, the sale of bonds in a large block to, say, a foreign public financial institution or a single foreign government can

24Ibid., p. 59.
create the basis for some political or economical pressure. Grants offered on a unilateral basis also offer an opportunity bias for political pressure.

Third, foreign loans for capital expenditure by public agencies have the further advantage that they can be used for domestic economic development in accordance with a coherent over-all economic program. As a source of foreign exchange available to a country, capital imports through public borrowing, undertaken from a long-run standpoint, can be more stable than private investment. By planning on a long-term basis, the government can borrow and build up foreign exchange reserves in anticipation of any future foreign exchange shortages. In this manner, the government can insure a continuation of an investment program which otherwise would be jeopardized when and if exchange receipts should fall off and/or private capital inflows should dry up. In a developing economy dependent upon essential capital goods from abroad, such stability would be vitally important even if it should involve some extra interest burden.

Finally, although the economic factor is not paramount, it is considered, nevertheless, even if only as it relates to the balance of payments. In this respect, public investment ordinarily provides capital at a lesser direct cost to the
borrower than other types of capital. Investors on a direct basis frequently get an annual return on their investment of anything from 10 per cent to 40 per cent, or even more; as a minimum, the common attitude is that investors can legitimately expect a return above that obtainable at home, where their expectations may very well run from 10 per cent to 20 per cent. In contrast, public bond yields ordinarily run from three and one-half per cent to seven per cent. In addition, even if the project financed by the public foreign capital does not yield sufficient direct returns but creates external economies for other projects yielding greater returns, the servicing and repayment of the debt is possible through the general powers of taxation. Thus, such slow yielding longer-run projects like social overhead, the social productivity of which is greater than private productivity, can be financed by foreign capital only via public borrowing abroad or by the fortunate receipt of grants. Furthermore, when a project financed by the government borrowing abroad yields a return greater than the rate of interest payable abroad, the excess remains within the country and could feasibly go either to relief of taxation or towards further public expenditure benefiting the domestic economic development.

Thus, political affluence and the desire for more rapid
economic development and for cheap money with few strings attached are all reasons for the recent increased flow of foreign public capital to the underdeveloped countries.

It has been contended by various United Nations studies that public investment combines the features of both private portfolio investment and direct investment by exporting "know-how" and capital both at the same time without exercising control. Although public investment does not carry managerial or technical talent with it in the same way that direct investment does, most of the public lending institutions, such as the I.B.R.D., I.F.C. and the United States Export-Import Bank, do furnish a significant amount of technical assistance with their capital flows. In addition, this talent, when not obtainable in adequate quantity or quality domestically or from the lending institutions, can be purchased from abroad; i.e., through the technique employed in management contracts. In fact, "... the added costliness of funds gotten as direct investment may more than equal, at least in instances, the cost of the various 'extras' when these are purchased separately, rather than obtained in an over-all direct-investment 'package.'"25

25Krause, op. cit., p. 268.
A distinction is frequently drawn between "direct" and "portfolio" types of private investment. This distinction is sometimes made on the type of holding involved, that is, portfolio investment is investment in securities, while direct investment is the personal or corporate ownership of physical assets abroad.26 However, more generally the distinction is made between the two on the basis of control:

... whether or not the foreign investor anticipated returns (and so invested) because he was to have substantial control over the enterprise and consequently would be able to direct its activities or whether he anticipated returns because he had sufficient faith in the management of some foreign institution or individual.27

Using this definition, most long-term private foreign investment is "direct," with the exception of investment in government securities. Experience in Latin America demonstrates this clearly. By far the greater amount of private investment retained substantial control of the enterprises in which the investment occurred; on the other hand, nearly all other


private investment which was not accompanied by substantial control was investment in Latin American government securities.28

Private Portfolio Investment

Although private portfolio investment was once a major form of international investment, the flow of funds on this basis have dwindled to a mere trickle since the 1930's. W. Krause states that:

... at first, a weakening record on the part of debtors in the servicing of obligations, accompanied by losses in capital values, served to dampen enthusiasm for this form of investment. Thereafter, continuing unpleasant memories, plus generally unsettled international financial conditions, forestalled any marked renewal of interest, so that portfolio investment continues at a low ebb.29

Essentially, then, the decision on portfolio investment is based on a calculation of return versus risk as compared with alternative opportunities at home. The risks of investing in foreign bonds are higher partly because of ignorance of the conditions which prevent a correct evaluation of the credit-worthiness of the borrowers and partly because


29Krause, op. cit., p. 267.
of uncertainties of the exchange rate and political conditions. Consequently a substantial interest-differential is necessary to overcome this greater risk and to attract further private international debt financing.

In the following Chapters III-V, this study will modify the above definition of private portfolio investment. This modification will result in all governmental securities, both by source and by recipient, being included as public investment. This recategorization, along with the present low popularity of portfolio investment, makes further discussion unnecessary.

Direct Investment

Direct investment has been traditionally viewed as a desirable form of international capital movement. The traditions on which this view is based, however, are largely those of the developed economies. Nevertheless, a number of distinct direct and indirect advantages are ordinarily claimed for it. It is pointed out that, along with the needed capital and the increment in foreign exchange, key managerial personnel, entrepreneurial abilities, vital skills and "know-how" are also provided. It is therefore alleged that long-term
direct foreign investment is a "package deal." Within this "package," beyond the managerial skills and abilities brought into the country, are such elements as the training of local personnel; the assumption of risks, which relieves domestic investors and the government; greater income to governments through royalties, income taxes and other levies; more varied and abundant supplies of commodities for consumption and for use in expanding other industries; increased money incomes and often improved medical and educational services for the working force; encouragement of new local enterprises to supply goods and services to the new investment projects; a demonstration effect to the domestics of the possibilities of doing business successfully and profitably; the occasional sharing in the provision for social overhead facilities; and the fact that direct investors often have connections in their home countries or in other developed countries which enables them to complete advantageous marketing arrangements for prospective output, thereby bypassing to some extent the obstacle of narrow or underdeveloped markets that frequently

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30 Hunter, op. cit., p. 17.
confront many underdeveloped economies. 31

Here in the United States careful studies have shown that our economic growth has been the result far more of improvements in productivity than of increases in our stock of capital. Moses Abramovitz's study for the National Bureau of Economic Research suggests that between 1869-78 and 1944-53 net output per-capita in the United States would have increased only 14 per cent if productivity had remained the same and if we had merely had the use of the additional capital which our savings had made possible. However, the productivity of a representative group of resources in the study increased about 250 per cent over the period. 32 The same conclusion could possibly be equally valid for underdeveloped countries.


In contrast to the above alleged benefits, some persons in both underdeveloped and developed countries are inclined to see major drawbacks in too much reliance upon foreign direct investment. Foreign ownership and management, via direct investment, are often regarded as tantamount to foreign social and political control and charges of economic imperialism and exploitation are oftentimes echoed. The fact that large foreign-owned installations often take on the appearance of an economic self-sustaining system within the underdeveloped country serves further to strengthen this charge. Also, the high profit returns generally expected, and frequently received, come to be viewed as evidence of this exploitation. Finally, the argument is sometimes made that a small local economic, political or social elite is all too ready to join forces with the new foreign investors, and that together they act to preserve the status-quo in domestic economic, political and social inequalities in the light of their own mutual self-interests. Rather than being a stimulant

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34 Krause, op. cit., p. 266.

to economic development, direct foreign investment is then viewed as a factor contributing to general stagnation.

Incentives for Placement of Direct Foreign Investment

Direct investment is governed essentially by an evaluation of profit opportunities. These opportunities, however, cover a much wider range of factors than are reflected in the existing money rate of interest in the underdeveloped economies, or even in the direct rates of return on specific pieces of investment. The direct and immediate profitability of a certain undertaking abroad, say a branch plant, may not be considered separately but only in terms of its anticipated contribution to the over-all profitability of the parent concern. In fact, the growing importance of corporate international investment, in the form of branches and subsidiaries, is partly the result of the accumulation of undistributed profits in the parent firms. Rather than the rate of return on capital invested in the specific plants, the maintenance of sales volume, procurement of raw materials for home industries, and the preservation of markets against competitors are among a few of the factors which act often as important

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considerations in the establishment of branches abroad.

The various considerations governing the profitability of direct foreign investments can be related to certain characteristics of an underdeveloped economy—such characteristics as an adequacy of demand or market; the availability of social overhead; the relative ease or difficulty of transferring abroad service payments; a foreign trade bias, and the so-called "investment climate." It is of course not possible to give sufficient detail to cover all industries, locations, and conditions; however, certain general characteristics do stand out.

Adequacy of Demand. The relevance of the size of market to growth in underdeveloped economies has been widely discussed in the context of the doctrine of balanced growth. Additionally, this topic has been widely discussed in relation to regionalization projects such as the European Common Market and more recently in regards to the projected Latin American Common Market.

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While it is true that, in general, a limited domestic market acts as a disincentive to market-oriented foreign investment, it may be pointed out that a new industry, which caters to a small volume of demand previously met by handicrafts or by goods based on a lower level of technology, can find a larger market by replacing the older product at a lower price. Additionally, when there is a fairly widespread exchange economy with commercialized agriculture, a simultaneous increase in agricultural output would provide a market for new or expanding industries.

While lack of internal demand does inhibit foreign investment in the sectors catering to internal demand, strong foreign demand for export products of underdeveloped economies (and especially for raw materials) has attracted foreign capital to the extractive export industries, at least in the past. A recent United Nations survey attests to the above two facts.

Governed as it is by the profit motive, the increased flow of private capital has in the main gone into countries favored with natural resources in strong world demand, as well as into the countries with relatively large and buoyant domestic markets.38

The replacement of imports, often engineered by tariffs,

can create internal demand if demand so diverted is large enough for the efficient operation of the import-replacing industry. However, tariffs (by sheltering an inefficient industry) can decrease real income, except in the case of infant industries capable of developing comparative cost advantages. The strength of tariffs in attracting foreign investment depends partly on the nature of the industry concerned. In the case of market-oriented industries, an import duty on finished products would act as a strong incentive for branches to move within the tariff wall if the raw materials or parts remain untaxed. This occurs, provided, of course, that the internal market subsequent to the imposition of the tariff is adequate in size. In the case of all assembling operations in automobiles, radios, electrical equipment, tire making, wine bottling, etc., the pull of the market is very strong. In terms of space required and transport costs, the parts can be transported more cheaply than the finished and assembled product and it is more economical to carry out the early stages at the source of raw materials and the final stages of manufacture near the market. In such cases as

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these, tariffs on assembled parts would more easily encourage establishment of assembling plants. In the case of strongly supply-oriented industries, tariffs in an underdeveloped economy, unless it possesses some crucial raw material or fuel, are not likely to be very effective in attracting branch factories. In a market-oriented industry for which the country offers demand and cost advantages capable of being developed in a short time, a temporary and small tariff wall may provide the marginal incentive to foreign investors.

**Availability of Social Overhead.** The absence of social overhead in the form of transportation and communication facilities, water works, power stations, repair and maintenance services, and marketing arrangements hinders foreign direct investment in an economy lacking these facilities. The social overhead capital is by its very nature slow in yielding and provides return only in the long run, and its direct profitability is less important than the external economies which it generates for other industries. Generally, it provides for a future uncertain demand to be stimulated only by the subsequent development of industries. An exception to this case is when it meets an already-existing pent-up demand; i.e., in adding a track to a railway line which is already overworked. The unattractiveness of such projects to private
foreign investors, at least in the initial stage when they are directed towards anticipated demand rather than an actual demand, is obvious insofar as such private foreign investors are interested in immediate private profits rather than in broader social productivity. Moreover, to put the burden of provision of overhead facilities on the private investors engaged in directly productive projects, would be to put a premium on those with large resources and discourage medium-sized foreign enterprise. It would also direct foreign investment only to those channels, where, because of special circumstances, profit rates are exceptionally high, as in the petroleum industry. Investments in a large number of moderate-sized concerns catering to internal consumer demand would not be attractive under such circumstances. The necessity of such overhead investment would increase the risks and costs of direct investment on the part of private enterprises, with a consequent increase in the cost of the product in a market in which buying power is, by definition, limited.

When social overhead capital is provided by an agency

40 See the National Planning Association series on United States Business Performance Abroad.

or investment institution other than the private industries using their services, such industries would tend to be localized near the social overhead facilities and would provide the most economical utilization of the services. Under a system of individual private provisions, there may be no such agglomeration of industries and under-utilization of social overhead facilities may frequently result; i.e., where the electric power facilities are built by a private foreign enterprise for its own use. The provision of such facilities by a public or semi-public international or domestic agency would eliminate many of these difficulties and would tend to encourage a freer flow of private foreign investment.

Thus, a program of adequate investment in social overhead by the public or by semi-public agencies through borrowing abroad or domestically, coupled with a program of improvement in agricultural production and income, can help to provide for an expanded internal market which is required for the development of industries. The increased agricultural output would partly feed the industries in terms of raw materials, release marginal excess labor to help supply the industries, and would help to provide the purchasing power for buying their products in return. The investment in social overhead would not only generate services for the industries
but would also create income and hence demand for the output of the industries.

**Ease of Servicing Capital.** Another important consideration determining the pattern of investment lies in the ease or difficulty of transferring interests, dividends and amortization payments abroad in terms of the currencies of the investing country. Investments in the export sector of an economy directly provide from the proceeds of the exports the foreign exchange necessary for such a transfer. Additionally, foreign investment may contribute to the total foreign exchange resources of the domestic country via the production of import substitutes. Generally, in the early stages of development, imports are low because income is low and investment takes place only in those export products for which world demand is high and expanding. Even when imports grow in volume and are large enough to be capable of being replaced by efficient home production on an adequate scale, investment in the replacement of imports continues to be hesitant since it provides no direct command over foreign exchange.42 Unless the recipient country has developed a well-diversified export sector and has demonstrated a strong

foreign exchange position, the transfer of earnings remains a problem. Under a system of exchange control it creates more of a problem, in that it depends upon the discretionary policies of the exchange control authorities.

**Foreign Trade Bias.** Historically, investment in trade has preceded investment in productive enterprises or industries. The high profits which result from the opening of new trade opportunities have induced investments in trading ventures and have provided some funds for investment in overhead facilities catering to the export and import sectors. This has had a cumulative effect, insofar as further inflows of foreign capital and even domestic capital tend to be attracted towards the foreign trade sector because of the newly-created overhead facilities. Moreover, generally in an underdeveloped economy the foreign trade sector happens to be the most progressive and efficient sector in the initial stages of development. This comes about as a result of the fact that in this sector there is most frequent contact with the more advanced countries. Consequently, any improvements in methods and techniques are concentrated in this sector because of this contact and partly because it is in these

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fields that the country's comparative advantage lies under the existing conditions. Thus, improvements, insofar as they occur (other things being equal), seem to be export biased. All of these factors favor the attraction of foreign capital to the export sector.

The "Investment Climate." Foreign direct investment decisions in underdeveloped economies have also been influenced by that rather intangible concept called the "investment climate." The most concrete ingredients in this concept include the relative administrative ease with which profits can be converted into dollars for remittance or for the importing of material and equipment, the ease with which capital can be repatriated, and governmental legislation and policies pertaining to foreign investment. Such factors as exchange and trade regulations, domestic taxation, and regulations and control on employment of domestics and on ownership


rights are included here. However, even beyond convertibility of invested funds and the relaxation of other restrictions, a "favorable investment climate" signifies not so much financial stability or the absence of restrictive legislation, as a subjective feeling on the part of foreign investors that the government is appreciative of their presence and "can be talked to." This usually means a conviction that the business community is in political control of responsible governmental policy.

**Public Loan Capital From Private and Other Sundry Sources**

It has already been stated that most foreign capital investment in underdeveloped countries is assumed to be either direct investment in the broad sense—including natural resources and utilities as well as manufacturing operations—or public governmental and international institutional investment—including loans, grants, and technical assistance. There are, however, a number of other significant forms of investment complementary to economic development, all related in essence to an investment either of direct physical capital or

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46See Chapter IV for an explanation as to why this category has been classified as "public loan capital" in this study.
of indirect capital flows via specialized skills. This type of investment includes export credits for the procurement of industrial goods, machinery and equipment; institutional or joint arrangements through which private and public financial and other resources can be channeled for long-term purposes; and patents, licensing and technical assistance agreements.

**Export Credits and Medium-Term Loans**

Industrialization in less advanced countries leads to increased requirements of imported capital goods, and consequently to a change in the composition of imports as between consumer and capital goods. Import requirements tend to exceed foreign exchange resources even when export earnings are supplemented by "official" foreign grants, long-term "official" lending and private foreign direct investment. Thus, the granting of export credits and medium-term loans by the industrialized countries has been of considerable help to underdeveloped countries in financing their purchases of imported equipment and machinery.

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47 In concurrence with the International Monetary Fund's policy, this study will include as long-term capital all medium-term credits and loans with a schedule of repayment extending for one year or more. See Chapter IV and the Computational Appendix for a further explanation of long-term capital.

48 For a detailed discussion of export credits and an analysis of European export credit schemes see Claudio Segré,
In the post-war period, in addition to an expansion of export credits by exporters and governments in the industrialized countries, direct physical and financial investments were increasingly being stimulated through the operations of private and semi-private financial institutions in Western Europe and North America. These private and semi-private sources all helped to mobilize public and private capital for development purposes. The increase in both types of activities reflected the improving conditions and newly emerging opportunities in many developing countries, all of which in turn were the result of efforts by the governments of these underdeveloped countries and the assistance made available to them by the governments of the more industrialized countries and the international organizations.


49 The role of public lending institutions (international, regional and national) in promoting the international flow of development capital has been considered previously in this chapter.

50 Medium-term international financial investment has traditionally been the concern of a relatively small group of specialized banks in Western Europe and the United States. The First National Bank of New York, the First National Bank of Boston and the Bank of America have been traditionally active in certain areas, particularly Latin America. The Chase Manhattan Bank of New York has set up a subsidiary to promote private investment in underdeveloped countries and to advise clients of the parent bank regarding their foreign ventures. The Chemical Bank of New York Trust Company has
There are cogent economic arguments to justify these recent developments in medium-term investment credits and loans. Imports of goods financed in this manner permit countries to make investments which need some years to mature but afterwards have a high physical and monetary yield, making it possible for them to finance amortization. Quasi-private banks and exporters are often able to refinance these medium-term equipment credits and loans and, in most cases, this can be done through an official bank specially created for this purpose—for example, the Banque Francaise du Commerce Exterieur and the expanded operations of the United States Export-Import Bank included these provisions in 1957.51

established an affiliate having similar functions. The leading Canadian commercial banks, such as the Royal Bank of Canada and the Bank of Montreal, are also extending the scope of their foreign activities in medium-term loans. In addition, a number of new financial groups less directly connected with commercial banking interests have been established to invest abroad. They include the American Overseas Finance Corporation, the Transoceanic Development Corporation and the International Basic Economy Corporation which is particularly concerned with investment in Latin America. For a more detailed discussion of operations and policies concerning these quasi-private financial institutions, medium-term developmental loans and export credits, see U.N. Department of Economic and Social Affairs, *The Promotion of the International Flow of Private Capital* (New York: United Nations, 1960), pp. 25-34.

Additionally, in Western Germany, and to a lesser extent in Italy, the granting of extensive export credits has in some instances led to more direct participation in foreign ventures.\(^5\) Finally in other cases the economic rationale is even stronger. Most exporting countries can often afford to wait for payment, and a number of governments, such as those of the United Kingdom and Western Germany, have established institutions to insure lenders against the failure of importers to repay the credit or loan either because of commercial failure of the firm or the company's lack of foreign exchange.\(^5\) Since 1953, keen competition has developed among world exporters for business which can be financed in this manner.\(^5\)

There are, however, a number of economic limitations attached to a creditor loan financed in this manner. Obviously, the capacity of a country to receive credits and loans of this nature is limited by its capacity to reimburse


them. It is not sufficient for the borrowing corporations to earn enough locally to pay the annuities. Sufficient foreign exchange has also to be acquired by the country concerned. For this reason, this type of transaction is mainly adopted where imports of capital goods will make it possible to produce either more exports or more substitutes for imports.

From the point of view of the lending countries there are other limitations to an increase in this type of financial loan. Since exporters nearly always have to find the necessary credit from sources outside their own firms, such investment is vulnerable to changes in official policy. To begin with, some exporting countries find that this type of export strengthens inflationary pressures. General anti-inflationary financial policies by the governments would very likely make it difficult for suppliers to find the capital which they would need. Its availability also depends on general economic developments throughout the world. If a world-wide economic recession were to appear, commercial transactions based upon medium-term credits and loans would seem very insecure as a field of investment.  

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Licensing and Technical Assistance Agreements

Frequently purchases of equipment are often accompanied by a request from the buyer for technical instruction in its maintenance and operation. Foreign firms which have technical "know-how" to sell but which are reluctant to commit large amounts of capital in foreign ventures are often ready to meet such requests by making arrangements for the use of patents and licenses and supplying technical assistance.\(^{57}\)

Nearly all patent agreements and technical assistance contracts extended to under-developed countries entail the provision of services (and subsequently capital expenditures) whether they cover the design, installation and operation for a given period of an entire new industry or project, or, more frequently, industry-to-industry assistance for the development or improvement of specific products, phases of production and marketing techniques. Technical assistance contracts of the first type are usually related to the establishment of a new basic industry requiring vast fixed installations procured with foreign public or private financing and an advanced stage of technology. They are used for public work construction (roads, dams), heavy industry plant erection (steel mills), exploration of natural resources, and in general for projects in which domestic (public or private) control is preferred and in which the financial, technical and operational phases (though often combined in some way) are tackled separately.

The second type of contract, used chiefly in the manufacturing industry, deals with license of 'know-how' agreements under which foreign expertise, usually viewed as a complementary benefit of foreign direct investment, is increasingly made available to domestic enterprises, by itself though it may be accompanied by limited direct financial participation on the part of the licensor. The licensor may not only offer the right to use patents and utilize production and other technical information, but also given technical assistance for the solution of special problems and help train local staff.\(^5^8\)

Most licensing and technical assistance agreements are combined with sales of the necessary equipment and frequently both are financed on extended credit terms by the seller or on medium-term loans by a third party.\(^5^9\)

THE LONG-RUN INCOME AND DEVELOPMENTAL ASPECTS
OF CAPITAL INFLOWS

The long-run effects of foreign investment extend beyond the immediate impact on the sectors in which the foreign capital initially flows. Although capital inflows do create income in the sectors in which they are invested in the first instance, a primary increase in investment and income in a

\(^{5^8}\)U.N. Department of Economic and Social Affairs, The Promotion of the International Flow of Private Capital, p. 27.

\(^{5^9}\)Ibid., p. 28. For this study, the data available did not allow differentiating capital loaned for technical assistance from that of equipment credits and other medium-term type loans. Thus, technical assistance of this nature will not be categorized in Chapter IV.
given sector of an economy will normally cause a chain of secondary direct and indirect effects—some of which were covered in the section above. Generally, however, in an aggregate sense, income created in a given sector will create the demand for the output of other industries. Also, the input requirements of this sector will give rise to demand for the output of other industries which sell inputs to it. In an underdeveloped economy where such industries do not already exist to experience an increased demand for their output, such catering industries may be induced to develop. As other industries sell their outputs to this industry, so also this industry sells its output to other industries. In both of these directions, where there are secondary repercussions on industries supplying its requirements and on industries utilizing its products, there will be an important development effect. Such a development of the secondary industries would push up the income level and this in turn may generate demand for other consumption goods industries. There will be greater demand for housing and other services with the rising income. The development of a given industry may introduce a factor or factors used by other industries which may have a cost-reducing effect on the latter, resulting in a still greater rise in real income (i.e., cheap hydroelectric power).
In addition, it may encourage attempts at innovation for further fabrication of a product or a by-product of the industry.

The "Agglomeration Effects"

Considerations such as those above have led W. W. Rostow to suggest that in the course of the historical development of many advanced countries, there had been certain leading lines of activity which underwent the initial growth and which subsequently generated, sustained, and accelerated the growth in other sectors by means of direct and indirect repercussions.\textsuperscript{60}

Particular sectors in certain periods acquired a very rapid rate of growth. In the United States such leading sectors had successively been the cotton industry in 1820-1850, and the railroad boom from 1850, leading to a centralized iron and steel industry, and chemical, electrical, and light engineering industries in the latter periods.\textsuperscript{61} These "primary growth sectors" have often been based on technological innovations happening to be bunched together in certain periods, as well as from the effective utilization of imported

\textsuperscript{60}Rostow, op. cit., pp. 52-57; see also Hirschman, op. cit., especially pp. 40-44.

\textsuperscript{61}Rostow, op. cit., p. 55.
capital and more intensive exploitation of natural resources.

The "supplementary growth sectors" are those which undergo rapid advance in response to these primary sectors; i.e., either to supply their input requirements or to take advantage of new opportunities in other fields which are based on the utilization of the output or services generated in the primary sectors. The railways, for example, can lead to iron and steel development, reduce transportation costs, increase exports, help earn more foreign exchange, and extend the internal market for other industries.

The interrelated developments in the "primary and supplementary sectors" can cause further developments in other sectors--"derived growth sectors"--via the increase in total real income and effective demand. An empirical isolation of the sectors of an economy into such rigid divisions, as implied above, is obviously difficult to realize. This results not only because of the difficulty of identifying such sectors by any such simple formula, as suggested by Rostow, that primary sectors are characterized by cost and supply changes and that derived sectors are characterized by demand changes, but also because such factors do change category in different time-periods. On the whole, however, such a broad

conceptual framework may help study the growth of the different sectors of the economy more closely and their interrelations in the course of development. The distinction between the sectors may be based upon the purposes at hand. In the case where a stimulus to the economic growth of a country comes from outside, via foreign capital investment, research could isolate the sectors into which foreign capital initially flows and then study the process of their interrelationships with other sectors.

Recent studies in the theory of location and regional development have attempted to adapt and apply just such techniques in order to predict or project the "agglomeration effects" of an initial development. They have attempted to ascertain the effects from an initial investment in a certain industry on a given region in terms of the strength and direction of its direct and indirect repercussions on all types of economic activity within the region.63 Undoubtedly,

more studies of this nature will follow.

**Limitations of Underdeveloped Economies to Modern Income Analysis**

In the context of an underdeveloped economy, the scope of such secondary repercussions as those discussed above, following investment in the foreign financed sectors, is governed by a number of factors arising from the very nature of underdevelopment itself. The availability of entrepreneurial ability, managerial personnel, technical skill, a suitable labor force, domestic savings, positive monetary and fiscal policies, and all the other factors which make up the basic rationale for development operate to limit the scope of the secondary repercussions.  

The usual theory of the Keynesian multiplier-accelerator process is derived in the context of the developed economies: possessing a well-diversified economy and a substantial capacity for production. This type of an economy, when under the impact of income originating from a new investment sector, would become activated. Coupled with this is the phenomenon of sufficient savings, well-organized financial institutions to channel the savings into further investment projects, and

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64See "Ability to Utilize Capital" in previous section.
responsible governments. However, in the absence of any pre-existing surplus productive capacity either in the consumption or investment goods industries, expenditure of income generated in the foreign-financed sector of the economy does but one thing—create inflationary pressure and lead to an increase in imports. In this case the leakage in the working process of the multiplier-accelerator is very high. 65

The productive facilities, in the form of social overhead and productive capital equipment for the industries, have to be created before any secondary repercussions can be realized out of the income generated in the foreign financed sector. Instead of spending the increase in income thus generated on consumption, measures have to be taken to mobilize them into savings and convert them into capital formation. By siphoning off a proportion of the increased income for purposes of capital formation, the average rate of saving can be increased. In so far as a moderate increase in consumption is considered necessary to maintain the incentive to increased production and to increased efficiency, the marginal rate of saving would be less than unity. With a

marginal rate of saving higher than the average rate of saving, it would be possible eventually to raise the average rate of saving. Once a higher rate of marginal saving is attained and can be continued from year to year, the average rate would continue to rise and as time passes the average rate of investment would also become progressively higher and the process of development can be self-sustaining.

The Retention of Generated Income

The amount of income generated and retained within the country would depend, among other factors, upon the pattern of foreign investment. In an industry financed from abroad, which employs a large amount of cheap labor at a very low wage rate, the direct income received by the inhabitants of the country would not be large. This is the case frequently with the plantation and extractive industries. In industries like petroleum refining, on the other hand, the labor requirements are very small. Thus, the extent of income created within the country depends, as in the case of mining and agricultural industries, upon whether further processing of the raw materials or minerals is undertaken in the domestic country; if so, a greater amount of domestic resources including labor would be utilized and a larger income would be created. Sometimes, considerations such as the desire to
utilize the productive capacity of processing facilities and
plants already installed in the more developed market areas
will induce foreign investors to undertake such further
fabrication abroad rather than in the domestic country. In
some other cases, the desire to minimize the extent of capi­
tal investment in a country, where political and social
uncertainty and instability are constant dangers, brings
about such a policy.\textsuperscript{66}

The amount of income retained within the country de­
pends also upon which sector of the economy receives the
initial foreign capital investment. As was pointed out in
the previous section, foreign investment in most underdevelop­
ed economies has an export bias. Although this trend has been
criticized as being detrimental in some respects, it has
nevertheless benefited the developing economies in their re­
tention of income and in their mobilization of domestic
savings. A recent United Nations survey states:

Where the export sector is relatively large, where
the export market is buoyant and where production for
export is concentrated in the hands of relatively few
enterprises, the conditions are particularly favourable
for high levels of private saving. Moreover, since
duties on exports and imports constitute a major source

\textsuperscript{66}Raymond F. Mikesell, \textit{Foreign Investments in Latin
49-54.
of revenue for governments in under-developed countries, a relatively large export sector facilitates government saving; and this may be still easier if production for export is dominated by corporate enterprises, since revenue from indirect taxes can be augmented by revenue from direct corporate taxes.67

There is additional leakage involved in the income stream generated by foreign capital insofar as interests and dividends are transferred abroad. This leakage per unit of capital investment is likely to be greater in the case of direct investment than in the case of foreign portfolio or public investment inasmuch as earnings from direct investment are usually higher. Moreover, to the extent that establishment of foreign enterprises in the underdeveloped economies destroys and substitutes for the domestic industries run on older methods, the consequent fall in income in such sectors tends to partially offset the net income-generating effects of the foreign investment in the long-run.

It has also been alleged that the terms of trade between raw materials and manufactured goods have suffered a secular decline.68 The underdeveloped economies which specialize in the production of raw materials financed by foreign capital have, therefore, a decline in real income as

a result of this alleged deterioration in the terms of trade. This decline in real income can also be set against the net income-increasing effects of foreign investment in the long-run.

The Distribution of Generated Income

The distribution of income generated by foreign capital is an important factor in determining the extent of the income which can be channelled into savings and capital formation and subsequently development. The role of proper monetary and fiscal policy in attaining such an end is crucial. The income generated by the foreign-financed enterprise is, in the first instance, distributed within the enterprise itself in terms of profits, the salaries of foreigners employed in the enterprise, the amounts paid to local labor or producers of other goods and services utilized in the enterprises, and the taxes paid to government. Specific calculations of the extent of the various benefits for one area were included in a recent Latin American study. For example, it was estimated that in 1955 United States investors paid $1.1 billion in taxes and other payments to Latin American governments

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alone. It is, of course, possible to change the relative shares of the different groups involved by positive policy. Wage regulation, compulsory provision for the employment of a certain proportion of the domestic labor force, and expenditure on social services for the local employees by the foreign-financed enterprise all would increase the domestic economies' share of income. The government of the domestic country can also increase its share by increasing the tax rates or the amount of levies payable by the foreign-financed enterprise. However, in the case of private investment, all such measures would decrease the share going to the foreign firm and would most certainly affect their incentive to engage in further exploitation of such resources. Relative to public investment, this problem is minimized and could be more easily resolved by positive policy.

In the case of private foreign investment, there may be limits within which such governmental manipulations would be possible. C. P. Kindleberger has described the situation as approaching that of a bilateral monopoly with the government of the underdeveloped country on the one hand and the foreign firm on the other.

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company on the other. Wide differences may exist in the views of the parties concerned regarding the sharing of income and regarding other conditions for exploitation of the natural resources. Kindleberger contends that the final result would depend upon their relative bargaining strength.\(^7\)

The Channeling of Generated Income

Once the newly created income generated by the foreign capital is distributed between the different participants, the problem remains to divert a proportion—depending upon the desired marginal rate of saving—of the income shares received by the various income groups to a higher level of capital formation. The increased revenues of the government can be mobilized relatively easily for expenditure on developmental projects, provided the political pressure to raise the present level of consumption can be resisted. Insofar as the income flows to the hands of the social groups who participate in luxury consumption, taxation of such incomes may be resorted to in an attempt to recapture the income and to divert it to capital formation.\(^7\)

These various measures to encourage domestic savings

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\(^7\)Prebisch, *op. cit.*., p. 14.
and investment form a vital link in the developmental process. The interdependence between the effective utilization of, or realization of maximum benefits from, foreign capital and the mobilization of domestic savings and investment is very close at every stage. Thus, an important United Nations report states:

However, the classification of methods of financing economic development into domestic and foreign—though indispensable to orderly discussion—carries with it the danger that each of the two methods of financing may be considered separately and that their relative magnitudes and relationship may be neglected. In practice, a particular method of financing economic development is normally combined with other measures or has repercussions upon other measures which have been taken or might be taken.73

Historically, the most effective way of increasing the rate of domestic capital formation has been by means of reinvestment of profits by both foreign-financed and domestic enterprises. The reinvestment of profits has some special advantages to an underdeveloped economy, inasmuch as the rate of profit tends to be quite high and, secondly, because if they are distributed and not reinvested immediately it is difficult to rechannel the earnings into further capital formation. This difficulty results partly because of the

absence of an efficiently administered and diversified tax system, and partly because continued pressure towards increased consumption tends to eat up such distributed earnings. In the initial state such ploughing back of profits is desirable because it allows increased investment in lines which have already proved successful and profitable. Moreover, such internal financing spares the firms the high rate of interest which usually prevails in an underdeveloped economy. It is, of course, possible that a continued reliance on internal financing by the business enterprises may hamper the development of stock exchanges. Internal financing would remove an important section of the demand for securities; i.e., on the part of the recipients of distributed dividends. It would also decrease the supply of securities coming from such business enterprises.\footnote{U.N. Department of Economic and Social Affairs, \textit{World Economic Survey: 1960}, pp. 80-85.}

In the early years, of course, expanding enterprises may require funds from both the stock market and from their own undistributed profits. However, this argument applies only to the domestic enterprises. The profits of the foreign enterprises, if not reinvested in the host country, would simply be transferred abroad and would not help in the
development of its internal stock market. On the other hand, reinvestment would, under the circumstances, constitute a net addition to the capital resources of the underdeveloped economy.

Inducement to reinvestment of profits can be achieved by such measures as tax discrimination in favor of non-distributed profits, favorable tax treatment of capital expenditure by liberal amortization allowance, by making certain types of government assistance conditional upon reinvestment of profits, a policy of dividend limitation by informal convention or formal legal requirements, and by other methods.  

The Per-Capita Increase of Generated Income

Any increase in the marginal rate of saving and investment would be of little value if the population continues to increase at the same or at a faster rate. An increasing population, by cutting into the margin available for saving, would increase total consumption for the community as a whole, per-capita consumption rising little or remaining constant, depending upon the rate of population increase. In the initial years the increase in population would increase the consuming

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population rather than the producing population. Furthermore, development requires an increase in the productive equipment per head of the population. Insofar as the increasing population reaches the productive age, it has to be provided with capital equipment so that whatever increase in marginal investment that does take place would have to be spread over the larger population more thinly, instead of contributing towards the increment of per-capita productive equipment.76

In Summary

It has been pointed out above that in order for the foreign capital to start off a process of development, gathering momentum through time (with other sectors of the economy responding to and associating with the foreign-financed sectors of the economy), certain basic limitations in the framework of the underdeveloped economies have to be removed. Foreign direct investment, accompanied as it is by entrepreneurship, technical skills, benefits of extensive facilities in the parent organizations and other economies of international assistance.

scale, can partly contribute to the removal of such bottle-necks. However, other considerations may favor public foreign capital.
CHAPTER III

MAGNITUDE, EVOLUTION, SIGNIFICANCE AND ECONOMIC CLIMATE OF THE FOREIGN CAPITAL

MAGNITUDE OF THE FOREIGN CAPITAL

At the end of 1960, the relative amounts of total foreign capital invested and allocated in the two countries under study were respectively $71.7 per-capita in Brazil and $64.8 per-capita in Mexico. In aggregate amounts, the total foreign capital outstanding in the same year were $5,076.1 million and $2,267.4 million in Brazil and Mexico respectively.

Although in 1960 the total amount of foreign capital in Brazil was over twice as large as that in Mexico, there was very little significant difference between the two countries with foreign capital in per-capita terms. Additionally, even though the aggregate increase in Brazil, over the fourteen year period, was greater than in Mexico by $566.7 million, the proportional increase in Mexico was significantly the larger. Foreign capital in Brazil had increased by 68 per cent since 1947, while in Mexico it had increased by over 189 per cent.
TABLE I


<table>
<thead>
<tr>
<th>Countries and Year</th>
<th>Gross Amount of Foreign Capital (Millions of Dollars)</th>
<th>Per-Capita Amounts of Foreign Capital</th>
<th>Population (Millions of Persons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1947</td>
<td>$3024.3</td>
<td>$62.4</td>
<td>48.4</td>
</tr>
<tr>
<td>1952</td>
<td>2947.1</td>
<td>54.1</td>
<td>54.5</td>
</tr>
<tr>
<td>1960</td>
<td>5076.1</td>
<td>71.7</td>
<td>70.8</td>
</tr>
<tr>
<td>Mexico:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1947</td>
<td>782.3</td>
<td>32.9</td>
<td>23.8</td>
</tr>
<tr>
<td>1952</td>
<td>1160.0</td>
<td>42.3</td>
<td>27.4</td>
</tr>
<tr>
<td>1960</td>
<td>2247.4</td>
<td>64.8</td>
<td>35.0</td>
</tr>
</tbody>
</table>

SOURCE: Population data was taken from U.N. Department of Economic and Social Affairs, Demographic Yearbook, 1961 (New York: United Nations, 1962), pp. 128-31. Other data was adapted from the Computational Appendix in this study.
during the same period.

EVOLUTION OF THE FOREIGN CAPITAL

The evolution of the gross inflow of foreign capital during the two periods under study is shown in Table IV in the Computational Appendix to this study. It can be seen that this evolution was neither steady nor smooth. Receipts periodically reached new peaks and then fell back once more. Nevertheless, it is clear that the long-term trend in both economies has been upward. The average level of receipts in 1953-60 was over five times as high as in 1947-52 for Brazil, and over twice as high for Mexico.

Direct private investments, particularly in manufacturing, have accounted for almost all of the private capital inflow in both countries. In the earlier period, movements in this type of investment dominated both the trend and the short-term fluctuations of all capital imports. For example, they caused the decline in total gross receipts in 1950 for Brazil and in 1948-49 for Mexico. Their contribution was decisive in the increase over the early period. However, in 1953-54 there was a sharp increase in official loans and long-term credits to both countries. This significant increase in public capital was maintained at progressively higher levels throughout the entire latter period of 1953-60.
Table IV shows additionally that for Mexico, throughout both periods being surveyed, there was also a progressively larger increase in the capital outflow. In Brazil this increase in capital outflow was more pronounced after 1952. Although during the earlier period of 1947-51 for Brazil and during 1947 for Mexico there were relatively large long-term capital outflows, this was due primarily to the repurchase of foreign investments from Britain by Brazil, the settlement of expropriated oil and land properties to the United States by Mexico and the payment of subscriptions to the International Monetary Fund and to the International Bank for Reconstruction and Development by both countries. Leaving aside these special transactions, which were financed primarily with exchange reserves accumulated during World War II, the capital outflow appears to have grown very rapidly in both countries --especially during the latter part of the 1953-60 period. This growth was due primarily to the rising burden of the amortization payments on previous imports of public capital. If amortization payments are excluded, the export of long-term capital from both Brazil and Mexico has been relatively small. Comparing both sides of Table IV in the Computational Appendix--columns 4 and 5--it can be seen that the average amortization payments were 99 per cent and 40 per cent of
gross capital inflows for Brazil and Mexico, respectively, in the period between 1947 and 1952.¹ As might be expected, this ratio increased to 41 per cent for Mexico during the period between 1953 and 1960. However, surprisingly during this latter period, the ratio decreased to 41 per cent for Brazil. This reverse in ratios for Brazil can be accounted for by the significant increase in public capital during the latter period. Although amortization and repayments increased from an average of $55.2 million in the 1947-52 period to an average of $201.7 in the latter period (an increase of 265 per cent), public capital² increased from an average of $35.6 million to $371.8 million (an increase of 1044 per cent). More attention will be given to this subject in Chapter VI of this study.

SIGNIFICANCE OF THE FOREIGN CAPITAL

The relative importance of foreign capital from the point of view of the borrowing country can be considered by

¹Discounting purchases of assets from old creditors, payments made on expropriated properties and I.M.F. and I.B. R.D. subscriptions, a truer ratio would be 57 per cent for Brazil and 26 per cent for Mexico during the 1947-52 period.

²Public capital includes all loans and credits of over one year and all official donations or grants.
relating it to the total domestic capital formation in the borrowing country. Even though the absolute amount of foreign capital may be small in relationship to what other borrowing countries are receiving or have received in the past, it may constitute a large proportion of the domestic capital formation in the country so that whatever investment and consequent growth in national income are taking place in the country are due in part to the foreign capital. In the absence of this foreign capital the rate of growth might slow down considerably. The degree of dependence on foreign capital can thus be more pertinently brought into light.

The ratio of foreign capital importation to the total available foreign exchange resources in a given period is an additional index of this dependence. Even though in a particular instance foreign capital may form a relatively small proportion of total investment, it may be crucially important in obtaining the requisite foreign exchange. The investment program of a country may be marginally, but crucially, dependent upon the imports of, say, certain strategically important raw materials, semifinished goods or capital goods and technical assistance. In the absence of this crucial foreign exchange generated via capital importation the domestic growth program may be upset. Additionally, the imports of essential
consumer's goods may have to be sacrificed and this may entail adverse effects on efficiency and social stability. Also, extra pressure would undoubtedly be imposed on the expansion of exports with probably unfavorable consequences on price.

**Foreign Capital as a Proportion of Domestic Capital Formation**

As a proportion of domestic capital formation, foreign capital in Mexico (according to the estimate of this study) was quite significant. This was especially true in the latter period (1953-1960) when greater domestic capital formation was also significant. This trend was even more pronounced in Brazil, as is evident from Table II.

**TABLE II**

**FOREIGN CAPITAL AS A PROPORTION OF GROSS DOMESTIC FIXED CAPITAL FORMATION**

<table>
<thead>
<tr>
<th>Country and Period</th>
<th>Average Gross Foreign Inflow (Millions of Dollars)</th>
<th>Average Gross Domestic Fixed Capital Formation (Millions of Dollars)</th>
<th>Foreign Capital as Per Cent of GDFCF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1947-1952</td>
<td>$ 96.2</td>
<td>$1600.8</td>
<td>3.9</td>
</tr>
<tr>
<td>1953-1960</td>
<td>485.4</td>
<td>2290.3</td>
<td>21.2</td>
</tr>
<tr>
<td>1947-1960</td>
<td>318.6</td>
<td>2060.5</td>
<td>25.5</td>
</tr>
<tr>
<td>Mexico:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1947-1952</td>
<td>109.1</td>
<td>831.7</td>
<td>13.2</td>
</tr>
<tr>
<td>1953-1960</td>
<td>243.5</td>
<td>1179.1</td>
<td>20.7</td>
</tr>
<tr>
<td>1947-1960</td>
<td>185.9</td>
<td>1045.5</td>
<td>17.8</td>
</tr>
</tbody>
</table>

**SOURCE:** Data was adapted from the Computational Appendix in this study.
Although the proportion of domestic capital formation accounted for by foreign capital was relatively smaller in Brazil during the early part of the post-war period, so also was the rate of domestic capital formation significantly smaller.

As a whole, in the course of foreign capital inflows in the two countries under study, there seems to be a positive correlation between the rate of domestic capital formation and the rate of foreign direct investment, loans and grants. From Table II the reader can see that in any period which showed the greatest domestic capital formation this also was the period of largest capital imports.

**Foreign Capital as a Proportion of Foreign Exchange**

In the case of Brazil the relative proportion of foreign capital as a source of foreign exchange reveals an interesting point. The ratio of foreign capital inflow to the total foreign exchange earnings was 24 per cent in the period between 1953 and 1960.³ Although foreign capital formed 21.2 per cent of the total capital formation during

³This ratio would have been even higher had this study based the period from 1954, the year in which the terms of trade began to become adverse.
this period, and the rate of domestic saving and investment was also quite high, the expansion of Brazilian exports was inadequate to meet the country's growing needs for imports of both raw materials and machines. The rate of investment in the domestic sector had been higher than the rate of expansion of either exports or import substitution. In the Brazilian post-war stage of industrialization large investment in social overhead, which yields results only after a period of time, has taken place. This has tended to increase imports without a sufficiently rapid expansion of exports or import substitution for exchange earning purposes. However, the availability of foreign capital at this crucial stage in Brazil's economic development has undoubtedly helped to tide its economy over considerable foreign exchange stringency which might otherwise have curtailed its growth and investment programs. Additionally, without this crucially provided foreign exchange from foreign capital Brazil would have undoubtedly had an even worse domestic inflationary spiral.

In the earlier period for Brazil, the proportion of capital inflow to total foreign exchange resources was relatively much smaller, even though it was still higher than the ratio of foreign capital to total capital formation. The former ratio was 4.2 per cent between 1947 and 1952 while the
latter was 3.9 per cent. Two explanations can be offered for this low ratio of foreign capital to foreign exchange in the earlier period. First, as was noted, foreign capital inflows were relatively small during this period, as was domestic growth. Second, export earnings, notably due to high coffee prices, were significantly large during this period. Both of these factors would tend to reduce the ratio.

TABLE III
FOREIGN CAPITAL AS A PROPORTION OF FOREIGN EXCHANGE RESOURCES

<table>
<thead>
<tr>
<th>Country and Period</th>
<th>Average Gross Foreign Capital Inflow (Millions of Dollars)</th>
<th>Average Gross Foreign Exchange Earnings (Millions of Dollars)</th>
<th>Foreign Capital as Proportion of Foreign Exchange Earnings (Per Cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1947-1952</td>
<td>$96.2</td>
<td>$1489.9</td>
<td>4.2</td>
</tr>
<tr>
<td>1953-1960</td>
<td>485.4</td>
<td>2031.4</td>
<td>24.0</td>
</tr>
<tr>
<td>1947-1960</td>
<td>318.6</td>
<td>1799.3</td>
<td>18.0</td>
</tr>
<tr>
<td>Mexico:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1947-1952</td>
<td>109.1</td>
<td>909.4</td>
<td>11.9</td>
</tr>
<tr>
<td>1953-1960</td>
<td>243.5</td>
<td>1535.4</td>
<td>15.8</td>
</tr>
<tr>
<td>1947-1960</td>
<td>185.9</td>
<td>1267.1</td>
<td>14.7</td>
</tr>
</tbody>
</table>

SOURCE: Data was adapted from the Computational Appendix in this study.

In the case of Mexico, during both periods of capital inflow under study, the ratio of capital inflow to foreign
exchange earnings has been quite high, 11.9 per cent and 15.8 per cent, respectively. However, in contrast to Brazil, this proportion has been smaller than the ratio of foreign investment to domestic capital formation. These findings, although not greatly significant in relative differences, do tend to be supported by other economic characteristics in Mexico during the post-war period.

Factors such as a more balanced economic growth program; diversified and expanded exports; considerable import substitution; and an already existing (although somewhat limited and in need of rehabilitation) structure of social-overhead have all tended to reduce Mexico's dependence upon foreign capital for foreign exchange resources. However, in summary, it must be recognized that Mexico, as Brazil, was crucially and marginally dependent upon all forms of foreign exchange earnings in order to finance a significant share of her post-war economic development. With this orientation in mind, the I.B.R.D. and the Nacional Financiera of Mexico have jointly reported the following conclusion:

... it is probable that without the foreign funds, Mexican investment would have been reduced by the

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peso as well as the foreign costs of these projects. Moreover, foreign capital has often helped to finance development projects of crucial importance for the country's economic development. If foreign financing had not been obtained for electric power development, railroad rehabilitation, key industrial projects and the eradication of the foot-and-mouth disease, it is probable the progress would have been slower in these fields and in others as well.\(^5\)

**ECONOMIC CLIMATE OF THE FOREIGN CAPITAL**

A summary sketch of the economic environment of the capital inflow may profitably be undertaken in order to put the foreign capital in a proper perspective to the context of the stage of development of the two countries concerned, the nature of their economies, their resource pattern and the institutional framework.

**Brazil**

As between Brazil and Mexico during the post-war period, the largest amount of foreign capital flowed into the country not only with the largest population and domestic market, but also the one with the most abundant and easily exploitable natural resources. In terms of unexploited resources, Brazil stood in the most favorable position. The opening up of new

\(^5\)Ibid., p. 16.
and virgin resources in Brazil produced a degree of profita-
bleness which was not readily attainable in the older and
more settled regions of Mexico, where such resources had been
subjected to exploitation for a long time without intensive
technological and organizational changes. The settlement of
new lands in the interior, the efficient cultivation of
coffee, the exploitation of virgin forests and mines, all
were important factors in the utilization of the recently
expanded frontiers in the resource pattern of Brazil.

In so far as the supply of other complementary factors
was concerned, Brazil again was favorably endowed in many
respects. The size of Brazil's area and population, the
rising consumer wants of her expanded population, the scope
of her economy, and the strong demographic influence of wide-
spread immigration of multinational origin all contributed to
the country's receptivity to foreign capital investment and
to her ability to absorb outside elements. Being a land of
recent settlement, the movement of labor into Brazil was of
high quality, i.e., skilled and trained Europeans displaced
by war and the depression of the 1930's and skilled craftsmen
and tradesmen from Japan. 6 Additionally, measures designed

6George Wythe, Brazil, An Expanding Economy (New York:
to orient the entire educational system toward accelerated economic development by intensified technical training were included among the goals of a development program initiated by the government at the beginning of Brazil's recent growth in 1942. At the same time, "the growth of industrial production in privately owned plants has been outstanding, owing in large part to the emergence of a group of dynamic owners and managers who have begun the modernization of plants and the adoption of advanced techniques." One observer of Brazilian growth since 1940 points out that the:

... elements contributing to the maintenance of an appreciable rate of growth in the economy are a broad base of natural resources, the rapid increase in population coupled with a rising standard of living in the urban centers, and the existence within the country of a large group of energetic, forward-looking entrepreneurs. Labor is adaptable to training, and progress is being made in teaching technical skills. Noteworthy progress had been made in the past decade in the expansion of electric power production, the production of crude petroleum and refinery products, and the improvement of road transportation.9

To assess properly the economic background of foreign capital in Brazil, it is important to remember that foreign capital in Brazil, it is important to remember that foreign

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7Ibid., pp. 256-58.
9Ibid., p. 3.
capital inflows during the post-war period took place in an environment of economic expansion—an expansion which was initiated under the impact of rising export prices (especially rising coffee prices) and concerted governmental action. The process of expansion was already underway by the end of 1952, whereas, the great increases in capital imports did not start until after 1952. The rise in the prices of coffee and other primary commodities had already started by 1947-48 and the yield on capital in Brazil was continually increasing from 1942 onward.\textsuperscript{10}

The Brazilian government, for its part, took a very active role in providing stimuli and initiation for economic growth after the early 1940's. Although the direct developmental operations of the government were concentrated principally on the growth of transportation facilities and power, the promotion of basic industries and the improvement of the underdeveloped regions of the country, the government was indirectly involved in almost all other activities and phases of the economy as well.\textsuperscript{11} The Brazilian Economic Development

\textsuperscript{10}Wythe, \textit{op. cit.}, pp. 176-77.

\textsuperscript{11}For a more detailed discussion on objectives, policies and operations of governmental agencies in economic development see William Diamond, \textit{Development Banks} (Baltimore: The Johns Hopkins Press, 1957), especially pp. 92, 118-24 for discussions concerning Brazil and Mexico.
Council stated that Brazil was a country in which the national economy was "... based on collaboration between governmental action and the activities of private enterprise." The principal objectives of the Brazilian policy of economic development, the Council stated, were "... to create conditions generally favorable to balanced economic development, to publicize the possibilities and advantages of such development, to make public investments in the basic sector, and to facilitate and stimulate private investment."^{12}

It is also illustrative that the foreign capital which followed the expanding sectors in Brazil also financed those sectors which were just beginning expansion or which were directly dependent upon the expanding sectors.^{13} Foreign capital, therefore, acted cumulatively on the process of expansion. Manufacturing in Brazil was at the center of the stage. It offered a good return to the enterprise and entrepreneur if he had adequate transportation and power facilities and it promised a good return in social productivity to the overhead facilities if he could borrow on easy terms and if


he could procure the necessary technical assistance. In these processes within Brazil, both public and private capital imports were involved.

Mexico

In the years immediately prior to 1947, Mexico had also devoted a great deal of effort to the creation of favorable conditions for economic growth and to an evolution of complementary factors—complementary factors which took the form of supplementary domestic savings, a relatively skilled and disciplined labor force and a relatively high degree of technical and managerial ability for a country in Latin America. Moreover, it was not private enterprise but the government which mainly organized and financed a widespread technical and formal educational base and subsequently facilitated a relatively wide diffusion of skills in the economy. For example, the volume of educational and technical services supplied by the government of Mexico increased from 1940 to 1945 at an average annual rate of 11 per cent.\textsuperscript{14} However, it must be pointed out that even prior to this concerted governmental action, Mexico had already and quite unintentionally

drawn quite heavily on foreign technology and technical skills in the period before the revolution of 1911. With United States, French and British foreign investments, foreign technicians and personnel were employed in railways, public utilities and other industries ranging from petroleum extraction and mining to cattle raising. Additionally, in the time after the revolution, government policy had stipulated that in all possible cases involving foreign investments domestic labor and personnel should be employed and/or trained for any positions not immediately filled by domestics. The close proximity of the United States also helped to upgrade the quality of labor in Mexico. Many Mexicans obtained experience and training by working and going to school in the United States. Although the evolution of a disciplined and suitable labor force for industrial employment was to a certain extent hampered in the initial stages of Mexico's post-revolutionary development by social forces—like ties with village and agricultural pursuits—Mexico quickly adapted to strong labor unions for recruitment and for the maintenance of discipline. With these unions virtually controlled by the government

development was expedited in many areas of the economy. Additionally, Mexico was fortunate in having a group of leaders who dominated the government and the economy from the latter 1930's onward. A sort of informal tradition of "collective action and responsibility," and a sort of general pragmatic agreement that industrialization and economic development were desirable goals worth striving for, permeated the Mexican economic scene.

To fully understand Mexico's lack of foreign capital dependency prior to 1947, it is pertinent to examine how Mexico secured the necessary foreign exchange for the importation of machinery and the necessary raw materials from abroad prior to that time. Her imports of capital goods amounted to 27 per cent and 35 per cent of total imports in the years of 1941 and 1947, respectively. Imports of raw and semi-processed materials amounted to 44 per cent and 35 per cent of total imports in 1942 and 1947, respectively. These crucial

16 Ibid., pp. 80-82.
19 Ibid., p. 118.
imports were met partially by an increase in exports consisting mostly of raw materials, foodstuffs, textile goods and tourism. In 1939, tourism contributed 16 per cent of current receipts in the balance of payments while agricultural and mineral exports contributed almost 70 per cent. Moreover, the National Foreign Trade Bank, established under Federal sponsorship in 1937, was designed specifically to facilitate financing of foreign trade and to mobilize goods for export. The expansion of Mexican foreign trade resulted also from favorable legislation and tariff reductions in the early 1940's. The terms of trade also showed improvement during this time. Thus, a combination of fortuitous circumstances plus a rapid expansion of exports enabled Mexico to procure a portion of her necessary foreign exchange.

Attempts were made simultaneously to reduce capital requirements by economizing on capital in the choice of methods and types of industries to emphasize. The Nacional Financiera and other government-sponsored institutions and

\[20\text{Ibid.}, \ pp. 111, 115.\]

\[21\text{U. S. Department of Commerce, Investment in Mexico, Conditions and Outlook for United States Investors, p. 95.}\]

agencies were employed for this complementary function to economic development. Emphasis on small scale manufacturing was intended to save capital. Agricultural improvements during this time involved changes in methods but no large employment of capital.

However, the greatest stimulant to Mexican industry and exports, as well as to conservation of scarce capital, during the period of time just prior to 1947, came from the demands of World War II. At the beginning of the war, there was a great deal of unused industrial capacity in Mexico. When the war reduced supplies of manufactured goods from the United States and Europe, new opportunities appeared for Mexican industry at home and abroad. Mexico's previously existing excess capacity—from the depression of the 1930's and prior foreign investments—permitted substantial increases in production to be achieved without much new industrial investment. Consequently, industrial investments rose to a lesser extent than other investments, and most of the increase in industrial output during the war was achieved by more intensive use of existing equipment.

Textile manufacturing furnishes an example of the wartime industrial pattern of high output and low investment in Mexico. Production in this industry, the most important in
Mexico, increased by an annual average of 6.6 per cent between 1939 and 1945 in spite of almost negligible additions to capital. The same trend is apparent in the total volume of industrial production, which rose by an annual average of 9.4 per cent from 1940 to 1945. This increase was even greater than the substantial growth rate in gross national product of 8.2 per cent during the same years.

It is important to indicate such capital-saving policies because it throws light not only on the effective utilization of domestic savings in a situation where capital was scarce and labor was abundant, but it also throws into relief the circumstances of Mexico's small dependence on foreign capital in the years just prior to 1947.

In contrast to the above, however, the immediate post-war years (1945-1947) in Mexico were notable for a relatively high level of industrial investment. Mexican industry emerged from the war with funds to finance expansion, and it proceeded to increase capacity to correspond to a somewhat optimistic evaluation of the post-war market prospects at home and abroad. As industrial machinery and equipment became more

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24Ibid., p. 276, Table 78.
plentiful, the volume of industrial investment rose steadily, and in 1947 it was almost five times as great as in 1939. 

Funds for governmental investment and expansion in the economy during this latter period came partly from taxation, partly out of forced subscriptions to national development banks from labor and financial institutions, partly out of inflationary financing and partly out of private savings.

When Mexico, at the beginning of the post-war period (1947-1949), turned to foreign borrowing and at the same time received an expanded inflow of private capital, Mexico had already equipped herself with many of the prerequisites of a dynamic industrial economy. Her own relatively successful economic development inspired confidence abroad, and her own unfavorable attitude toward foreign capital subsided somewhat under the impact of increased confidence in her own economic and political progress. Additionally, the breaking of relations by Mexico with Germany during World War II caused a certain return of confidence owing to Mexico's stand with the Allies. 

The reorganization, in 1943, of the Mexican public

\[^{25}\text{Ibid.}, \text{p. 277, Table 79.}\]

\[^{26}\text{U. S. Department of Commerce, Investment in Mexico, Conditions and Outlook for United States Investors, p. 15.}\]
debt, which had been in default with slight exception since 1914, and the commencement of service on this debt, further restored confidence abroad. In 1946, the railroad debt was likewise reorganized and service commenced on it.\textsuperscript{27} At the beginning of the post-war period economic development in Mexico was proceeding at an accelerating rate as evidenced by the high rate of income growth between 1939 and 1945. The renewed large-scale foreign investments and borrowings, which started again in 1947, were thus preceded by expansionary boom conditions internally and by restored confidence in Mexico from abroad. The foreign capital, in turn, gave the expansion and confidence further impetus.

\textbf{Concluding Observations}

It has been found, in the cases of both Brazil and Mexico, that a certain degree of prior development and expansion has proved helpful in facilitating a further inflow of capital from abroad. It is easier to attract foreign capital where profitable opportunities of investment have been partially exploited and have been shown to be worthwhile. It

is especially important where social and cultural differences are greater, and hence familiarity on the part of the foreign investors and governments is less. Even with regard to the investment of foreign capital itself, the process of investment is cumulative and the initial success of a certain amount of foreign capital breeds the prospects of further success. Both Brazil and Mexico were fortunate in this respect, especially in regards to the manufacturing sector of their economies. Additionally, it has been found, as again in the case of both Brazil and Mexico, that a certain degree of governmental action has proved helpful and at times necessary for capital importation and effective economic development.

In the following chapter, this study will consider separately the different types of private and official capital movements going into both Brazil and Mexico. In the second chapter following, consideration will be given to the effects and fields of implementation of the capital movements in the two countries.
CHAPTER IV

FORMS OF INTERNATIONAL CAPITAL FLOWS

DEFINITIONAL CONSIDERATIONS

The forms of long-term foreign capital flow and their relative amounts are interrelated with the agencies or channels through which capital is imported. The form of foreign capital is a function not only of institutional factors in the lending and borrowing countries, but also of the historical circumstances in each case.

Although this study has previously discussed and defined the common forms of foreign capital movements in Chapter II, such terms as "private" and "public" capital forms are not completely clear and precise when reference is made to the various concepts of foreign investment. Thus, before foreign capital forms in Brazil and Mexico are discussed, the meanings of the various forms must be clarified.

It is not always easy to classify a capital movement as either private or public because the movement or transfer process normally entails three types of participants: savers,
financial intermediaries, and end-users of the funds. Any one of these three may be either a private party or a public entity. This tripartite process even causes confusion when one views data collected by the various governmental agencies and international institutions. For example, in the International Monetary Fund's balance of payments data, classification of capital movements is made according to whether the recipient is of an official or private nature; i.e., International Finance Corporation loans are usually classified as private. The more popular approach, which the International Bank for Reconstruction and Development and governmental agencies incorporate, usually classifies according to financial intermediary; i.e., International Finance Corporation loans are usually classified here as being of a public nature.

Thus, in both the national and in the international areas, the flow of private funds to governments and of public funds to private enterprises, either through private or public intermediaries, is very common and assumes many different forms. This multiplicity of forms can be evidenced by reference to Table VII.

As is evident, if strict logic were to be applied, three separate classifications would have to be made for each transaction: one according to source, one according to
<table>
<thead>
<tr>
<th>Source</th>
<th>Intermediary</th>
<th>Recipient</th>
<th>Example in the International Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>Private</td>
<td>Private</td>
<td>Direct and traditional portfolio investment in private enterprises in foreign countries.</td>
</tr>
<tr>
<td>Private</td>
<td>Private</td>
<td>Public</td>
<td>Loans to foreign governments floated in the private market by private financial institutions.</td>
</tr>
<tr>
<td>Private</td>
<td>Public</td>
<td>Private</td>
<td>I.B.R.D. loans to private enterprises financed with funds obtained in the private markets.</td>
</tr>
<tr>
<td>Private</td>
<td>Public</td>
<td>Public</td>
<td>I.B.R.D. loans to governments financed with funds obtained in the private markets.</td>
</tr>
<tr>
<td>Public</td>
<td>Private</td>
<td>Private</td>
<td>Exim Bank loans to foreign private enterprises through private financial institutions.</td>
</tr>
<tr>
<td>Public</td>
<td>Public</td>
<td>Private</td>
<td>Exim Bank loans to foreign private enterprises through Development Banks.</td>
</tr>
<tr>
<td>Public</td>
<td>Public</td>
<td>Public</td>
<td>I.B.R.D. and Exim Bank loans to foreign governments financed with their own capital. Also intergovernmental grants.</td>
</tr>
</tbody>
</table>

intermediary, and one according to recipient. For purposes of clarity and feasibility in this study, however, only direct and traditional portfolio investment will be considered as private capital. All other types of international capital movements will be considered as public capital, even if the source and end-user are private and only the intermediary is public.

This type of classification is highly meaningful from an economic point of view. As has been pointed out in Chapter II, direct private investment and public investment, loans and grants are two quite different economic phenomena, which originate in different sources, respond to different stimuli, move through different channels, pursue different objectives, and produce different effects. It is the purpose of this study, therefore, to classify and study them separately in the two economies of Brazil and Mexico in the post-war period.
GROSS MOVEMENTS AND ORIGINS OF PRIVATE CAPITAL
TO BRAZIL AND MEXICO

Prior to World War II, both Brazil and Mexico had a long and sometimes erratic history of private foreign investments. However, following the definition of private capital

1Although no detailed statistical data were available on direct investment by countries of origin and destination, approximate movements to Brazil and Mexico can be compiled and indicated from various sources. Information was obtainable, on the other hand, as to the movement of public capital invested by the United States and by the international lending institutions; i.e., the International Bank for Reconstruction and Development, the International Finance Corporation, et al. The operations of the International Monetary Fund will be discussed later, in Chapter VI with the section on the balance of payments, since they relate to short-term compensatory credits and not to true long-term capital flows.

TABLE VIII
YEARLY AVERAGES AND RATIOS OF PUBLIC AND PRIVATE CAPITAL IMPORTS

<table>
<thead>
<tr>
<th>Period of Yearly Average</th>
<th>Brazil</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Millions of Dollars)</td>
<td>(Millions of Dollars)</td>
</tr>
<tr>
<td>Ratio of Public Capital to Total (Per Cent)</td>
<td>Ratio of Private Capital to Total (Per Cent)</td>
<td>Ratio of Public Capital to Total (Per Cent)</td>
</tr>
<tr>
<td>1947-52</td>
<td>$35.6</td>
<td>37</td>
</tr>
<tr>
<td>1953-60</td>
<td>371.8</td>
<td>76</td>
</tr>
<tr>
<td>1947-60</td>
<td>227.7</td>
<td>71</td>
</tr>
</tbody>
</table>

SOURCE: See Table IV in the Computational Appendix.
developed in the Computational Appendix of this study, over 95-99 per cent of all private capital flowing into both Brazil and Mexico since 1947 has been direct investment.\footnote{3}

In 1947 Brazil held $2,322 million in foreign direct investment while Mexico held $377 million. In the same year United States participation in Mexican direct investment amounted to almost 73 per cent of the total. In 1960 the total amount of direct foreign investment in Brazil and Mexico amounted to approximately $3,638 million and $1,495 million, respectively. Of these aggregate estimates in 1960, approximately 38 per cent and 60 per cent represented United States direct investments in Brazil and Mexico, respectively.\footnote{4}

\footnote{3}{Private capital in this study includes only those amounts which in the transfer process are not guaranteed nor administered by any public body; i.e., the source, transfer intermediary and recipient are all private.}

\footnote{4}{Data were adapted from the following sources: Banco de Mexico, S.A., Informe Anual, 1950 (Mexico City: Bank of Mexico, 1951), Table 53; Banco do Brasil, Relatorio do Banco do Brasil, 1950 (Rio de Janeiro: Bank of Brazil, 1951), p. 162; International Monetary Fund, Balance of Payments Yearbook, (Minneapolis: University of Minnesota Press, 1959); J. R. Rippy, "French Investments in Argentian and Brazil," \textit{Political Science Quarterly}, LXIV (December, 1949), 560-78; J. F. Rippy, "A Century and a Quarter of British Investment in Brazil," \textit{Inter-American Economic Affairs}, VI (Summer, 1952), 83-92; Cleona Lewis, \textit{The United States and Foreign Investment Problems} (Washington, D. C.: The Brookings Institution, 1948).}
with 1947, these aggregate amounts represent substantial increases in both countries.\textsuperscript{5}

In the three decades prior to 1947 direct foreign investment was relatively unimportant in Mexico. Discounting the effects from the World Depression in the 1930's, this relative unimportance of direct investment flowing into Mexico can be traced to a number of factors which were peculiar

\textsuperscript{5}It appears that United States private capital flows into Mexico since 1953 have not tended to keep pace with other sources of direct investment inflows. This slight trend can be partially attributed to the substantial increases of Canadian, European and other Latin American investments during the same period—investments which were increasing at a faster rate than those of the United States.
at that time to the Mexican economy and tradition. Generally, her fear of foreign investment as involving political interference and exploitation combined with a known history of expropriation and public debt default all provided discouragement to the foreign investor. Foreigners also had been excluded from ownership in land and in various sectors of the extractive industries. In the period of time prior to 1942 there was also a general lack of confidence in Mexico's financial stability and industrial future. Mexico was looked upon more as an exporter of agricultural products and as having an unsophisticated internal market than as a growing and industrializing country. Moreover, in the early period, the role of the state in "pioneering" and "commandeering" various industrial undertakings left little scope for any future for a prospective foreign investor.6

In the period just prior to 1947, Brazil also did not experience a substantially great inflow of direct foreign investment. In fact, Brazil, as in the case of Mexico, terminated a number of British and other European investments with the expirations of concessions, repatriations financed by

liquidation of foreign exchange balances,\(^7\) and in the case of German, Italian and Japanese interests, by World War II liquidation.\(^8\) However, throughout Brazilian history, there were no major traditions of direct expropriations as was the case in Mexico.

A tabulation made by a research organization in Brazil indicated that of some 2,000 companies in the Brazilian economy in which foreign private capital was invested, United States capital was represented in 791 of these firms. The distribution of foreign direct investments in 1959 for Brazil, by principal countries of origin, was estimated as follows: United States, 37.5 per cent; Canada, 17.7 per cent; Federal Republic of Germany, 9.3 per cent; United Kingdom, 7.4 per cent; France, 5.5 per cent; Italy, 4.5 per cent; Argentina, 4.5 per cent; Belgium-Luxembourg, 4.0 per cent; Switzerland,

\(^7\)As an example, British private investments in Brazil decreased from £67.9 million in 1945 to £30.6 million in 1951. Similarly, British investments decreased in Mexico from £43.1 million to £36.2 million in the same period. U.N. Department of Economic and Social Affairs, *The International Flow of Private Capital, 1946-1952* (New York: United Nations, 1954), p. 20.

3.5 per cent; Japan, 1.8 per cent; and the Netherlands, 1.6 per cent. A similar tabulation made by the Bank of Mexico indicated the following distribution of foreign direct investments for Mexico in 1952: United States, 75.6 per cent; Canada, 14.2 per cent; Sweden, 4.8 per cent; United Kingdom, 3.9 per cent; France, 0.5 per cent; and Others, 1.0 per cent.

During the 1947-52 period the average annual private capital inflow in Brazil amounted to $60.6 million and in Mexico, $51.1 million. However, during the 1953-60 period the average yearly inflows of private capital almost doubled themselves in both cases; i.e., $120 million in Brazil and $95.5 million in Mexico. Although these trends represent substantial increases in the absolute amounts of private (direct) investment flowing into both Brazil and Mexico, the ratios of private capital to total capital inflows in both countries have decreased significantly between the two periods under study. The ratio decreased from 63 per cent to 24 per cent in the case of Brazil and from 54 per cent to 39 per cent in

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11 Adapted from Table IV in this study.
the case of Mexico. This downward trend in the ratio of private capital to total capital inflow in both countries can, of course, be traced to the substantial increases in the amounts of public capital inflows, particularly since 1953.12

In the past, especially prior to 1931 for Brazil13 and 1913 for Mexico,14 bond issues in the United States and Western Europe were important sources of private capital for the two countries. However, since before the Second World War and until very recently, such issues were completely suspended in both countries. There were some cases of default; private lenders felt unable to protect their investment fully because they had little control over the use to which they were put; and, above all, the historic background of economic and political conditions with expropriation in Mexico and the uncertainties of political and economic factors in Brazil—i.e., inflation, exchange crises, etc.—were all factors not conducive to private bond issues.

12See Table IV and the following section of this chapter concerning public capital for further details.


14Ibid., p. 109.
In 1957, however, a Mexican newsprint mill sold a bond issue of $7 million in the world market. Since that time a number of other small bond issues have been issued both from Brazil and Mexico. The amounts involved are, however, small and the use of bond financing will be limited so long as present economic and political conditions in both countries continue. Besides, medium-term equipment credits and official development loans are in part a substitute for private bond issues, since they also are providing capital in Brazil and Mexico for long-term investment in sectors where this form of finance used to be common.

As pointed out above, foreign direct investment was the most important element of the private capital movements into both countries, with United States capital accounting for the bulk of the increase. However, it is revealing to note that these increases in United States private capital


17See the following section of this chapter concerning public capital for a further discussion concerning medium-term credits and investments.
flows to Brazil and Mexico took place even though these two countries were among the four countries in Latin America who were not included in the United States insurance program against expropriation, inconvertibility, impossibility of transferring funds and war risks. This could possibly indicate that private corporate investment is not so much influenced by formal political agreements, as by the strength of markets, the "investment climate," integrated corporate operations, corporate knowledge of the country and area, and immediate merits of individual projects.

Another observation reveals that the industrial distribution of the existing foreign investments from the two historical sources of private foreign capital involved (old British, French, Canadian and United States investments and the more recent United States and German investments) has

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18. The United States Economic Cooperation Act of 1948 established a scheme under which investment could be insured against the dangers of expropriation, inconvertibility and the impossibility of transferring funds, and the Mutual Security Act of 1956 added war risks to this list. But the United States insurance program is applicable only when a bilateral agreement with the capital-importing country has been concluded. Since such agreements implicitly limit the local government's powers in the field of exchange policy, both Brazil and Mexico have not yet signed one. U.N. Economic Commission for Latin America, Economic Survey of Latin America, 1957 (New York: United Nations, 1959), p. 54.
tended to be complementary and thus conducive for economic
development in the two countries. Post-war United States,
Canadian and German investments were largely in the manufac-
turing industries, petroleum distribution and trade, while
old British, French and the other traditional investments
were concentrated in railways and in the extraction and
production of raw materials.

GROSS MOVEMENTS AND ORIGIN OF PUBLIC CAPITAL

INFLOWS TO BRAZIL AND MEXICO19

The annual average of public capital which flowed
into Brazil during the 1953-60 period increased almost nine
and one-half times over the average inflow during the preceding period.20 The average inflow into Mexico, on the other
hand, only increased two times over the preceding period.
Although the 1947-52 base average for Brazil was smaller than
Mexico's, this still does not adequately account for the
significantly larger increase in Brazil. The explanation
lies partially in the fact that public capital constituted

19Public capital in this study includes all sources
of official long- and medium-term loans, credits and grants.
See context of this chapter and Computational Appendix for
further details.

20Public loan capital alone increased over ten and one-
half times.
only 37 per cent of the total capital inflow in Brazil during the 1947-52 period, while during the 1953-60 period this ratio, along with increasing amounts of private capital, increased to over 76 per cent of total capital imports. Public capital inflows to Mexico, on the other hand, accounted for over 46 per cent of the total in the earlier period and only increased to an average ratio of 61 per cent in the latter period.21

Viewed from another angle—the dependence of the total public borrowing in each country on external sources—public foreign capital is equally noticeable. The ratios of external public indebtedness to total public debt were 42 per cent in 1947, 25 per cent in 1952 and 23 per cent in 1960 for Brazil and 13 per cent in 1947, 13 per cent in 1952 and 12 per cent in 1960 for Mexico.22

The reasons for such great importance of external public borrowing can be found in the circumstances existing

21 See Table VIII in this study.

in both the lending and borrowing countries. In addition to persistent foreign exchange problems in both countries, other factors played roles as well. Owing to the inadequacy and undeveloped state of the mobilization of domestic savings in both countries during the periods under study, competition by the government in the internal capital markets for funds might have raised the interest charges to the private borrowers, who did not have access to the external capital market because of inferior creditworthiness, and thus retarded private investment. Large external borrowing by the governments under these circumstances enabled the most effective utilization of both domestic and foreign resources. As the capital markets in both Brazil and Mexico have developed, the ratio of external to internal public debt has declined, even with substantial increases in public capital borrowings from abroad.\(^{23}\)

Such large scale foreign borrowings and guaranties by the two governments were also necessitated by the active roles which each government had to play in its respective country's economic development. Both the Brazilian and Mexican govern-

\(^{23}\)If the extreme inflation in Brazil and the relatively moderate inflation in Mexico had not been so apparent to savers, these ratios would have undoubtedly become even smaller for both countries.
ments, driven by the necessity of political and economic unification, have played a large role in the settlement of new regions, the technological advance of agriculture, and the provision and rehabilitation of social and economic overhead facilities; i.e., health, education, railroads, highways, ports and dams.

Generally, a partial explanation for these substantially increased public capital inflows to Brazil and Mexico lies with a number of interrelated policy changes on the part of both recipients and within the lending sources themselves. First, the institutional factors determining the preferences of the lending sources were more favorable during the period under study for such expansions of public lending. Increased emphasis was placed on development loans as an instrument of economic aid by most of the countries and institutions contributing to Brazil and Mexico. This was especially true in the United States, which was the largest single contributor in both cases. In the years between 1950 and 1960, the International Cooperation Administration of the United States tended to provide additional development loans rather than strictly grants, while the Development Loan Fund was set up exclusively with a view to providing more loans. Also, the lending authority of the United States Export-Import Bank was
raised substantially. The International Bank for Reconstruction and Development, for its part, also increased its funds and induced further participation in the private financial markets for complementary funds. Additionally, the United Nations has made a concerted effort through its various agencies and programs to induce further capital flows for economic development. Generally, since the Korean War, most of the major countries and lending institutions in the Western World have re-oriented themselves in practice to economic development, particularly in Latin America, rather than to reconstruction in the North Atlantic Community.

Secondly, a number of private financial institutions in the Western World have gained more confidence in the policies and trends of both the Brazilian and Mexican economies and politics. Many large institutions, notably in New York, and equipment manufacturers in the United States and Western Europe have participated in a number of public ventures and have been less reluctant to extend long-term credits.

Finally, these developments have all been in conformity with the expressed policies of both the Brazilian and Mexican governments. Since 1953, both governments have shown a marked preference for long-term capital in the form of additional
developmental loans from abroad.\textsuperscript{24}

\textbf{Public Loan Capital From Governmental Sources}

Of the total public loan capital in Brazil and Mexico during the two periods under study, approximately 23 per cent in both Brazil and Mexico was the outcome of operations directly conducted by the United States government.\textsuperscript{25} Although European governments have extended substantial amounts of medium-term credits and loans to both Brazil and Mexico for the financing of bilateral trade or for the amortizing of unpaid debts, and are of course also making investments indirectly via the international organizations, the United States has been the two countries' major direct source of long-term foreign governmental capital for the periods under study. Most governments of Western Europe have concentrated this type of investment in their own overseas territories,

\footnotesize{\textsuperscript{24}U.N. Department of Economic and Social Affairs, \textit{International Economic Assistance to the Less Developed Countries} (New York: United Nations, 1961), pp. 43-44.}

and it has not been the policy of the government of Western Germany to directly make long-term developmental loans to other governments. 26

Thus, a relatively large proportion of all public loan capital in both Brazil and Mexico has come from the United States. It has consisted of loans obtained from the Export-Import Bank in Washington, of long-term credits granted to finance the buying of United States agricultural surpluses and of special loans under the foreign aid program of the United States government.

The Export-Import Bank

The primary purpose of the United States Export-Import Bank has been to promote the international trade of the United States. This objective has underlined almost the entire rationale for the expanded long-term loans to both Brazil and Mexico during the post-war period. At the same time, however, the Export-Import Bank's operations have in fact contributed to the "capacity to import" and to the economic growth of both Brazil and Mexico during the period.

Since the beginning of the post-war period (in 1947)
until 1960, Brazil and Mexico had received from or had guaran-
teed by the Export-Import Bank some over $933 million\textsuperscript{27} and
$402 million, respectively. As of June, 1960, Brazil still
had $513.2 million in loans from the Export-Import Bank out-
standing. Mexico, at the same time, still had $191.4 million
outstanding.\textsuperscript{28} Brazil alone has accounted for 38 per cent of
all Export-Import Bank loans in Latin America, thus making it
first in the area. Mexico was third in ranking with 12 per
cent of the loans.\textsuperscript{29} They have been, and are required to be,
spent on equipment made in the United States and their amount
is carefully calculated in the light of amortization possibil-
ities.\textsuperscript{30}

\textsuperscript{27}Included in this sum for Brazil are some medium-term
credits consisting of approximately $345 million.

\textsuperscript{28}See Table IX and U.S. Department of Commerce, \textit{Export-
Import Bank of Washington--Report to the Congress for the


\textsuperscript{30}For a more detailed analysis of the operations and
policies of the Export-Import Bank see Hawthorne Arey, \textit{History
of Operations and Policies of Export-Import Bank of Washing-
1954). See also semi-annual reports of Export-Import Bank to
United States Congress, and U.S. Department of Commerce,
\textit{Export-Import Bank of Washington, General Policy Statement}
### TABLE IX

**EXPORT-IMPORT OPERATIONS IN MEXICO AND BRAZIL:**
**CUMULATIVE 1934-JUNE, 1960**

<table>
<thead>
<tr>
<th></th>
<th>Brazil</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credits authorized</td>
<td>$1,344.6</td>
<td>$621.3</td>
</tr>
<tr>
<td>Cancellations</td>
<td>209.2</td>
<td>47.3</td>
</tr>
<tr>
<td>Participations by others at own risk</td>
<td>27.3</td>
<td>6.5</td>
</tr>
<tr>
<td>Undisbursed balance</td>
<td>92.7</td>
<td>152.4</td>
</tr>
<tr>
<td><strong>Disbursements</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ex-im Bank</td>
<td>962.7</td>
<td>395.4</td>
</tr>
<tr>
<td>By others at Exim Bank risk</td>
<td>52.8</td>
<td>19.7</td>
</tr>
<tr>
<td>Total</td>
<td>1,015.4</td>
<td>415.1</td>
</tr>
<tr>
<td>Total repayments</td>
<td>502.3</td>
<td>223.7</td>
</tr>
<tr>
<td>Principal outstanding</td>
<td>513.2</td>
<td>191.4</td>
</tr>
</tbody>
</table>


The funds from this bank have benefited a wide variety of industries in both countries; but it should be noted that much of the capital obtained was invested in such overhead industries as electric power, transport, and mining, a phenomenon which has emerged significantly since 1952 for both economies.
Public Law 480

As is common knowledge, this law concerns the United States government program for financing exports of agricultural surpluses. It came into force in July, 1954. Since the terms of payment involved at the time of purchase are only partially in dollars or sometimes none at all, it is equivalent to lending foreign exchange to the buyers to enable them to make the purchase. Usually the receiving country pays for most of what it receives in local currency, these transactions being known as "special" sales.\(^3\) Like any other inflow of capital, Public Law 480 enables the receiving country to import more than it exports, and is thus attractive to developing economies suffering from balance of payments difficulties and dependent on imports of staple foods which the United States can supply. Additionally, these funds can be used to finance the local costs of development.

\(^{3}\)Transactions under the surplus disposal program of the United States fall into two broad groups. The first, and most important, includes exports under grants, donations, barters and sales settled in local currencies. These are the "special" transactions. The second group involves credit sales where dollar payments are required. Message from the President of the United States, Transmitting the Thirteenth Semiannual Report on Activities Carried on Under Public Law 480, 83rd Congress, as Amended, House Document 131, 87th Congress, 1st Session (Washington, D. C.: U.S. Government Printing Office, 1961), pp. 19-20.
including wages for labor and locally produced materials. In some instances, the funds can be used to provide local currency financing needed for projects whose foreign exchange costs are financed by an international lending institution or United States government agency.\textsuperscript{32}

Brazil, whose external balances were notoriously weak during the 1953-60 period, falls in this "special" category. More than half of the total Public Law 480 funds in Latin America went to Brazil in the form of "special" disposal sales which did not require settlement in United States dollars. These "loan funds," in the amount of $215 million, were channeled by the National Economic Development Bank into economic development projects of the government and private enterprise.\textsuperscript{33}

Mexico, on the other hand, experienced a relatively strong currency during the 1953-60 period. Because of this


external strength and because Mexico normally made large pur-
chases of United States farm products, she accepted Public
Law 480 commodities under normal commercial procedures. Thus,
although Mexico was extended long-term credit in the amount
of $13.6 million, she was required to make repayments in
dollars.34

Other United States Loan Agencies

From 1950 until the end of the latter period under
study, the International Cooperation Administration of the
United States had extended some economic development assist-
ance on the basis of loans rather than grants. In 1956 Brazil
took advantage of this new policy change and borrowed $53.6
million in the form of two loans for her economic development.
Mexico, however, did not receive any loans from the Inter-
national Cooperation Administration during the entire period.35

Additionally, since 1958 the Development Loan Fund of

34Message From the President of the United States,
Transmitting the Thirteenth Semiannual Report on Activities
Carried on Under Public Law 480, 83rd Congress, as Amended,
House Document 131, 87th Congress, 1st Session (Washington,

35See Table X and U.S. Department of Commerce, Export-
Import Bank of Washington--Report to the Congress for the
### TABLE X

**LOAN OPERATIONS UNDER THE INTERNATIONAL COOPERATION ADMINISTRATION OF THE UNITED STATES, 1947-1960**

<table>
<thead>
<tr>
<th>Date</th>
<th>Purpose</th>
<th>Amount (Millions of Dollars)</th>
<th>Disbursed and Outstanding</th>
<th>Undisbursed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(Millions of Dollars)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7-9-56</td>
<td>Economic Dev.</td>
<td>$31.3</td>
<td>$30.2</td>
<td>$1.1</td>
</tr>
<tr>
<td>12-31-56</td>
<td>Economic Dev.</td>
<td>117.9</td>
<td>23.4</td>
<td>94.4</td>
</tr>
<tr>
<td>Total:</td>
<td></td>
<td>$149.2</td>
<td>$53.6</td>
<td>$95.5</td>
</tr>
<tr>
<td>Mexico:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-22-56</td>
<td>Commod. and Serv.</td>
<td>13.6</td>
<td>0</td>
<td>13.6</td>
</tr>
</tbody>
</table>


the United States has been available to Brazil and Mexico for economic loan assistance. However, as of June, 1960, neither country had availed itself of this source.\(^{36}\)

---

Public Loan Capital From International Agencies

Within the framework of the United Nations there were three international institutions providing public loan capital to Brazil and Mexico: the International Bank for Reconstruction and Development (I.B.R.D.), the International Finance Corporation (I.F.C.), and the International Monetary Fund (I.M.F.).³⁷ The activities of the I.M.F. will not be studied in this chapter, but rather in Chapter VI. This is because a credit granted by the I.M.F., rather than being a long-term capital movement, is intended only to assist a country during temporary and short-term deficits in its balance of payments and is considered to be a financial movement of a short-term compensatory nature.

The International Bank for Reconstruction and Development

In several respects, the loans of the I.B.R.D. were similar to those granted by the Export-Import Bank of the United States.

³⁷The International Development Association (I.D.A.), an affiliate of the I.B.R.D., and the Inter-American Development Fund, an affiliate of the Organization of American States, were formed in September and October of 1960, respectively. As of December, 1960, neither Brazil nor Mexico had received any funds from these two institutions. U.N. Department of Economic and Social Affairs, International Economic Assistance to Under-Developed Countries: Statistics of Official Contributions in 1960 (New York: United Nations, 1961).
United States. For example, the I.B.R.D. limited its lending to the estimated cost of the imports required for each project and usually granted credits and loans only if the borrowing country could not obtain funds from private sources, if the borrowing country's repayment capacity was regarded as sufficient and if the service of the external debts of the borrowing country had not been suspended unilaterally. Nevertheless, there were important differences between the two banks. First, while the loans of the United States bank had to be spent on United States exports, a borrower could freely use the proceeds of I.B.R.D. loans to make purchases in any other country. Secondly, the resources of the I.B.R.D. were smaller than those of the Export-Import Bank. Thirdly, the Export-Import Bank was tied to United States commercial and political foreign policy, whereas the I.B.R.D. was not tied to any such unilateral considerations. 38

During the entire period from 1947-60, the disbursements made by the I.B.R.D. to both Brazil and Mexico did not represent a very high proportion of the two countries' gross

capital inflow. Brazil received $267.1 million which comprised only six per cent of her entire long-term capital inflow. Similarly, Mexico received only $226.3 million, or nine per cent of her total capital inflow. Even relative to public loans, the percentages were only nine per cent and 17 per cent, respectively, for Brazil and Mexico.39 This surprisingly low proportion resulted even though Brazil alone accounted for 29 per cent of all I.B.R.D. loans in Latin America, making her first in the area. Mexico was second with 21 per cent of the total loans in Latin America.40

It must be added that in addition to its lending operations, the I.B.R.D. has expended funds for economic surveys of both Brazil's and Mexico's prospects for development, furnished experts to study development problems, helped to negotiate agreements with other countries and private investors, recruited technical personnel, and operated an Economic Development Institute in which both countries participated.41

Although the value of capital lent by the I.B.R.D. has

39See Table IV and Table XI.

40Benton, op. cit., p. 54.

TABLE XI

INTERNATIONAL AGENCY LOANS TO BRAZIL AND MEXICO
DURING THE PERIOD 1947-1960

<table>
<thead>
<tr>
<th></th>
<th>Brazil Number</th>
<th>Amount (Millions of Dollars)</th>
<th>Mexico Number</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.B.R.D. Loans:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electric Power</td>
<td>9</td>
<td>$239.1</td>
<td>5</td>
<td>$124.8</td>
</tr>
<tr>
<td>Transportation</td>
<td>3</td>
<td>28.0</td>
<td>2</td>
<td>86.0</td>
</tr>
<tr>
<td>Irrigation</td>
<td>0</td>
<td>15.0</td>
<td>1</td>
<td>0.5</td>
</tr>
<tr>
<td>Industrial Credit</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total:</td>
<td>12</td>
<td>$267.1</td>
<td>9</td>
<td>$226.3</td>
</tr>
<tr>
<td>I.F.C. Loans:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Credit</td>
<td>7</td>
<td>$10.5</td>
<td>3</td>
<td>$1.4</td>
</tr>
</tbody>
</table>


not been exceptionally large, it has played an important role in the economic development of both Brazil and Mexico. This fact will be brought out more clearly in Chapter V when the fields of implementation are discussed.

The International Finance Corporation

The investments of the International Finance Corporation in Brazil and Mexico did not exceed but a few million dollars in the years prior to 1960. The I.F.C. had only
placed $10.5 million in Brazil and $1.4 million in Mexico since its operations started in 1957. Although these amounts are relatively small in relation to other sources of foreign capital, they do constitute a large proportion of the total I.F.C. funds loaned out in the world. Brazil had garnered almost 20 per cent of the total by 1960 while Mexico received three per cent. However, the I.F.C. has played a much larger role than these amounts would indicate. This has resulted from the participation with I.F.C. of private and domestic capital in effecting development projects in both countries.

Public Capital From Official Grants

In absolute amounts, the average grants and donations increased from $4.4 million in the 1947-52 period to an average of $14.9 million in the 1953-60 period for Brazil. However, as a ratio to the total capital inflow during these


two periods, official grants in Brazil decreased from an average ratio of 4.5 per cent to three per cent. This again was the result of substantially greater increases in official loans rather than any decreases of grants.44

In contrast to Brazil, the average amount of grants in Mexico decreased between the two periods from an average of $16.3 million in the 1947-52 period to an average of $3.5 million in the 1953-60 period. This decrease in the absolute amount of grants, along with the increase in official loans, resulted in Mexico's experiencing a significantly greater decrease in her average ratios of grants to total capital inflow than did Brazil. The ratio decreased from a substantial 14.9 per cent in the 1947-52 period to a relatively insignificant 1.4 per cent in the latter period.45

A partial explanation for Mexico's experiencing such a significant decline in her ratio of grants to total capital inflows lies in the fact that from 1947 until 1951 nearly $60 million was provided by the United States government to pay indemnities for large numbers of infected cattle that had to be slaughtered in Mexico to prevent the spread of a hoof-and-mouth disease. Another $28 million in United States government assistance represented the cost of Agriculture

44See Table XII. 45Ibid.
### TABLE XII

YEARELY AVERAGES AND RATIOS OF PUBLIC LOANS AND GRANTS

<table>
<thead>
<tr>
<th>Period of Yearly Average</th>
<th>Brazil</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Millions of Dollars)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public Loans</td>
<td>Public Loans</td>
</tr>
<tr>
<td></td>
<td>Ratio of Loans to</td>
<td>Ratio of Loans to</td>
</tr>
<tr>
<td></td>
<td>Total (Per Cent)</td>
<td>Total (Per Cent)</td>
</tr>
<tr>
<td></td>
<td>Public Grants</td>
<td>Public Grants</td>
</tr>
<tr>
<td></td>
<td>Ratio of Grants to</td>
<td>Ratio of Grants to</td>
</tr>
<tr>
<td></td>
<td>Total (Per Cent)</td>
<td>Total (Per Cent)</td>
</tr>
<tr>
<td>1947-52</td>
<td>$31.2</td>
<td>$33.7</td>
</tr>
<tr>
<td></td>
<td>32</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>$4.4</td>
<td>$16.3</td>
</tr>
<tr>
<td></td>
<td>4.5</td>
<td>14.9</td>
</tr>
<tr>
<td>1953-60</td>
<td>356.9</td>
<td>144.6</td>
</tr>
<tr>
<td></td>
<td>73</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>14.9</td>
<td>3.5</td>
</tr>
<tr>
<td></td>
<td>3.0</td>
<td>1.4</td>
</tr>
<tr>
<td>1947-60</td>
<td>217.3</td>
<td>97.0</td>
</tr>
<tr>
<td></td>
<td>67</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>10.4</td>
<td>9.0</td>
</tr>
<tr>
<td></td>
<td>3.2</td>
<td>4.8</td>
</tr>
</tbody>
</table>

**Source:** Adapted from Table IV and the Computational Appendix in this study.
Department veterinarians and other trained persons working in Mexico to combat the disease. These amounts were all disbursed as grants from the United States to Mexico.46

The programs of economic and technical assistance via grants, in both Brazil and Mexico and in both periods under study, has come mainly from the United States. Since 1953, the United States has contributed 81 per cent of all grants to Brazil and almost 50 per cent of all grants to Mexico.47 These activities were administered primarily by the "United States Operation Missions" in both countries. These missions were authorized under the Interdepartmental Committee of the State Department, the Institute of Inter-American Affairs, the Technical Cooperation Administration, the Foreign Operations Administration and the International Cooperation Administration of the United States.48 In the period after 1953,


48The funds were used for programs in the fields of health and sanitation, agricultural extension, agricultural research and credit advisory service, education, public and business administration, community development, industrial training and minerals investigation. For a more detailed discussion of United States economic and technical assistance
the United States alone publically donated to Brazil over $53 million. In the same period Mexico received over $16 million from the United States in the form of grants. The remainder of the other economic assistance programs to Brazil and Mexico were operated almost entirely out of United Nations agencies. The United Nations Technical Assistance programs amounted to approximately nine per cent of all grants in Brazil and to approximately 14 per cent in Mexico in the period between 1953 and 1960. The United Nations International Childrens Fund went to make up the bulk of the remaining grants to the two countries, with almost 10 per cent to Brazil and 36 per cent to Mexico in the latter period.


It was estimated by one source that, in the period between 1943 and 1960, the United States government had expended some over $50 million on an extensive program of technical assistance alone in Brazil. Benton, op. cit., p. 70.

For a historical survey and detailed discussion of United Nations economic and technical programs in Latin America, see Glick, op. cit., pp. 217-40.

Since the end of World War II, in both Brazil and Mexico, the largest single source of all public developmental loan capital has been of a medium-term nature. Over 49 per cent ($1,500 million) of all public capital flowing into Brazil represented industrial investment credits or private financial loans. Mexico experienced a similar ratio of 47 per cent ($650 million). The largest share of these significant amounts of capital took place after 1953. From 1947 until 1952 Brazil received only $14.2 million in capital of

52A number of loans and credits in this category have been extended by private sources to private recipients in both Brazil and Mexico. However, both principal and interest has been either guaranteed by the recipient government or by the government in which the private firm or institution extending the loan has been located. Thus, effectively either one or both of the two governments have been ultimately responsible for the loan. It was only because of governmental policy or action in either case that the loan took place. It was from this rationale that this study was prompted to include all such investments as public capital. This definition must be kept in mind when comparing data from this study with that of the International Monetary Fund. The I.M.F. includes as public capital only those funds which have been guaranteed or directly received by the government of the borrowing country. However, this study, as pointed out above, includes also as public capital all funds which originate from or are explicitly guaranteed by the government of a lending country. See context of this chapter and the Computational Appendix for further detail.
this nature. Mexico, likewise, received only $33.8 million during the same period. However, after 1953 for Brazil and after 1954 for Mexico, medium-term investment credits and loans began to be granted in very large volume. During this latter period, since 1953, the upward trend in this type of loan continued to grow at an increasing rate.53

Prior to 1953, both Brazil's and Mexico's capacities to import had been hardly sufficient to pay for the materials, fuel and spare parts needed to sustain their post-war economic growth rates. They therefore had little to spare for purchasing new capital goods, although their rapid economic growth strongly encouraged the demand for equipment. At first, European suppliers were the only ones to grant credits and loans of this nature, but later United States, Canadian and Japanese exporters, banks and financial institutions joined them.54 After 1953, investments of this nature were extended for a growing number of projects in both Brazil and Mexico, and there was a tendency to lengthen the period


of repayment from around five years in some cases to over ten years in others.\textsuperscript{55}

Because of this trend, Brazil and Mexico were able to defer payments on a higher proportion of their machinery imports, and have new factories built by foreign enterprises without an immediate cost in foreign exchange. The most striking example took place in Brazil during 1957. Under Act 1807, Brazil registered applications for medium-term financing—at a favorable exchange rate—which reached a value of nearly $500 million.\textsuperscript{56}

These credits and loans have been and presumably will continue to be a strong help in the long-term growth of both countries. But on such a scale, as indicated above, they have and will continue to involve heavy commitments of foreign exchange. The annual redemption charge for all public loans increased from $35 million in 1952 to about $160 million in 1960 for Mexico. In Brazil, amortization charges on industrial credits and medium-term loans alone rose well over $100 million per annum in the years 1958-1960;\textsuperscript{57} i.e., more than


\textsuperscript{56}Ibid., p. 56.

\textsuperscript{57}International Monetary Fund, \textit{Balance of Payments Yearbook, VII, XII}; International Monetary Fund, \textit{International
10 per cent of the total 1957 capacity to import.\textsuperscript{58}

Industrial credits and financial medium-term loans as an important source and form of capital inflow to both Brazil and Mexico has resulted from a number of factors. First, after 1953 Europe experienced a very favorable growth in industries, retained earnings and exports. This growth encouraged stronger competition among the industrialized countries for the markets in the equipment-importing countries like Brazil and Mexico.

Secondly, the close proximity and interrelationships between Brazilian and Mexican markets with the United States have been important factors. In addition, most of the major financial institutions (banks, investment houses, etc.) in the United States and in a number of the Western European countries have agents and affiliations in both Mexico and Brazil, thus facilitating an expansion of long-term credit and helping to determine the creditworthiness of medium-term loans. Although, during the entire period under study, there


was only one instance of either country having a security listed on the stock exchanges of the United States, this has not apparently affected the creditworthiness of the firms in both Brazil and Mexico in receiving long-term credit and loans from abroad.

Thirdly, the recent development of capital flows of this nature to Brazil and Mexico have probably had their strongest influence from governmental policies and actions. In the two economies of Brazil and Mexico, both governments have directly assumed the amortization and interest burdens of 42 per cent and 88 per cent, respectively, of all loans and long-term credits of this type. The majority of the loans in this category, in which the Brazilian and Mexican government agencies borrowed directly or in which Brazilian and Mexican private firms had a government guarantee, were from

the United States. The remaining 68 per cent of the loans and credits in Brazil and 12 per cent in Mexico were apparently lent to private borrowers in the two economies. However, the majority of these loans can still be classified as public capital. They either came from governmental or international lending institutions (such as the International Finance Corporation) or they came from the Western European countries where the governments there guaranteed the credits and loans and thus effectively assumed the risks.

Finally, the role of industrial credits and medium-term financial loans can be traced partly from the differences in the fields of foreign investments. European export credits and United States private loans were concentrated in routine, long-established and proven enterprises; i.e., export-oriented or foreign-exchange-earning private enterprises or else economically sound government-sponsored projects in both

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60 The following United States Commercial banks and private financial institutions participated: Bank of America, Chase National Bank, U.S. Maritime Commission, U.S. Commercial Company, and the National City Bank of New York. Certainly other institutions and banks participated but they were not enumerated in the I.M.F. Balance of Payments Yearbook. The data in this paragraph was adapted from the International Monetary Fund, Balance of Payments Yearbook and the International Financial Statistics series, loc. cit.
Brazil and Mexico. On the other hand, in fields or projects which involved considerable risk, direct control was usual and United States direct investment predominated. Apparently, prior to 1953 there were very few projects in both countries which financially qualified for anything but direct equity investment.

In spite of the importance of foreign direct investment and other public types of loans and grants in both Brazil and Mexico, especially since 1953, industrial credits and medium-term financial loans remained in 1960 to be major sources of external developmental finance.

CONCLUDING OBSERVATIONS

The floating in international private capital markets of foreign government bonds, once so important in international financing, was virtually extinguished for Brazil and Mexico in the post-war period. Similar floating of shares and debentures of private business enterprises, and trade in outstanding securities, from Brazil and Mexico also were nonexistent during the periods under study. The only exception was when the transactions were related to direct investments --involving managerial control through enterprises in the investing countries. Such investments accordingly accounted
for almost all of the private long-term capital moving into the two countries. To some extent the international institutions and individual governments took over the role of "floating securities on the international markets" for the two countries. Additionally, the phenomenal increases in medium-term loans and industrial credits appear to have also assumed a share of this role.

In both of the cases, government or government-sponsored and guaranteed borrowing and loans from abroad were the major sources of foreign finance in the economic developments of Brazil and Mexico during the post-war period. In Brazil, which attracted the largest amount of foreign capital, government or government-sponsored foreign borrowings and loans from abroad were over 70 per cent of the total, even though Brazil was also the largest single recipient of direct investment--discounting petroleum in Venezuela--in Latin America from 1953 onward. The greater role of the government combined with other special factors also increased the ratio of public capital flows into Mexico as well, almost 60 per cent of the total in the period under study.

In a recent study conducted for the International Economic Association by Felipe Pazos, it was shown that in the United States during 1939 and in Mexico during 1950 the
pattern distribution of loan and equity capital invested in the total economies of the two countries approximated a ratio of seven to three; i.e., 70 per cent loan capital and 30 per cent equity capital. This pattern distribution of investment in the two economies measured total investment both as a stock and as a flow concept, with total private and public investment being financed by domestic equity capital, domestic loan capital, foreign equity capital and foreign loan capital. The study concluded that because of the apparently successful development of the two economies—the United States and Mexico—then this pattern distribution of 70 per cent loans and 30 per cent equity was a satisfactory yardstick or criteria for correlating growth and investment elsewhere in the "free world." It was further postulated that an "ideal" distribution of international capital movement into a developing economy should follow this ratio as well. Empirical data, in the above mentioned study, tended to suggest that the

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international flow of capital in Latin America during the early 1950's was the reverse of this ideal ratio of loans to equity; i.e., rather than being 7:3, results indicated 30 per cent loans and 70 per cent equity. Conclusions, therefore, were drawn that either more foreign private portfolio or foreign governmental loan capital was needed to maintain the proper balance for growth in the developing economies of Latin America. The results, however, of this study's analysis of international capital flowing into both Brazil and Mexico throughout the post-war period indicates just the reverse again of Pazos' data trend in Latin America. This is not to say that Brazil and Mexico could not have efficiently used more loan capital—as the following chapter of this study will point out, the two economies could actually have economically employed a great deal more of foreign public capital—rather it merely points out that if the ratio of 7:3 is economically meaningful and

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62 Pazos, op. cit., p. 221.

63 Differences in definitions and types of data used account for a portion of the differences in ratios between this study and that of Pazos. Pazos' data concerned itself with capital flows in an earlier period for Latin America (1950-1953) when public loans were relatively less important. Moreover, Pazos excluded all public loans of a medium-term nature, whereas this study did not.
an ideal ratio for economic growth, as Pazos contends, then both Brazil and Mexico have been very favorably endowed with foreign capital forms.

It appears for Brazil and Mexico that in their stage of development—when their domestic enterprises have not yet gained experience, efficiency, and hence credit-worthiness to borrow abroad—government borrowing has been a very efficient and more ample source of foreign funds.64

Past experience suggests that government investment financed by foreign loans can be a suitable method of laying the foundations of a country's economic development in the form of public services and social overhead capital. Nor should we forget investment in agriculture, which in the nature of the case must often be financed by public authorities. Foreign loans may leave the borrowing country free to use these resources in accordance with an over-all development program, as seems to have been the case with . . . Mexico.65

However, R. Nurkse cautions:

. . . . it is nearly always possible to some extent to substitute foreign funds for domestic saving so that the country's consumption is increased and little or no addition is made to the rate of accumulation. This can happen even if each foreign loan is earmarked for a specific productive project. If the inflow of capital is accompanied by a relaxation of domestic saving effort

64See the following chapter in this study for a more detailed discussion concerning uses of the foreign capital flows.

there may be no change in the total rate of capital formation. Strong and persistent pressures in this direction are set up nowadays by the disparities in real income and consumption levels. In short, while direct investments run into the market difficulty, . . . it is conceivable that the use of international loans may be subject to the difficulty [of] . . . the high and rising propensity to consume which is induced in the poorer countries by the great and growing discrepancies in per capita income and consumption levels. Direct business investment, though it may lead to lop-sided development, has at least a solid merit in that it almost inevitably results in a net increase in the amount of real capital situated within the country's boundaries. In the case of "autonomous" international investment, there is nothing inevitable about it; the increase may be nullified through direct or indirect substitution. The effectiveness of autonomous foreign investment depends essentially on complementary domestic action in the receiving country. This applies to inter-governmental grants even more than to loans made by either private investors or governments to public authorities in underdeveloped countries. International grants can of course be used for capital formation in the same way as loans.\textsuperscript{66}

Thus, in order to make use of domestic funds, so released, for domestic enterprises, simultaneous development of institutions for mobilizing domestic savings is essential. In this respect, both Brazil and Mexico developed a number of agencies and institutions for this purpose. Mexico, however, was the more successful of the two countries, as inflation tended to thwart voluntary private savings in Brazil. Moreover, the more developed the organization of the domestic

\textsuperscript{66}\textit{Ibid.}, pp. 91-92.
capital market and its contact with the external markets, as the experience of Brazilian and Mexican joint-ventures will show in the following chapter, the more numerous are the channels for foreign capital inflow. Finally, the development of specialized government investment institutions in the two economies—without organized stock markets in touch with international loan markets—proved to be fruitful channels for foreign borrowing. The close interrelation between the mobilization of domestic and foreign capital is evident at every step.67

In further observations, it appeared, in the two cases, that direct investment increased only after substantial government borrowing and investment began to pave a way for it or else simultaneously expanded with it.68 Moreover, it


68 This analysis is further explained in the following chapter where the uses or fields in which they were applied are brought to light.
is worth recapitulating that the extensive borrowing and grants received by the two countries required in almost all cases some sort of inter-governmental action as evidenced by the joint-technical studies and joint-assistance programs; the participation of both countries in the provisions of the United Nations, the International Monetary Fund, the International Bank for Reconstruction and Development; and the close political and economic liaison with the principal lending and investing country—the United States. It may be instructive here for other underdeveloped countries that some sort of action—not necessarily "formal" agreements—on the inter-governmental level was necessary to increase both public capital as well as to indirectly induce further investment from private sources.
CHAPTER V

FIELDS AND IMPLEMENTATION OF INTERNATIONAL CAPITAL FLOWS

THE PATTERN OF PRIVATE INVESTMENT IN BRAZIL AND MEXICO

The story of private foreign capital in both Brazil and Mexico during the post-war period was essentially the story of direct investment. More specifically, this story was essentially the history of United States direct investment in the manufacturing industries. The aggregate share of manufacturing and commercial enterprises in outstanding United States direct investments in Mexico increased from two per cent in 1929 to 37 per cent in 1950\(^1\) and to almost 60 per cent in 1960.\(^2\) United States direct investments in Brazil followed a similar course. In 1960 almost 65 per cent of all United States direct investments in Brazil were in the


manufacturing or commercial industries.\textsuperscript{3}

The pattern of direct foreign investment in Mexico in 1946 was as follows: Public utilities represented 46 per cent of the total—transportation and communication 22.5 per cent and electric power, gas and waterworks 23.5 per cent; mining and smelting 25.5 per cent; manufacturing 18.5 per cent; commerce 7.5 per cent; agriculture 1 per cent and all other industries 1.5 per cent.\textsuperscript{4} The pattern of direct foreign investment in Brazil in 1946 was very similar to that of Mexico. Foreign public utilities in Brazil during this time were 63 per cent of the total, while manufacturing was 27 per cent, mining and petroleum 6 per cent and all other industries approximately 4 per cent.\textsuperscript{5}

However, in the period of time between 1946 and 1960, the pattern of private foreign investment in Mexico changed significantly. In 1960 the pattern distribution in Mexico was as follows: Manufacturing 43 per cent, mining and petroleum 20.5 per cent, public utilities 18.5 per cent, commerce

\textsuperscript{3}\textit{Ibid.}, p..22.


14.5 per cent and all others 3.5 per cent. This pattern change was likewise followed by Brazil in the period between 1946 and 1960. In 1956, Brazil held the following distribution of direct foreign investments: Manufacturing 33 per cent, public utilities 41 per cent, mining and petroleum 7 per cent and all others 19 per cent—commerce and distribution investments constituted the bulk of all other industries in Brazil.  

Manufacturing

Probably of greatest long-run significance throughout the entire period under study were the increasing direct foreign investments in the manufacturing industries of both Brazil and Mexico. Brazil has led all the countries in Latin America since 1953 in receipt of direct foreign investment for manufacturing, while Mexico has followed a close second.  

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# TABLE XIII

## ESTIMATED PERCENTAGES OF PRIVATE FOREIGN DIRECT INVESTMENT

### BY INDUSTRIES IN BRAZIL AND MEXICO

<table>
<thead>
<tr>
<th>Industry</th>
<th>From World</th>
<th></th>
<th></th>
<th>From United States</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Brazil</td>
<td>Mexico</td>
<td>Brazil</td>
<td>Mexico</td>
<td>Brazil</td>
<td>Mexico</td>
</tr>
<tr>
<td></td>
<td>1946(^a)</td>
<td>1956(^b)</td>
<td>1946(^c)</td>
<td>1960(^d)</td>
<td>1946(^e)</td>
<td>1960(^f)</td>
</tr>
<tr>
<td></td>
<td>(Per Cent)</td>
<td>(Per Cent)</td>
<td>(Per Cent)</td>
<td>(Per Cent)</td>
<td>(Per Cent)</td>
<td>(Per Cent)</td>
</tr>
<tr>
<td>Public Utilities</td>
<td>63</td>
<td>41</td>
<td>46</td>
<td>18.5</td>
<td>39</td>
<td>21</td>
</tr>
<tr>
<td>Transport &amp; Comm.</td>
<td>(22.5)</td>
<td>(4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power, gas &amp; water</td>
<td>(23.5)</td>
<td>(14.5)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>27</td>
<td>33</td>
<td>18.5</td>
<td>43</td>
<td>39</td>
<td>54</td>
</tr>
<tr>
<td>Min. &amp; Petroleum</td>
<td>6</td>
<td>7</td>
<td>25.5</td>
<td>20.5</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Commerce</td>
<td>--</td>
<td>--</td>
<td>7.5</td>
<td>14.5</td>
<td>--</td>
<td>13.5</td>
</tr>
<tr>
<td>All other</td>
<td>4</td>
<td>19</td>
<td>2.5</td>
<td>3.5</td>
<td>8</td>
<td>2.5</td>
</tr>
</tbody>
</table>


United States enterprises in both countries predominated among foreign investments in manufacturing, having undergone a fourfold expansion in Brazil and a sixfold expansion in Mexico between 1947 and 1960.9

In Brazil, leading United States producers in many major branches of manufacturing were represented, including meat-packing, the assembly of automobiles and refrigerators, the production of automobile tires, chemicals, pharmaceuticals, electric supplies, radios, rayon and rubber goods.10 Generally, throughout the post-war period, the pattern of foreign manufacturing investment has been quite evenly distributed in Brazil. For example, in 1956 the distribution of direct foreign investment in the manufacturing industries of Brazil was as follows: Chemicals and pharmaceuticals 22 per cent of the total, food 18.5 per cent, machinery 15.5 per cent, iron and steel 15 per cent, textiles 15 per cent, vehicles and parts 14 per cent.11

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11Dale, op. cit., p. 29.
In Mexico, United States manufacturing enterprises invested, some jointly with Mexican capital, in canned foods, rayon yarn and other textile manufactures, containers, farm implements and machinery, asbestos products, cement, automotive vehicles, radios and phonographs, pharmaceuticals, films, aluminum products, steel drums, soft drinks, electrical supplies and appliances, chemicals and paper.\(^\text{12}\)

This type of investment—direct foreign investment in the manufacturing industries—appears to have increased with and followed the industrial expansion of each sector in both Brazil and Mexico. This trend constituted an innovation to some extent. In the past, Brazilian and Mexican manufacturing industries attracted relatively less foreign capital than the other economic sectors or than their prototypes in other countries. However, because of the recent concerted economic development programs in both economies, the pattern of consumer purchases changed in the two republics and the demand for domestic manufactures increased rapidly. Relative to 1946, there were substantial increases in the proportion of foreign investment catering to internal demand. The most remarkable change was the increase in the proportion of

\(^{12}\)U.N. Department of Economic and Social Affairs, op. cit., p. 114.
investment in consumer-oriented manufacturing activities and the relative decline of investment in the extractive industries and public utilities for both economies. In contrast to the predominantly extractive industrial pattern of post-war United States direct investments all over the world, 54 per cent of the United States direct investments in Brazil and almost 50 per cent of her investments in Mexico were in the manufacturing sector during 1960. Additionally, this type of investment was characterized by the fact that it was almost completely oriented towards the domestic market. For example, less than one per cent of all United States manufacturing output in both Brazil and Mexico was exported in 1955.

Although both Brazil and Mexico have been popularly classified as underdeveloped economies, it appears that perhaps both countries should occupy an intermediate position when evaluating domestic markets. Certainly in the southern part of Brazil the local market is big enough to support a sizable industry financed in part by foreign direct investments,

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and in Mexico the area around the Federal District of the capital city and other already existing large industrial areas are sufficient for such undertakings.

Political factors also explain the rising trend of investments in the manufacturing industries of both countries. Political opposition to foreign capital is often reduced when it provides employment on a large scale or is used to produce goods for the home market, and these were the conditions typical of investment in the secondary rather than in the primary industries of Brazil and Mexico. In both cases, moreover, supplies of imports were blocked by tariffs, quotas, controls or discriminatory exchange rates, and yet lack of capital—or technical and managerial inexperience—often prevented domestic producers from taking advantage of these opportunities. Such circumstances were in themselves attractive to foreign manufacturers. Furthermore, the governments provided special and often very strong incentives to encourage foreign firms to set up factories.¹⁵

¹⁵In Brazil, for example, imports of capital equipment representing foreign direct investments were stimulated in the years 1947-52 by a system of import licensing, which gave preference to capital goods, and by an increasingly overvalued exchange rate. After a change in the system of exchange control in 1953, special provisions were made early in 1955 in order to facilitate the importation of capital equipment representing foreign direct investment in Brazil. The total
Developments abroad were simultaneously encouraging some foreign firms to invest and manufacture in Brazil and Mexico. Immediately following World War II, the United States was the only country which had a great amount of savings available—especially in the form of corporate retained earnings—and a part of these funds were attracted to Brazil and Mexico by their expanding populations and rising domestic markets. Additionally, since 1953, both in some of the West European countries and in the United States, the internal markets for motorcars and for some other mechanical and chemical products either only expanded slowly or showed signs of being at least temporarily saturated. Manufacturers therefore found it relatively less attractive to invest in these domestic sectors. But profits remained high. Consequently, as import restrictions simultaneously became more severe in Brazil and Mexico, often on these very items, many firms decided to use part of their funds to establish plants in the two countries.

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The activities of West Germany in Brazil were the most striking example of this "domestic market saturation" problem. The total inflow of private capital from West Germany to Brazil reached approximately $50 million in 1956 and 1957, or almost 20 per cent of the total private inflow during these two years.\textsuperscript{17} Japan illustrates another case. Her direct investments in Brazil had been relatively small until after 1953. However, because of political circumstances having arisen after World War II, Japanese investors were induced to pay more attention to the markets in Latin America by comparison to Asia--their conventional area of operations. In Brazil, for example, forty Japanese investment projects were in advanced stages of completion by 1960--in some cases these projects were linked with the settlement of Japanese immigrants.\textsuperscript{18}

France and the United Kingdom have by political and economic necessity, since the end of World War II, made the bulk of their investments abroad in the franc and sterling areas respectively and, of course, neither Brazil nor Mexico were included in either group. This explanation offers a


\textsuperscript{18}Ibid., p. 54.
partial explanation for their lack of participation in the manufacturing industries of the two countries.

Factors internal to the firms themselves have also played a role in the pattern of distribution and in the expanded development of foreign manufacturing enterprises in Brazil and Mexico. For example, there had been very little investment in those lines of activity in which imports from Brazil and Mexico into the United States competed with the products of United States home industries. Although there had been some specialization regarding different brands of the same product between some Mexican and Brazilian branch plants and the parent companies, the former generally did not export the particular brand to the United States.19

Most of the United States direct investments were concentrated in the manufacturing industries in which her technological leadership was supreme—adapted as they were to her mass production technique—and which were her major export industries. These export industries of the United States, when thwarted from expansion of exports from home by tariff, quotas, consumer's and governmental preferences for "Mexican

made" and "Brazilian made" goods, and by the necessity of making better adjustment to consumer's tastes and on-the-spot sales services, reacted by erecting branch plants and subsidiaries across the border in Mexico and down the Atlantic in Brazil with a view towards maintaining their markets.²⁰

Another important factor in the expanded development of foreign manufacturing firms in Brazil and Mexico has been the expanded use of retained earnings in the financing of the enterprises concerned. During the period between 1949 and 1959 approximately 60 per cent of the increase in United States direct investments in Brazilian and Mexican enterprises were financed from reinvested earnings of subsidiaries. In the case of branches, the increase in investments was treated in the accounts as an inflow of fresh capital, whether or not the amount represented retained earnings. Taking this into account, it may be estimated that the proportion of total capital outlays financed from retained earnings was well above 60 per cent.²¹


²¹International Monetary Fund, Balance of Payments Yearbook, V (1954); Balance of Payments Yearbook, VII (1956); Balance of Payments Yearbook, XII (1960).
Internal considerations of the manufacturing enterprises also complemented the expansion of other industries as well. The substantial increase of foreign investment in commerce and merchandising during the post-war period in both countries was, to a large extent, due to the growth of the manufacturing enterprises. Many of the merchandising companies were the sales outlets for the foreign manufacturing companies operating in the two countries and thus their growth was the result of the growth in the latter. Additionally, the extensions of several United States chain stores in both Brazil and Mexico were directly related to the expanded availability of manufactured consumer goods.  

Besides the availability of internal markets, special governmental inducements via tariffs and legislation, availability of retained earnings and the favorable developments abroad, there were certain other factors which attracted foreign firms to invest and manufacture in Brazil and Mexico during the post-war period. For example, most manufacturing industries presuppose the existence of external economies.

22Almost 90 per cent of Sears Roebuck's products in Mexico are being produced domestically. Richardson Wood and Virginia Keyser, Sears Roebuck De Mexico, S.A. (First case study in an N.P.A. series on "United States Business Performance Abroad") (New York: National Planning Association, 1953), p. 94.
particularly of a social overhead nature. The renovated and expanded social overhead—in the form of transportation and communication facilities—and the newly developed and relatively cheap hydro-electric power facilities in both the economies of Brazil and Mexico were obvious attractions.23

Taxation policies in Brazil and Mexico were also alleged to have been determining factors for direct foreign investments in the manufacturing industries. Generally, the foreign investments in manufacturing were subject to lower corporate taxes in the two countries than were the extractive industries. Both for this reason and because manufacturing enterprises, whether domestic or foreign, frequently enjoyed special tax concessions in both countries, the tax credit allowed for income taxes payable abroad was usually not sufficient to fully relieve a parent company from paying corporate taxes in its home country for income from a foreign manufacturing branch.24 These circumstances allegedly

23 The bulk of these renovated and expanded facilities were accomplished with public foreign capital simultaneously with the private investments. See the following section of this chapter concerning public foreign capital for further details.

24 In the United States credit was allowed for foreign business income taxes—no credit was allowed for indirect taxes; moreover, a special tax reduction was applied to United States corporations who derived at least 95 per cent of their
contributed to the tendency to organize foreign controlled manufacturing enterprises as subsidiaries and to the high rate of reinvestment mentioned above, since in the case of a subsidiary the parent company pays taxes only on dividends, not on reinvested earnings.

In cases where the parent companies had to pay taxes on their income from controlled manufacturing enterprises abroad—for instance, in the case of subsidiaries not reinvesting a considerable portion of their earnings—tax concessions by the two capital-importing countries obviously did not act as special inducements since they did not reduce the aggregate taxation on the income. Conversely, the two countries were able, at times, to raise corporate taxes without increasing the total tax liability of the corporations. Both countries accomplished this by applying special taxation to dividends so as to encourage the reinvestment of earnings.  

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The effect of taxation in Brazil and Mexico on investment in manufacturing, as indeed in other industries, is complex and cannot be dealt with in detail here. It appears, however, that "the special risks of foreign investment, not unfavourable tax treatment, appear to constitute the principal deterrent to it."  

Public Utilities

Transportation, communications and other public utilities have historically absorbed the major part of foreign investments in both Brazil and Mexico. Prior to 1947, public utilities played an overwhelmingly dominant role in the foreign investment patterns of both countries— in 1946, 63 per cent and 46 per cent of total foreign direct investment


27 This would be even more notable if consideration were given to the large portion of foreign public capital which was borrowed for the financing of public utilities and railroad development and rehabilitation. See the following section of this chapter concerning public capital for further details.
in Brazil and Mexico respectively represented public utilities. However, since the end of World War II, foreign control and direct investment in public utilities has significantly declined—in 1960 public utilities represented only 18.5 per cent of total direct investment in Mexico and in 1956 only 41 per cent in Brazil.28

In Brazil, the Brazilian Traction, Light and Power Co., Ltd. was the largest public utility enterprise in the country in 1947. In 1949, this company supplied about two-thirds of the electric energy produced and about three-quarters of the telephone service. Its operations also included tramways and gas and water services. Ownership was predominantly Canadian—40 per cent—with significant British and American participation. In 1949, the Brazilian Electric Power Company, a subsidiary of the American and Foreign Power Company, supplied about one-fourth of the electrical energy produced and was also engaged in telephone service. International Telephone and Telegraph Corporation supplied about one-tenth of the telephone service in Brazil in 1949 as well.29

28See Table XIII.

The capital invested in Mexico in electric power and light facilities in 1947, according to a United Nations study, was 75 per cent foreign owned. The distribution of ownership was as follows:

<table>
<thead>
<tr>
<th>Company</th>
<th>Millions of Dollars</th>
<th>Per Cent of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mexico Light and Power Company (Canadian)</td>
<td>$91.6</td>
<td>43</td>
</tr>
<tr>
<td>American and Foreign Power Company (American)</td>
<td>60.1</td>
<td>28</td>
</tr>
<tr>
<td>Monterrey Railway and Power, Ltd. (Canadian)</td>
<td>7.8</td>
<td>4</td>
</tr>
<tr>
<td>Total Foreign</td>
<td>$159.5</td>
<td>75</td>
</tr>
<tr>
<td>Total Mexican</td>
<td>51.5</td>
<td>25</td>
</tr>
</tbody>
</table>

However, since 1947 the expansion of privately owned electric power utilities in both Brazil and Mexico has been hampered by governmental policy. This policy has, in general, not allowed the firms "to charge rates sufficiently high to maintain earnings at levels enabling them to reinvest and to attract new capital." As late as the 1920's, United States direct investments in public utilities in the two

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30 Ibid., p. 112.
countries were regarded as lucrative. The enterprises have, however, found it increasingly difficult to obtain authorization to increase their rates so as to compensate for the higher costs of operation and of replacing worn-out equipment that have resulted from the inflationary trends characterizing the post-war period in both economies. Operations have thus become less profitable. In 1950, for instance, earnings of United States foreign direct investments after taxes payable abroad represented 4.3 per cent of book value of equity investment in public utilities as against an average of 17 per cent in other industry groups.\(^{32}\) The exceptionally low yield has hampered the expansion of foreign controlled public utility enterprises in both economies in two ways. It has discouraged the transfer of fresh capital from the investing country and reduced the amounts which the enterprises have been able to

\[^{32}\text{U.N. Department of Economic and Social Affairs, }\text{The International Flow of Private Capital, p. 44.}\]
reinvest out of current profits.\textsuperscript{33}

An increasing proportion of electric power capacity has gone into the hands of publicly owned utilities in both countries. In Mexico the publicly owned Federal Electricity Commission and Nueva Compania Electrica de Chapala accounted together for 12 per cent of the installed capacity in 1946, 28 per cent in 1950\textsuperscript{34} and 36 per cent in 1959.\textsuperscript{35} This expansion was financed mainly by Federal budgetary appropriations and by public loans from abroad.\textsuperscript{36}

It was estimated in 1952 that 95 per cent of the telephones in Mexico were operated by subsidiaries of United

\textsuperscript{33}The question of rates of return on foreign investments in public utilities has been a subject of concern to the International Bank for Reconstruction and Development in connection with loan negotiations in both Brazil and Mexico. A loan to Mexico of $26 million in 1950 for financing the expansion of facilities of the Mexican Light and Power Company, Limited, was made only after a reorganization of the company's financial structure and the approval by the Mexican authorities of power rates "affording reasonable earning prospects for the recapitalized company." International Bank for Reconstruction and Development, \textit{Fifth Annual Report, 1949-1950} (Washington, D.C.: I.B.R.D., 1950), p. 20.


States and Swedish companies. However, since that time, the bulk of the Swedish interests have been acquired by a Mexican company subsidized by the government. International telegraphic service prior to 1949 was operated almost entirely by United States subsidiaries. However, in 1949 the government failed to renew all foreign-owned concessions and took complete control over the telegraphic industry.

Prior to 1947 foreign capital, almost entirely British, controlled approximately one-fourth of the total railway mileage in Brazil. However, since that time, the Brazilian government has purchased almost 90 per cent of the British railway investments.

The trend toward government ownership of railways has also continued in Mexico since 1947. In the period between 1947 and 1950, the Mexican government purchased from the British the Inter-Oceanic Railway and Mexican Railways, Limited. In 1951, the last major privately owned railway,

37 U.N. Department of Economic and Social Affairs, *Foreign Capital in Latin America*, p. 112.


the Southern Pacific Railway of Mexico, a United States subsidiary, was purchased by the Mexican government.40

The only foreign owned transportation industry in both countries which has expanded via foreign private capital has been the airlines industry. In 1955, almost one-third of all capital in this industry in Mexico was controlled by firms abroad. Likewise, in the same year, almost 40 per cent of the industry in Brazil was controlled and owned from abroad.41

Commerce and Trade

One other quite new development since 1947 has been the substantial investment of foreign private funds in the commercial and distribution sectors of the Brazilian and Mexican economies. For the most part this was effected in association with local capital in both countries, and the subsidiaries concerned concentrated most of their attention on handling locally made commodities.

In Brazil, United States, British, French and German interests have been the most prominent in the wholesale and


41 U.N. Department of Economic and Social Affairs, Foreign Capital in Latin America, pp. 53, 113.
retail trade since 1947. In Mexico, the United States and Germany have played dominant roles in this industry during the post-war period.

In Mexico, commerce accounted for nearly a fifth of the total increase in foreign direct investment during the period between 1946 and 1960—more than any other activity except manufacturing. The share of commerce in total direct investments rose from less than 7.5 per cent in 1946 to 14.5 per cent in 1960. The bulk of this increase was accounted for by United States capital.

The bulk of the increase in "All others" industries for Brazil in Table XIII above, apparently came from foreign enterprises engaged in distribution and commercial activities in Brazil during the post-war period. Although data was not directly available to correctly ascertain the full amount of foreign commerce activities in Brazil during this period, this study can get an approximation of the trend from United States investment data. United States commercial activities

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42 U.N. Department of Economic and Social Affairs, Foreign Capital in Latin America, p. 53.

43 Ibid., p. 114.

44 Banco de Mexico, S.A., Informe Anual, 1959, p. 96; and Banco de Mexico, S.A., Informe Anual, 1960, p. 91.
in Brazil in 1946 represented less than 5-7 per cent of total United States direct investment. However, in 1960, commercial activities accounted for over 13.5 per cent of the total.\(^{45}\) Although there has been a tendency in Brazil to regard foreign investments in trade somewhat critically, "... in view of the large profits which have been earned in recent years and remitted abroad and in view of the competition they give to local trade investments,"\(^{46}\) this has not apparently thwarted the post-war investment pattern in this industry.

As indicated in a previous section above, import restrictions and other factors have induced much of the merchandise for retail trade in Brazil and Mexico to be manufactured locally by foreign investors. This, of course, further induced foreign investment in the distribution and trade sectors. However, the distribution of many leading United States manufactured products, particularly durable consumer goods and


\(^{46}\)U.N. Department of Economic and Social Affairs, *Foreign Capital in Latin America*, p. 54.
machinery, were handled largely through vertically integrated selling branches or subsidiaries of manufacturing concerns in the United States. Thus, trade relations were also a significant orientation for a number of the direct investments in the distribution industries during this period. For example, in 1960 Brazil purchased more than 50 per cent of all her imported machinery from the United States, and it was United States direct investments in the machinery industry which expanded the greatest in the distribution sector of the economy.47

**Extractive Industries and Agriculture**

In contrast to the usual pattern of direct foreign investment—orientated heavily towards the extractive industries—both Brazil and Mexico in the post-war era have experienced very little foreign investment in their mining and petroleum industries.

In the petroleum industry this seemingly conflicting pattern can be easily explained by reference to the roles played in each of the two economies by their respective

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governments. In 1938, the properties of the principal private petroleum companies in Mexico were expropriated by the Mexican government. Since then the extraction, refining and distribution of petroleum in Mexico have been in the hands of a governmental corporation known as Petroleos Mexicanos (PEMEX). These developments, of course, have completely excluded foreign direct investment in the petroleum industry. In Brazil, provision was made under legislation in 1953 for a government controlled enterprise (PETROBRAS), without financial participation of foreign capital and with functions similar to those of PEMEX in Mexico. Although foreign enterprises engaged in petroleum distribution are permitted to continue operations in Brazil, this type of operation should more correctly be classified as trade.

Mining activity in Mexico, in contrast to petroleum, has been carried on chiefly by foreign enterprises. A survey of the industry showed that in 1947 sixteen large companies, accounting for more than 80 per cent of the country's total


49U.N. Department of Economic and Social Affairs, The International Flow of Private Capital, p. 46.
mining production, were owned by United States capital. In addition, almost all of the large mining companies in Mexico are export orientated. In 1955, 78 per cent of all mining production in Mexico was exported—chiefly to the United States. However, the slow growth of and the shifting pattern away from the Mexican mining industry, in spite of the high price of metals during most of the past fourteen years, reflects a number of difficulties, particularly in the sphere of taxation and governmental intervention, with which it has been faced in the post-war period. Reserves of high-grade ores have been depleted, and the search for new sources of supply has been inhibited by governmental regulations. More recently, the Mexican government made some effort to stimulate the industry. A new Mining Taxation and Development Act was brought into effect in 1956 with the object of encouraging investment, but the decline in world prices since 1956 and the imposition of import quotas on lead and zinc by the United States has further added to the difficulties facing the industry.


51 U.S. Department of Commerce, United States Investment in Latin America, p. 175.

52 F. Benham and H. A. Holley, The Economy of Latin
In Brazil, the Constitution of 1946 limits the participation of foreign investment in mining enterprises.\(^5^3\) This apparently explains the major reason why there has been no significant inflow of foreign capital into Brazilian mining during the post-war era.

Foreign investment in agriculture is usually confined to large-scale operations for export and is usually regulated by concession contracts. Most of the land available for foreign investment in Brazil is located in the interior of the country and not directly accessible for the exportation of its produce. Additionally, in Brazil, the government has been quite reluctant to grant title or concession for fertile lands to foreign interests.\(^5^4\) Finally, as a formal restriction, Brazil limits and forbids foreign acquisition of land in specific locations, particularly near border areas.\(^5^5\) In Mexico, land reform legislation limits the size of agricultural

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landholdings and large-scale agricultural operations.\textsuperscript{56} Thus, all of these factors have practically excluded foreign enterprise from the agricultural sectors in Brazil and Mexico. For example, the Bank of Mexico estimated that in 1960 foreign capital represented less than one per cent of the total investment in agriculture in Mexico.\textsuperscript{57}

**Banking and Financial Institutions**

The importance of foreign banks and other foreign private financial institutions has declined sharply since 1947 in both Brazil and Mexico. The number of foreign banks, including branches, in Brazil dropped from 80 to 42 between 1941 and 1951. In the same period the number of domestic banks and branches rose from 1,566 to 2,554.\textsuperscript{58} Both the rapid growth of domestic banking facilities and the liquidation of German, Italian and Japanese banks during World War II contributed to reduce the importance of foreign banking

\begin{itemize}
\item \textsuperscript{56}Report of the Combined Mexican Working Party, \textit{op. cit.}, p. 20.
\item \textsuperscript{57}Banco de Mexico, S.A., \textit{Informe Anual, 1960}, p. 94.
\item \textsuperscript{58}Instituto Brazileiro de Geografia e Estatistica, \textit{Anuario Estatistico do Brasil, 1951} (Rio de Janeiro: Instituto Brazileiro de Geografia e Estatistica, 1952), p. 221.
\end{itemize}
in Brazil. Additionally, for some years foreign banks have been subject to a measure of legislative opposition in Brazil. The principal objection has been that foreign banking, like foreign investments in commerce, does not involve substantial capital imports but operates largely with Brazilian capital and remits profits abroad. In 1941 a law was enacted providing for the liquidation of all foreign banks within five years. This law, however, was in effect superseded by the Constitution of 1946, which did not provide for any "naturalization" of banking institutions.\textsuperscript{59} In 1952, however, a bill was enacted which deprived foreign banks of the right to accept deposits.\textsuperscript{60}

In insurance, as in banking, the role of foreign enterprise tended to decline during the post-war period in Brazil. In 1940, foreign insurance companies accounted for about 25 per cent of the subscribed capital of all insurance companies in Brazil; while in 1951 their share had declined to less than 10 per cent.\textsuperscript{61}

Foreign owned banks and insurance companies in Mexico

\textsuperscript{59}Spiegel, \textit{op. cit.}, pp. 146-48.

\textsuperscript{60}U.N. Department of Economic and Social Affairs, \textit{Foreign Capital in Latin America}, p. 54.

\textsuperscript{61}Instituto Brazileiro de Geografia e Estatistica, \textit{op. cit.}, pp. 375-76.
have practically disappeared, largely as a result of restrictive legislation in these fields enacted in the 1930's and early 1940's. The only recent departure from this trend has been the participation of some United States firms in investment companies in cooperation with domestic interests.

Joint International Business Ventures

The association of domestic and foreign business ventures in both Brazil and Mexico, although by no means a new development, became far more frequent after the end of the Second World War than previously—the trend towards joint ventures having accelerated considerably in the years after 1953.

Data revealed by a series of studies conducted by


64 The Columbia University School of Law has conducted a survey of joint international business ventures. The problems, results and prospects of such ventures are examined in detail. The studies covering Brazil and Mexico have been summarized and concluded with other country studies in Wolfgang G. Friedmann and George Kalmanoff, Joint International Business Ventures (New York: Columbia University Press, 1961).
Columbia University on Brazil and Mexico indicated that joint ventures had been growing in importance as a form of foreign private investment, but that they were still quantitatively in the minority. In Brazil, a compilation as of October, 1958 revealed that there were some 1,496 such enterprises in the economy.65 The total capital of those firms was about $650 million, or somewhat more than 20 per cent of the total direct foreign investment in Brazil. In Mexico, figures of the Banco de Mexico indicated that 11 per cent of all new direct foreign investment during the period between 1950 and 1957 were in joint ventures.66 An overwhelming percentage of such investments (94 per cent in the case of Mexico) in both countries were in forms in which the foreign interest had majority control.67 However, there were several United States and European manufacturing groups which actually preferred minority participation, while cases of foreign financial control and domestic managerial responsibility were not unknown. Even more numerous were cases where the foreign partner accepted major responsibility for technical control and the domestic partner for managerial control.68

Motives of foreign enterprises for participating in

65 Ibid., p. 26. 66 Ibid., p. 27. 67 Ibid., p. 28.
68 Ibid., pp. 155-78.
joint ventures in both countries were summarized in the Columbia University studies under the following headings:

(1) the achievement of capital savings and the reduction of business risks; (2) the obtaining of management skills and the maintenance of employee morale; (3) the facilitating of sales; (4) the facilitating of vertical integration—combining an existing operation with a preceding or following stage of production; (5) the improvement of government relations; and (6) the achievement of good public relations.\(^6^9\)

The study indicated that both governments seemed to favor joint venturing on the broad grounds that it permitted local capital to participate more fully in the benefits of economic development, and that it transmitted technical and business know-how more rapidly and effectively than either purely local, or 100 per cent foreign owned ventures, and finally that it lessened the danger of foreign domination of an industry.\(^7^0\)

Finally, the growing number of joint ventures, particularly in manufacturing, reflected a "natural trend" in the economic development of both countries.

In earlier days many of such enterprises resulted from the association of a foreign supplier with a

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\(^{69}\text{Ibid.}, \text{pp. 134-51.} \quad ^{70}\text{Ibid.}, \text{pp. 129-30.}\)
domestic distributor, the former supplying the manufacturing experience and the latter the market knowledge that makes for successful partnership, while in more recent times the growing diversity and extent of industrial activities have multiplied the opportunities for association between domestic and foreign enterprises. Each has sought the assistance of the other, the domestic industrialist looking for solutions to such problems as the shortage of exchange, the dearth and high cost of domestic capital, and the technical and research facilities required by modern industry; the latter providing knowledge of local markets, established distributing facilities and the ability to cope with the growing complexities of Government relationships, particularly those in such fields as labor, foreign trade and exchange control.\textsuperscript{71}

**Concluding Observations**

The fields of private foreign investment were distinguished from various points of view for Brazil and Mexico. The distinction between extractive and manufacturing industries was important because they have differential effects on diversification and subsequently economic development. The investment in an extractive industry provides less employment and generates less income in the host country than if an investment takes place in the processing and further fabrication of raw materials and semi-finished products. In the two cases of Brazil and Mexico, both economies were highly favored in this respect in that they both were recipients of

\textsuperscript{71}\textit{Ibid.}, pp. 151-52.
principally manufacturing investments.

The distinction between import-replacing and export industries was also important because of the differences in their effects on the balance of payments of the developing economies; i.e., the problems of adverse terms of trade and fluctuating world prices. In an underdeveloped economy, investment in export lines generally coincide with extractive industries and primary products; whereas, import-replacing investment is, with few exceptions, for manufacturing for internal demand. Here again, both countries were favored with principally import-replacing type foreign investment.

Finally, the distinction between public utilities and other types of direct investments was important because privately financed public utilities provide social overhead facilities which are necessary for a simultaneous expansion in all sectors of the economy and for a sustained economic growth pattern. The private foreign investor in manufacturing,

72Investment in purely domestic goods, which are neither directly import-competing nor export-promoting, would not directly affect the balance of payments of the recipient country—except insofar as these goods may cause indirect substitution for imports, say through their effects on price and income or on the production of some other commodity which might reduce imports or increase exports via the complicated maze of input-output relationships.
finance and/or commerce--interested only in existing lines of profitable investment--cannot be expected to achieve such coordination and social productivity. It was in regard to this distinction that the pattern of private foreign capital in Brazil and Mexico was somewhat adverse. The lack of adequate private funds for social overhead in the two economies during the post-war period has had a number of effects. First, it has created bottle-necks, at times, in the transportation and power sectors of the economies. Secondly, it has induced an expanded flow of foreign public funds for this purpose. Thirdly, it has placed a further strain on the balance of payments and on the internal monetary and fiscal operations of both countries. Finally, it has offered justification for expanded Brazilian and Mexican governmental ownership and control of their respective economies.

The cases of Brazil and Mexico tended to point out that foreign investment in their manufacturing industries was positively correlated with their expanding stages of development. The recent expansion of their internal markets provided ample scope for such investment. In turn, the dynamic expansions of internal markets in the two economies were accelerated by tariff, quota and exchange policies integrated with expanded, publicly financed, social overhead
facilities. In Mexico these factors, in turn, were supported by an increase in the productivity and income of the agricultural sectors.

It was further observed in both cases under study that the expanded internal demand, the domestic growth patterns and the consequently balanced distribution of foreign capital—instead of being concentrated in one field or in the export sector—were all undertaken under integrated programs guided and stimulated by specific agencies affiliated with the respective Federal governments. Additionally, it was remarkable that in both cases, to a greater or less degree depending upon the product, tariffs played an important part in attracting foreign investment to manufacturing production and subsequently, at times, to the merchandising of their products. Moreover, the fields of foreign direct investment were remarkably influenced by the nature of the capital exporting country; i.e., by the lines of product in which the exporting country specialized and which were its specialized export products. This, of course, revealed an obvious link between the pattern of trade between the selling and the purchasing country and the pattern of the former's investment in the latter.

Finally, it appears that a wider range of considerations
like preservation of markets abroad for those lines of activity in which the capital exporting countries had developed a specialized body of skill and capital, and overall long-run profitability of the parent companies with their integrated activities, were apparently more important than the rate of profits on specific lines of investment in determining the pattern of direct investment. The lack of correlation between rates of profit on specific lines of investment and relative amounts of investments in them is evident from Table XIV.

PUBLIC AND QUASI-PUBLIC BORROWING

The governmental and the governmentally guaranteed borrowings during the post-war period in both Brazil and Mexico were devoted primarily to the railways, public utilities and general purpose public works, all belonging to the category of social overhead capital.73

73 This, of course, discounts the almost $1,500 million of quasi-public medium-term industrial credits in Brazil and the $650 million of such capital in Mexico. These foreign loan funds, by their very nature, went mostly for industrial credits on such items as machinery and spare parts. Presumably, the bulk of these loans went into the manufacturing industries--both public and private operations--where the payback period tends to be much shorter than in the social overhead industries.
### TABLE XIV

**UNITED STATES DIRECT INVESTMENTS AND EARNINGS RATIOS**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Percentage Distribution of U.S. Foreign Direct Investment in 1960&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Ratios of Earnings to Equity on U.S. Corporate Investments in Brazil</th>
<th>Mexico</th>
<th>Latin America&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Utility</td>
<td>21.0</td>
<td>15.0</td>
<td></td>
<td>2.5</td>
</tr>
<tr>
<td>Mining &amp; Petroleum</td>
<td>9.0</td>
<td>20.0</td>
<td></td>
<td>14.9&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>54.0</td>
<td>49.0</td>
<td></td>
<td>22.5</td>
</tr>
<tr>
<td>Other</td>
<td>2.5</td>
<td>5.5</td>
<td></td>
<td>25.0</td>
</tr>
<tr>
<td>Commerce</td>
<td>13.5</td>
<td>10.5</td>
<td></td>
<td>35.4</td>
</tr>
</tbody>
</table>


<sup>c</sup>Excluding petroleum production in Venezuela.

The use of foreign borrowings and guarantees by the Brazilian and Mexican governments, the main channels of foreign public capital inflow in the two countries, was distributed between the various sectors of their respective economies in approximately the same pattern. For example, during the period between 1947 and 1960, the pattern of the Export-Import Bank's and the International Bank for Reconstruction and
Development's loans to Brazil were distributed as follows: Transportation (predominantly rail, but including air, water and roads as well) 33 per cent of the total, electric power 35 per cent, heavy industry (largely governmentally owned) 18 per cent, agricultural facilities and equipment 5 per cent, and mining 9 per cent. Likewise, the pattern of distribution for Mexico was as follows: Transportation (predominately rail, but including air, water and roads as well) 41 per cent of the total, electric power 30 per cent, heavy industry (largely governmentally owned) 11 per cent, irrigation projects 9 per cent, agricultural projects and equipment 7 per cent, and mining 2 per cent. As is quite apparent from the above and Table XV, the bulk of the long-term foreign debt in both countries was tied to and used for transportation and power overheads.

Transportation

In the years prior to 1954 in Mexico, the maintenance and expansion of the railroads and highways and their services had failed to keep pace with the greatly increased use of their facilities. However, since 1954 a comprehensive program of rehabilitation, carried out with the aid of over $250 million in I.B.R.D. and Export-Import Bank loans (see Table XV)
### TABLE XV

**ESTIMATED AMOUNTS AND DISTRIBUTION OF AUTHORIZED EXIM BANK AND WORLD BANK GROSS PUBLIC LOANS IN THE PERIOD BETWEEN 1947-1960**

<table>
<thead>
<tr>
<th></th>
<th>Brazil</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount</td>
<td>Per Cent</td>
</tr>
<tr>
<td>Transportation</td>
<td>$313</td>
<td>33</td>
</tr>
<tr>
<td>Electric Power</td>
<td>326</td>
<td>35</td>
</tr>
<tr>
<td>Heavy Industry</td>
<td>173</td>
<td>18</td>
</tr>
<tr>
<td>Irrigation</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Agriculture</td>
<td>33</td>
<td>5</td>
</tr>
<tr>
<td>Mining</td>
<td>91</td>
<td>9</td>
</tr>
</tbody>
</table>

*a* In a number of Brazilian and Mexican cases, the borrowings from the United States were not tied to any specific projects and are thus excluded from this table. These funds were added to the over-all pool of foreign exchange resources and were disbursed through the medium of the governmentally sponsored banks, chief among which were the Nacional Financiera, S.A. in Mexico and the National Bank for Economic Development in Brazil, to both private and government expenditure according to the requirements of the over-all balance of payments and industrial policies. Public Law 480 funds from the United States, for example, are not included in the amounts in this table. However, the bulk of these loans to Brazil went to finance the social overhead facilities of hydroelectric power and railway transportation. Public Law 480 funds loaned to Mexico were invested primarily in facilities to process agricultural produce. However, some funds were disbursed to light industries manufacturing for consumer goods in Mexico. "U.S. Farm Surpluses Finance Development Loan for Brazil," *United States Department of State Bulletin, XXXVI* (January 28, 1957), 136-37. See also "United States and Mexico Sign Development Loan Agreement, United States Department of State Bulletin, XXXVIII* (January 20, 1958), 103; U.S. Department of Commerce, *Export-Import Bank of Washington—Report to the Congress for the Twelve Months Ending June 30, 1960* (Washington, D. C.: U. S. Government Printing Office, 1960), pp. 178-81.

*b*Millions of Dollars.

**SOURCES:** Data concerning I.B.R.D. loans was adapted from Table XI in Chapter IV of this study. Data concerning Exim Bank loans was adapted from the following sources:
has brought the services of most railways into line with the needs of their respective areas. More than three-quarters of the Mexican railway's tracks were relaid, diesels replaced steam locomotives, older freight cars were repaired, new ones were purchased and the communications systems were modernized.\textsuperscript{74}

In addition, Mexico also carried out successive road improvement programs via foreign borrowing and, as a partial result, the country had in 1960 about 28,000 miles of asphalt and gravel highways. It has been pointed out, however, that further expansion should have been simultaneously undertaken with the rest of the economy in the post-war period. Road traffic in Mexico doubled in the ten years between 1950 and 1960 and, as a result, many of the existing roads were not

\textsuperscript{74}"Mexican Railways Get Exim Loan Through Alliance," \textit{Foreign Commerce Weekly}, XXXXXVII (June 4, 1962), 1036.
adequate for the volume of traffic they had to carry. In 1960, some areas of rural Mexico were relatively isolated from the rest of the country because of inadequate surface transportation. Partially to offset this imbalance, the Mexican government has belatedly begun to construct or reconstruct 8,900 miles of highways.\textsuperscript{75} In this recent program and expansion (1958), the I.B.R.D. alone lent some over $25 million to cover the foreign exchange costs of building or reconstructing thirteen of the roads.\textsuperscript{76}

Whereas, Mexico's major transportation problems were concerned primarily with a widely dispersed and antiquated railway and highway system—which failed to provide adequate transportation for produce from the hinterland to the industrial centers of Mexico and to the markets abroad—Brazil's major transportation problems were the result of a concentration of economic growth and industrial development in the areas surrounding Rio de Janeiro and Sao Paulo. All means of transportation in this region were under heavy pressure to meet ever-increasing traffic loads. By the early 1950's the


railroad system had become "dangerously inadequate" and the highways in this strategic region had deteriorated under heavy traffic. To meet these needs, the I.B.R.D. and the Exim Bank made transportation loans to Brazil for a total of over $300 million in the period between 1947 and 1960. These loans helped principally the government-owned railroads to increase their freight carrying capacities and to improve their commuter services. However, some of this public foreign capital was employed in the Brazilian highway program. For example, the highway system of the state of Rio de Janeiro in 1953 was deteriorating under the pressure of heavy industrial and population growth. A construction program started in 1939 had added 2,200 miles to the State's road network by 1953, but almost one-half of the total mileage of these new roads already required in 1953 improvement and expansion to meet increased traffic demands. To finance equipment for this road maintenance and for new highway construction the I.B.R.D. and the Exim Bank lent the Brazilian


78 Adapted from data and sources in Table XV.

government almost $30 million.\textsuperscript{80} The new equipment permitted a shift from hand labor to mechanized methods in many cases and "resulted in better maintenance at reduced costs."\textsuperscript{81}

**Electric Power**

The development of electric power was in Brazil and Mexico—as in most underdeveloped countries—one of the major keys to their significant post-war economic development. With notable success in allocating public funds and with aid from the major world lending institutions for this sector totaling almost $200 million, Mexico undertook a program of power expansion which doubled its generating capacity in the period between 1950 and 1960.\textsuperscript{82} Included in this total of public capital from abroad was almost $125 million in five loans from the I.B.R.D. alone. These five I.B.R.D. power loans, borrowed by the Commission Federal de Electricidad and by the Nacional Financiera since 1950, assisted the addition of almost 1.3 million kilowatts of new capacity throughout Mexico and "have helped power supplies to keep up with the

\textsuperscript{80}Adapted from data and sources in Table XV.


\textsuperscript{82}Adapted from data and sources in Table XV.
growth of industry and population." Although most of this increase met the demand of consumers in Mexico's largest cities, this new supply of electricity also did much to stimulate the development of light industries outside the major population centers, to introduce the benefits of rural electrification to the farm lands, and to make possible the electrification of homes, schools and hospitals located outside the industrial centers.84

Until recently, very little of Brazil's immense hydroelectric potential—estimated at nearly 15 million kilowatts—was developed. In 1949 the generating capacity of the entire country was only 1.883 million kilowatts, and power shortages were threatening Brazil's continued industrial progress. A major part of this capacity was installed in thermal units which produced relatively high cost power and required large foreign exchange expenditures for fuel. An investment program of substantial proportions was needed to increase power supplies as rapidly as possible. Even more capital was required if hydroelectric plants, which produced cheaper power


84Ibid., pp. 64-65.
but which had a higher initial cost, were to be built.  

However, since the beginning of the post-war period--most notably since 1953--foreign public capital has been helping to fill the gap between Brazil's financial resources and her power needs. Public foreign loans for electric power development in Brazil had in 1960 totaled over $326 million--this sector in Brazil has received more public loan capital from the international institutions than any other country in Latin America. With these funds Brazilian power companies, both public and private, installed almost 2 million kilowatts of new capacity between 1950 and 1960. While some of this power involved thermal units that could be brought into production more rapidly to meet immediate demands, most of the increase utilized the country's hydroelectric potential. This shift away from thermal power saved Brazil millions of dollars in foreign exchange for imported fuel.

One of the best examples of the I.B.R.D.'s role in helping Brazil to develop its natural resources was the

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86Adapted from data and sources in Table XV.

intensive development of the Rio Grande River. At Furnas Rapids, 300 miles north of Sao Paulo City, a combination of private companies and public power authorities built the largest hydroelectric project ever undertaken in Latin America. The I.B.R.D. financed most of the foreign exchange cost of the project with a loan of $73 million. The completed project provides a 50 per cent increase in the power available to industrial and residential consumers in south-central Brazil, where four-fifths of the country's industry and much of its agriculture are located.  

Most of the increase in power financed by public foreign debt was, of course, needed in Brazil's two largest cities, Rio de Janeiro and Sao Paulo. Both of these cities were supplied with power by the Brazilian Traction, Light and Power Company, the largest private enterprise in Brazil. With the help of $120 million in governmentally-guaranteed I.B.R.D. loans, this company added more than one million kilowatts to its capacity in the ten years between 1950 and 1960.  

Outside this area of rapid industrial growth, public

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foreign capital also helped to finance the development of electric power for Brazil's impoverished northeast. Two relatively large cities, Recife, the most important port in northern Brazil, and Salvador, are located in this region, but "their economic progress has been hampered by inadequate and expensive electric power." However, "new hope for the northeast has come for the availability of hydroelectric power," financed in part with a $15 million I.B.R.D. loan.  

**Agriculture**

Agricultural facilities and machinery, between 1947 and 1960, absorbed almost $35 million in Brazil and $45 million in Mexico from the I.B.R.D. and the Export-Import Bank alone.  

These figures would certainly be much greater if consideration were also given to all the other sources of public loan capital; i.e., medium-term credits, governmental grants, technical assistance and Public Law 480 funds. Most of the agricultural loans from the I.B.R.D. and the Export-Import Bank to Brazil were for machinery; whereas, in Mexico the bulk of all such loans consisted mainly of allocations for

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91 Adapted from data and sources in Table XV.
irrigation projects.

Production from irrigated land in Mexico in 1960 represented more than a third of the total value of agricultural production and accounted for nearly a third of total commodity exports. Most of the post-war expansion of irrigated land was the result of public investment and public borrowings from abroad. These were mainly in large scale projects, which in 1960 encompassed more than 6.7 million acres. The agricultural sector of northwest Mexico illustrates one such case. In 1945 the wheat harvest of the region was 20,000 tons; in 1957 it was 600,000 tons and it had become Mexico's chief wheat growing region. In the Yaqui valley alone cotton production in 1949 was 1,000 tons; by 1957 it was 50,000 tons. In 1957, over 7,000 car loads of fresh vegetables were exported from this region to the United States; whereas, prior to 1945 the region had hardly been self-sustaining in vegetables.

The above results were obtained by the application of large-scale irrigation, via public domestic and external borrowings, to relatively fertile coastal lands which had previously suffered from long droughts alternating with floods.

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"Where a few years ago the arid plain stretched to the sea, there are now heavy crops of wheat, cotton, corn, sugar cane, vegetables and fruit." 93 This project has added an estimated $20 million to the net annual income from crop production in northwestern Mexico. 94

Other

The distribution of other governmental borrowings and quasi-public guarantees of long and medium-term credits and loans went primarily into the heavy industries of the two economies.

Finally, mention should be made of the fact that, although grants from the United States and the United Nations were not direct provisions for such overhead facilities as railways and hydroelectric power plants, they still constituted investments in the social overhead of both economies, i.e., technical studies, administration, health and education.

Concluding Observations

It has been contended by a number of writers in the area


94 Ibid., p. 18.
of economic development that in the beginning stages of
development a country should tend to have a relatively high
proportion of those physical assets—namely, social overhead
via transportation, power, light and other systems of this
nature—which generally provide little or no direct income.
Moreover, after a period of time, as other industries are
developing—partly under the stimulus of the availability of
such external economies—their rate of utilization and hence
effectiveness and incomes would increase.95

This, of course, has been the general historical pat­
tern of such investments in the development of the Western
World and in Japan; i.e., railroads in the United States and
in Canada during the late 19th century and early 20th century
are certainly illustrative of the case described above; the
transportation and power facilities in Japan at the turn of
the present century affords the reader with another case of
this nature.96 However, the experience and pattern of invest­

95Nurul Islam, Capital and Economic Development
(Tokyo: Charles E. Tuttle Co., 1960), p. 71. See also Ragnar
Nurkse, Problems of Capital Formation in Underdeveloped Coun­
tries (Oxford: Basil Blackwell, 1953), pp. 91-92; and A. H.
Hanson, Public Enterprise and Economic Development (London:

96Hanson, op. cit., p. 88.
ment in such overhead facilities via post-war foreign public debt in both Brazil and Mexico tends to reveal an interesting paradox to the general case. By the nature of the two cases, the provision of such overhead facilities in Brazil and Mexico were made, not in any great anticipation of demand, but rather in response to a pre-existing and simultaneous expansion of demand. Generally, the growth of social overheads in Brazil and Mexico were part of integrated patterns of development with other industries, which were simultaneously fostered and assisted by the state, so that the provision of such overhead facilities and the rate of their social utilization tended to keep in step with the sectors general growth and development. This, of course, was most notable after 1953 when both governments released sponsored studies and statements pertaining to this concerted governmental action. Although Mexico was the more notably successful in this integrated economy program, the recent placement of such social overheads in Brazil was, nevertheless, the direct result of such planning by the government there. The rehabilitation of the northwestern railways in Mexico provides an excellent and succinct illustration of simultaneous expansion. Provision was made of overhead facilities in the form of railways and irrigation projects with simultaneous attempts by the
government to settle agricultural population by the provision of land. The government expenditures consisted not only of direct capital investment—which included purchases of old assets from private foreign investors—but also of free gifts of lands, loans and sometimes even subsidies to induce further industrial investment by companies privately run. These factors, in turn, led to a rapid increase in the over-all profitability of such an integrated project with the rise in land values, crop prices, exports of produce to the United States and income levels in general.

This type of simultaneous expansion—social overheads balanced with complementary industries utilizing their services—in both Brazil and Mexico generally avoided a number of limitations or pitfalls which the countries in the more general case experienced. For example, the "lumpiness" of the size of great amounts of "anticipation investment" tended to prevent proper adjustments to the "size, income and needs of the population."

Additionally, because of the uncertainty involved in providing for the future there generally was miscalculation and over or under-provision—over-provision was

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the general rule. Moreover, the mere provision of such facilities, without other conditions of development being present, did not ensure sufficient growth of other industries. However, it must be pointed out that if the provision of overhead facilities is strictly limited to the existing demand, as happened in a number of the Brazilian railways and highways and in a number of Mexican power facilities, its stimulating effect on further development will undoubtedly be thwarted. Moreover, the railway and power systems in both Brazil and Mexico could have absorbed more foreign capital, as was evidenced by their generally high rates of social productivity and by the reports of the successive railway, communications and power committees appointed by the two governments and by the international institutions on the

98"It is conceivable, therefore, that some of these public works would turn out to be in the last analysis, an act of faith. However hard it may be for the pioneering spirit that opened up the new countries to apply itself to low-income areas today, not much can be achieved without that spirit, and no international organization concerned with the development can remain untouched by it." Ragnar Nurkse, "The Problem of International Investment Today in the Light of Nineteenth Century Experience," Economic Journal, LXIV (December, 1954), 755.
inadequacy of the respective systems in both countries. Finally, foreign public capital's stimulus to development via railways and port facilities in both economies was limited not only by their inadequacy but also by their technical layout and rate policies which in many cases heavily discriminated in favor of linking the ports and their particular hinterlands. This program apparently was accomplished with a view to encouraging exports and imports rather than to linking the different regions of the country and securing an extension of an internal market and an internal movement of labor and materials.

From the point of view of direct profitability, many of the public utilities financed by external debt in the two economies were not paying propositions. In 1952, for example,


100 See the various loans and development projects in Brazil and Mexico in the International Bank for Reconstruction and Development annual report series described in the preceding section of this chapter.
both the private and the governmental railways in both coun-
tries were earning less on investment than the rate paid on
external borrowed capital. However, the productive use of
such social overheads should be assessed, not in terms of
direct profitability, but in terms of its indirect contribu-
tions to the development of industry and trade in both coun-
tries and to the long-run growth of the economies. The
expansion of agricultural produce and exportation in Mexico,
the import substitution in both economies and the cumulative
growth in the different regions of both economies certainly
brought increasing exchange revenue economies and economies
of scale. Special utility and transportation rates were also
offered in both economies for the development of particular
industries and localities. All of these factors, coupled
with the favorable characteristics in the post-war internal
markets of both economies, tend to indicate that such public
investment have held a strong influence and stimulus on the
two rapidly expanding nations.

101U.N. Department of Economic and Social Affairs,
Foreign Capital in Latin America (New York: United Nations,
CHAPTER VI

THE NATURE AND PROBLEMS OF FOREIGN CAPITAL SERVICE

The capacity of a borrowing country to earn, through trade or other means, the currency of the lender (or currencies convertible into that of the lender) tends to set limits on the degree to which foreign capital can be effectively employed in the economic development of an economy. This concept has been termed "the capacity to service foreign capital."\(^1\)

While numerous non-economic elements may seriously influence the 'willingness' to service external debt from time to time, the 'capacity' to do so ultimately rests on two economic factors. In the first place, the debtor country's economy must be able to do without an amount of domestic income and savings

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\(^1\)Brazil and Mexico in the post-war period have had four principal types of investment or debt service: (1) transfers of earnings on private direct foreign investment; (2) interest and amortization payments on long-term loans (mainly from the I.B.R.D. and the Export-Import Bank); (3) interest and amortization payments on medium and long-term credits and loans extended by foreign suppliers, governments, banks and the International Monetary Fund; and (4) external debt service payments arising from the purchase of foreign owned railroads and utilities and service payments on previously defaulted and privately held bonds issued before the 1930's.
equivalent to the debt service. Secondly, the debtor country must be in a position to convert such segregated savings into the required foreign exchange. And if debt service is increasing, there must also be an increase in both the capacity to save and the capacity to transfer savings. . . .2

In the short run, there may be a discrepancy between growth in income and growth in savings, and between the capacity to save and the capacity to transfer savings abroad. Despite slow growth in savings, income may grow fast for a time . . . if the terms of trade are improving. . . . On the other hand, if inflationary fiscal and monetary policies are pursued, difficulties in the balance of payments are likely to emerge, despite a growth in income and savings. An inflationary situation results in an excessive pull of the domestic market for potential exports and particularly for imports. Thus the conditions necessary to assure a large or growing margin for debt service may be impaired notwithstanding a rise in income or even in savings. . . .3

The analysis of a change in foreign capital-servicing capacity over time, therefore, requires an examination of the performance of debtor countries in both the field of income and savings and the field of foreign trade via the balance of payments. That performance in both Brazil and Mexico will be appraised in this chapter.

Thus, the aim of this chapter is to review the economic development of both Brazil and Mexico to see whether their


3Ibid., pp. 58-59.
post-war increases in "foreign capital service" have been associated with corresponding increases in their "servicing capacities" and to see what effect this has had on their respective post-war development. For this purpose, an attempt is made to relate the various indicators of economic growth and the magnitude of foreign capital service obligations. Service payments are expressed as a percentage of income, savings and foreign exchange receipts. It will be shown that while all these ratios are informative, the most relevant one for both Brazil and Mexico from an analytical point of view is the ratio of public debt service to foreign exchange receipts, particularly in the context of a short-run decline of external earnings.

Moreover, the proportion of foreign exchange earnings absorbed by aggregate service payments depends on the one hand, on the flows and patterns of external receipts and, on the other hand, on the volume and patterns of past capital flows and their rates of return and terms of payment. Accordingly, it is necessary to examine each of these factors in the balance of payments and in the economies of Brazil and Mexico in order to understand the nature of their service capacities.
RELATIONSHIP BETWEEN SERVICE PAYMENTS AND DOMESTIC INCOME AND SAVINGS

The circumstances governing the generation of a higher level of income by an increase in the average rate of saving have been discussed in Chapter II of this study. The first requirement was an increase in the per capita income and not merely an increase in total income. Moreover, the generation of a higher level of saving was not a sufficient condition for economic development, if, for example, such savings were devoted exclusively to the meeting of external service payments instead of increasing the rate of domestic capital formation in the underdeveloped economy. To curtail internal development projects to service foreign capital would militate against the long-run objective of foreign capital, i.e., to accelerate the rate of capital formation and growth of income in the recipient countries. The alternative is either for the foreign investor and lender to wait until, through the successive ploughing back of the marginal savings, a higher level of income and of savings and investment is reached, or to augment sufficiently initial inflows of capital so as to enable a larger increase in income and savings. The nature and amount of capital inflows over a period of years are thus crucially important in the assessment of the capacity to
service foreign capital. If a certain amount of capital inflow takes place in one year and stops thereafter, its stimulus to development would be much more limited than if it is sustained over a number of years until a sufficient rate of growth in income is attained. Such a small once-and-for-all inflow of capital, in giving rise to a certain increase in income, may well be eaten up by an increasing population or an increase in consumption (as there is usually already heavy pressure for increased consumption). In such a situation, the country would not be able to service the foreign capital. Thus, the inflows of capital over a period of years have to be sustained and be large enough to enable a sufficient rise in per-capita income, out of which both the servicing of it and a higher rate of domestic savings and investment can be attained.

Relationship to Income

All other things being equal, the size of the ratio of service payments to income indicates the effort which a debtor country is called upon to make in providing foreign capital service. The higher the capital service, expressed in relation to income, the more effort is involved in making the service payments. As far as fixed public debt service is
concerned, the ratio is a measure of rigidity built into the economic system by importing foreign loan capital. While the absolute level of income will decline in the event of a depression or some other short-term fluctuation, the scheduled interest and amortization payments will still have to be made. Consequently, the ratio of public debt service to income will rise and the remaining or residual income available to meet consumption and investment requirements will contract. In this sense the public debt service ratio indicates the intensity of the strain to which an economy may be subjected in a crisis year.4

Both Brazil and Mexico have been notable in the post-war period for rapid growth rates in real income. However, evidence suggests that aggregate service payments in Brazil, and particularly public debt service, rose even faster. The foreign capital service payments abroad relative to national income in Brazil, expressed in successive six and eight year averages, from 1947 to 1960 were 2.2 per cent and 2.8 per cent.5 The highest percentage was reached in the latter

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4David Finch, "Investment Service of Underdeveloped Countries," *International Monetary Fund Staff Papers*, II (September, 1951), 60-67.

5Adapted from Computational Appendix in this study and from International Monetary Fund, *Balance of Payments Yearbook* series.
period between 1955-1960. The service charges continuously increased at a rapid rate throughout the post-war period, but especially so after 1952. The growth of national product, although rapid, did not actually keep pace with the service charges in this latter period. This can be partially explained by the fact that much of the investment in the latter period was in slow-yielding social overhead with a long gestation period rather than in quick-yielding directly productive projects. The result has been that the rate at which the investment was yielding results fell short of the rate at which the foreign debt and service charges were accumulating.

In Mexico, on the other hand, foreign capital service payments relative to national income, expressed in successive six and eight year averages, were 2.7 per cent and 2.3 per cent from 1947 to 1960. Although the aggregate amounts of foreign capital service payments increased in Mexico quite substantially during the post-war period, it appears that her income increased at a relatively greater rate. This trend, of course, has given Mexico even greater capabilities for internally generated economic development.

The above ratios indicate a relatively high portion of

6Ibid.
national income in both countries providing for foreign capital service, i.e., in a survey undertaken in 1955 by the I.B.R.D., only thirteen other countries in the world had higher ratios\textsuperscript{7} and the greatest majority of these other countries were not experiencing any significant amounts of economic development. This possibly indicates that large and continuing amounts of foreign capital, properly applied in a growing economy, can be effectively absorbed and apparently serviced. Moreover, the greatest burden in both economies has been public debt service rather than private direct investment income. This also was in contrast to the usual trend in the other countries. This heavy burden of public debt service has, however, made the economies of both countries relatively susceptible to short-term fluctuations in the balance of payments, as this study will point out in a following section of this chapter.

Relationship to Savings

A satisfactory growth in real income is one long-run condition for the successful servicing of external capital. Another, however, is growth in domestic savings. The higher

\textsuperscript{7}Avramovic, \textit{op. cit.}, pp. 176-77.
the portion of income that is saved and the faster the growth of savings relative to income, the easier it is to reconcile the claims of foreign capital service and domestic capital formation.

The proportion of gross savings devoted to the servicing of foreign capital is determined partly by the aggregate flow of domestic savings and partly by the role of foreign capital relative to the nationally-owned capital in the country's economic development. It also depends on the rate of return on foreign capital and on the terms of repayment.8

A high ratio of foreign capital service to savings implies that a large proportion of the currently generated savings are committed to providing a return to foreign capital, while the remainder is available for domestic capital formation. Table XVI below shows the proportion of gross domestic savings absorbed by service payments in Brazil and Mexico in the two periods under study.

As is evident from this table, Brazil experienced a significant increase in her ratio of service payments to gross savings.

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## TABLE XVI

PROPORTION OF GROSS DOMESTIC SAVINGS ABSORBED BY SERVICE PAYMENTS

<table>
<thead>
<tr>
<th>Country</th>
<th>Early Period</th>
<th>Service Payments as Percentage of Gross Savings</th>
<th>Latter Period</th>
<th>Service Payments as Percentage of Gross Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>1947-1952</td>
<td>14</td>
<td>1953-1960</td>
<td>20</td>
</tr>
<tr>
<td>Mexico</td>
<td>1947-1950</td>
<td>18</td>
<td>1953-1960</td>
<td>15</td>
</tr>
</tbody>
</table>


Moreover, in Brazil, public debt service accounted for more than 80 per cent of the ratio in the latter period. This high proportion of public borrowing in Brazil would, by its very nature, tend to increase the ratio.

Mexico, on the other hand, experienced a decrease in her ratio. Accounting for this favorable decrease in Mexico was the fact that domestic savings increased at a faster rate than foreign capital service payments in the latter part of

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9 Adapted from data in the International Monetary Fund, *Balance of Payments Yearbook* series.
of the post-war period. Moreover, public debt service during the latter period in Mexico accounted for less than 50 percent of the total. This, of course, helps to further explain the favorable decline in her ratio of service payments to gross savings.

In the majority of cases in underdeveloped countries, low ratios of service payments to total savings are accompanied by high rates of savings to total product, and vice versa, thus suggesting that the two ratios are inversely correlated. However, this is not invariably true, as the two cases of Brazil and Mexico point out.

Since the rate of income growth that can be achieved with domestic resources primarily depends on the level of remaining savings and the relation they bear to total product, and since a given ratio of service payments can be associated with either a low or a high level of remaining savings, attention should be directed to the latter variable and to its changes over time. In this respect, Table XVII presents rates of "gross remaining savings" in the late 1940's and in the 1950's for both Brazil and Mexico.

\[ \text{10} \text{Tbid.} \quad \text{11} \text{Avramovic, \textit{op. cit.}, pp. 74-76.} \]
### TABLE XVII

RATES OF GROSS CAPITAL FORMATION FINANCED BY NATIONAL RESOURCES

<table>
<thead>
<tr>
<th>Country</th>
<th>Years&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Rate (Per Cent)</th>
<th>Years&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Rate (Per Cent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>1948-49</td>
<td>14.0</td>
<td>1950-59</td>
<td>15</td>
</tr>
<tr>
<td>Mexico</td>
<td>1946-48</td>
<td>10.3</td>
<td>1950-59</td>
<td>15</td>
</tr>
</tbody>
</table>


The first conclusion emerging from Table XVII indicates that, although Brazil has experienced significant increases in her foreign capital servicings during the post-war period, this has not apparently hindered her domestic capacity to save. Moreover, in both cases, the volume of remaining savings not only kept pace with rising real incomes, but tended to increase faster. Gross savings as a proportion of total income showed a very substantial increase in Mexico (from 10.3 per cent to over 15 per cent between the two periods), even
though Mexico's terms of trade remained relatively unchanged over the entire period.\textsuperscript{12} With such rising rates of marginal savings, Mexico was able to greatly increase her rate of domestic capital formation and still make her heavy foreign capital service payments.

**RELATIONSHIP BETWEEN SERVICE PAYMENTS AND BALANCE OF PAYMENTS**

Like income and savings, growth in external receipts has to provide resources for two competing claims: service payments and import requirements. Accordingly, the following section analyzes the claim of service payments on the Brazilian and Mexican balance of payments.

Growth in the external earnings of both Brazil and Mexico and the growth in their service payments in the post-war period are presented in Figures I-IV. The value of Brazil's exports of goods and services increased from $1,220 million in 1947 to only $1,430 million in 1960, an increase of only 17 per cent in the fourteen years. Moreover, after 1954, Brazil actually experienced a decline in both the

\textsuperscript{12}For an explanation of service payments relative to terms of trade in both Brazil and Mexico, see the following section of this chapter concerning "Growth of External Earnings."
volume and value of her exports. Mexico, on the other hand, experienced a more favorable increase in her exchange earnings on current account. The value of Mexico's exports of goods and services increased from $670 million in 1947 to almost $1,500 million in 1960, an increase of over 124 percent in the fourteen years.

It may be interesting to examine the extent of the fluctuations in the current receipts of the two countries. From the short-run point of view, in both of the countries, the fluctuations in current receipts had a much greater amplitude than year-to-year fluctuations in the foreign capital service payments (including amortization, interests and dividends) as a whole. This trend is in conformity to the usual pattern of other developing economies in the past, where current receipts have fluctuated much more than service payments. In the long-run, however, the increase in current receipts for Mexico tended to show a much more consistent upward pattern. Brazil, on the other hand, experienced relatively more severe fluctuations with no discernible trend.

Like the ratio of service payments to income and

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savings, the magnitude of the proportion of foreign exchange earnings absorbed by foreign capital service indicates the effort which a debtor country must make to meet foreign claims. As indicated in a previous section of this chapter, the aggregate service payments of Brazil and Mexico rose by almost 450 per cent and 250 per cent respectively between 1947 and 1960. As a consequence, the share of external earnings absorbed by service payments increased from about 9.1 per cent in 1947 to a phenomenal 42.5 per cent in 1960 for Brazil and from about 17 per cent to 26.3 per cent between the same two periods for Mexico.

Since public debt service expanded faster than aggregate service payments for both countries in the latter period, the increase in the ratio of public debt to external earnings was even greater. Subsequently, this high ratio of fixed service commitments to external earnings implies a considerable short-run rigidity in both Brazil's and Mexico's balance of payments; and the post-war increase in this type of ratio in both countries suggests that this element of rigidity has become more significant.

\[14\] From $112 million in 1947 to $610 million in 1960 for Brazil, and from $114 million in 1947 to $395 million in 1960 for Mexico. See Figures I-IV in this study.
When export receipts fall, either due to a recession in external demand, or because of a breakdown in the country's supply of a principal export commodity, the entire impact of the fall must be borne by imports or the country must run a large deficit in the current balance of payments. The higher the ratio of fixed service payments to pre-crisis external earnings, the greater the strain which a debtor country may experience when external earnings contract sharply.\textsuperscript{15}

The adverse turn in Brazil's terms of trade and in her value and volume of exports after 1955 vividly illustrates this situation.

In summary, the ratio of total service payments to foreign exchange earnings in both Brazil and Mexico during the post-war period may be taken to imply a long-run curtailment of external earnings which would otherwise have been available for financing domestic consumption and investment requirements. Because these competing claims were strong (especially so in Brazil), it could be argued that both countries will find it more difficult continuously to service foreign capital if the proportion of their foreign exchange earnings absorbed by debt service payments continues to grow.

However, more important from the long-run point of view was the behavior of external receipts which remained after the foreign capital service had been paid. In Brazil, \textsuperscript{15}

\textsuperscript{15}Finch, \textit{op. cit.}, p. 67.
in which there was a long-run tendency for exports to stagnate or decline, the high and rising ratio meant a weakening of foreign capital-servicing capacity. On the other hand, in Mexico, where export earnings remaining after service payments were also increasing rapidly, the high ratio went hand in hand with the capacity to finance a satisfactory volume of imports and did not necessarily impede the process of secular growth. In Mexico it indicated primarily--although in a crude manner--that the role of foreign capital in fostering economic growth was considerable. In Brazil, export stagnation, while tolerable within a decade or two, is unlikely to be a lasting sustainable position, particularly with her relatively high income growth target and her increasing burden of foreign capital service. "... looking at debtor countries as a whole, the assumption can safely be made that growth in external earnings is a basic condition both for prospective growth in income and for the maintenance of continuous debt service."\(^16\)

**Growth of External Earnings**

From the long-run point of view, there is little doubt

\(^{16}\)Avramovic, *op. cit.*, p. 91.
that a rise in exports is a pre-requisite to sustained growth in income. Historical evidence has shown that, with the possible exception of the Soviet Union, any country that has achieved a continuous growth in income over a long period has also experienced a steady rise in merchandise and foreign capital imports, which in turn has required a growth in exports.17

The growth of current receipts for Brazil in the post-war period not only failed to materialize, but actually declined in value after 1954. In Mexico, on the other hand, external earnings not only increased, but increased at a relatively more stable and diversified pace. These inter-country differences in the behavior of current receipts, which were favorable in Mexico and unfavorable in Brazil, were largely due to circumstances beyond the country's control or to sheer chance.

A United Nations publication stresses that in the post-war period exports of primary-goods-producing countries tended to grow at a lesser rate than those of industrial countries, for:

\[ \ldots \text{the demand of importing countries for primary} \]

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products has increased more slowly than the growth in their income and output. For the industrial countries, technological changes leading to economies in use of raw materials and to substitution of synthetic for natural raw materials, shifts in the structure of production towards industries less dependent on imported raw materials, the increase in the degree of fabrication of manufactures, the income inelasticity of demand for foodstuffs and the greater protection of domestic agriculture, have all contributed to weaken the demand for imported primary products relative to income and output. And in trade among primary producing countries, the demand of importing countries has similarly been moderated by the development of domestic production of primary products.\textsuperscript{18}

What makes the case of Brazil striking, even among underdeveloped countries and especially when taken relative to Mexico, is the fact that the quantum of exports did not increase at all. Out of 22 underdeveloped countries listed by the United Nations publication, only five (Brazil, Cuba, Egypt, India and Argentina) experienced a downward trend between 1948 and 1955.\textsuperscript{19}


\textsuperscript{19}Ibid., p. 104. It is interesting to point out that the quantum of Brazilian exports declined in a period of growing world trade. According to the United Nations \textit{World Economic Survey, 1956}, the quantum of exports for the whole world (or the total international trade) increased by almost 35 per cent between 1948 and 1956, while the quantum of Brazilian exports declined in the same period by more than 11 per cent.
Thus, it is apparent from the above that international demand has to a large extent had an unfavorable influence upon the level of Brazilian exports, which consisted mainly of agricultural products.\(^{20}\)

A further partial explanation to the relative decline in Brazilian exports can be attributed to the structural nature of the country's economic development. The population shift from rural to urban areas, the rise in population and consumption and the higher relative profitability of investments in activities catering to the domestic market rather than to export industries are all factors in such an explanation. Thus, the behavior of international demand and the structural nature of the economy's development are two relatively "autonomous" factors unfavorably affecting the quantum and value of Brazilian balance of payments earnings, and subsequently, adversely affecting Brazil's capacity to service foreign capital.

In Mexico, on the other hand, "autonomous" circumstances played a highly favorable role in helping her to expand external earnings and to meet foreign capital servicing. For

example, an unusually favorable geographical position from the standpoint of the tourist industry contributed greatly to Mexico's foreign exchange supplies. This rise in earnings on the invisible account was an important offset to foreign capital service charges. Tourism in Mexico underwent a phenomenal increase of almost 450 per cent between 1947 and 1960. In 1960, tourism represented almost 46 per cent of foreign exchange receipts in the current account, whereas in 1947 tourism represented only 22 per cent.21 Furthermore, the wide variety of natural resources—both agricultural and mining—in Mexico facilitated the diversification of exports, so that the possibilities of expanding their volume greatly increased. Finally, Mexico's favorable current account was accompanied by a relatively steady and increasing flow of new foreign capital, while only very minor fluctuations were recorded in her terms of trade.22 All of these "autonomous" factors over the fourteen-year period helped to make foreign capital servicing in Mexico a smoother process.

However, national economic policy itself also played

21Adapted from data in International Monetary Fund, Balance of Payments Yearbook series.

an important part in the medium- and long-term evolution of external earnings for both countries.

In Mexico, the systematic encouragement of primary production and of foreign investment through a system of free exchange and trade was mainly reflected in increased availabilities of export commodities. Moreover, in Mexico the uninterrupted development of export activities was stimulated and made possible by four other factors. First, there were substantial increases in public and private investment in the agricultural sector of the economy. Secondly, the government allowed only a "moderate" expansion of consumption on the part of the mass of the population. Thirdly, the government allowed for three devaluations of the peso, in 1948, 1949 and 1954, having as their purpose the closer adjustment of the exchange rate to world market conditions and to the domestic monetary situation. Finally, action taken by the country herself influenced the evolution of the terms of trade. For example, insofar as the diversification of exports was a consequence of national economic policy, the latter can be said to have constituted an indirect form of

23Ibid., p. 18.

protection against the deterioration of the terms of trade in Mexico. What happened was that as a result of this diversification of exports, the considerable decline in the prices of zinc and lead—staple export commodities of the country—was offset in greater or lesser degree by the rise in coffee prices.  

In Brazil, on the contrary, a number of adverse domestic policy factors affected her evolution of external earnings. First, the fact that more favorable treatment was accorded to industry than to agriculture and mining certainly played a part. The industrialization process tended to absorb factors of production into import-substituting industries rather than into the export sectors. Secondly, the measures adopted to raise the consumption of the lower income sectors at a relatively "rapid" rate also tended to draw from the export sector. Thirdly, the policy of moderate over-valuation of the exchange rate (pursued in certain cases to keep down prices of raw materials and imported foodstuffs) also helped to cause the decline or stagnation of certain secondary or marginal

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Finally, one other special policy factor may have tended to reduce the incentive to raise the volume of exports. The fact that the terms of trade for Brazil improved substantially between 1948 and 1954 actually provided a windfall gain in "real" export receipts and this in turn substituted for any growth in export volume. As a result, the pressure to devote the necessary attention to the export sector may have been eased as long as the temporary price rises provided enough external earnings to support income growth and service payments abroad.

The situation in Brazil was complicated by the high inflationary pressures during the period. Most of the foreign borrowing, being governmental, accrued in the first instance as a large addition to the foreign exchange resources of the banking system which had a persistent bias towards cheap credit policy. The rapidly rising prices and volume of imports necessitated more loans to support the exchange rates and this in turn increased service payments. By 1955, Brazil was faced with the prospect of borrowing abroad merely to pay the interest and amortization on existing loans.

However, one moderating element in the Brazilian situation was that the marginal rate of savings out of the inflated money income was also high. Moreover, the inflation in Brazil did not "spill-over" into greatly expanded consumer imports as traditional trade theory would indicate. Rather, the expanding import requirements for her development were caused by the relatively narrow developed resource base of the country. This lack of development necessitated imports both of industrial raw materials and capital equipment, instead of the traditional imports of finished consumer's goods. It is remarkable that throughout the entire period imports of consumer's goods constituted only a small percentage of total imports—the ratio being less than 20 percent in 1948 and 6 percent in 1959. This, of course, was partially a reflection of the concerted action on import substitution.

The servicing of foreign capital in Brazil, especially during the latter part of the period under study, did pose a potentially serious problem. With needs for capital equipment and industrial raw materials expanding and the growth of the

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over-all national income, foreign capital service payments were rapidly increasing. Actually, however, Brazil never really had to fully face this problem. This happened because of the many special arrangements for financing the deficits which were made with the International Monetary Fund, the Export-Import Bank and others. Without such outside help, the necessity for structural changes would have been even greater than they actually were. The fact remains, however, that during the latter part of the 1950's, the servicing and repayment of these credits, along with the servicing of previous aggregates of foreign capital, certainly absorbed large amounts of foreign exchange which could otherwise have been utilized to finance purchases abroad for further economic development.

The Pattern of Trade and Multilateral Adjustment

In the course of servicing and repaying foreign capital in the post-war period, the pattern of Brazilian and Mexican trade underwent important changes. To begin with, the servicing of foreign capital, under those circumstances described above, was dependent upon a readjustment in the pattern

\[29\text{See Table XVIII.}\]
### TABLE XVIII

**BRAZILIAN AND MEXICAN PATTERNS OF TRADE**

<table>
<thead>
<tr>
<th></th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil:</td>
<td>1951a 1960a</td>
<td>1951a 1960a</td>
</tr>
<tr>
<td></td>
<td>(Per Cent)</td>
<td>(Per Cent)</td>
</tr>
<tr>
<td>United States</td>
<td>49 44</td>
<td>United States</td>
</tr>
<tr>
<td>Argentina</td>
<td>7 4</td>
<td>Germany</td>
</tr>
<tr>
<td>Germany</td>
<td>5 7</td>
<td>Venezuela</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>10 5</td>
<td>Argentina</td>
</tr>
<tr>
<td>Sweden</td>
<td>3 3</td>
<td>Netherlands Antilles</td>
</tr>
<tr>
<td>France</td>
<td>5 3</td>
<td>Sweden</td>
</tr>
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of trade between Brazil and Mexico and the lending countries. On the other hand, the transfer of investment income and amortization payments from the borrowing to the lending countries did not depend solely upon these two countries. Under the system of multilateral trade which generally evolved after the end of World War II, the two debtor countries were able to transfer foreign capital service payments not only by obtaining periodic favorable trade balances with their creditor countries, but also by means of export earnings arising out of their trade with third countries. This provided both Brazil and Mexico with a wider range of choice in adjusting the various items of their balance of payments in order to generate sufficient foreign exchange resources to be transferred to their creditor countries. The multilateral system facilitated the adjustment to the changing pattern of trade of the two countries by distributing the impact of this change to a wider range of countries instead of causing a concentration of the full burden of adjustment upon the trade relations between themselves and the particular creditor countries.

Although the total value of Mexican imports increased secularly, they were directed more towards other third countries than to her principal creditors, the United Kingdom, the
United States and Canada. While the imports from Western Europe and from other parts of Latin America greatly increased throughout the period, the growth in the case of United States and United Kingdom imports slowed down relatively.

Brazil experienced a similar trend in her imports. Although the total value of Brazilian imports did not increase secularly, their pattern nevertheless changed and they also were directed more towards other third countries than to Brazil's principal creditors, i.e., the United Kingdom, the United States and Canada. Similarly, while the imports from Western Europe, parts of Latin America and Japan steadily increased throughout the period, especially in the latter 1953-1960 period, the imports from the United Kingdom and the United States were actually reduced and in a much greater volume than the others increased.

In much the same fashion, Mexico's exports grew faster to other Latin American, Asian and Western European countries than to the United States, the United Kingdom and Canada. Brazil, likewise, experienced the same trend in the post-war period. Although Brazil absorbed an absolute decline in both the volume and value of her total exports--especially those to the United States and to the United Kingdom--she did experience some growth in her exports to third countries,
i.e., Germany and Japan.

Accompanying the above geographical trends were changes in the commodity composition of both Brazilian and Mexican foreign trade—the most pronounced taking place on the import side for both countries. The most striking aspect of the commodity import structures was the steady decline of consumption goods flowing into both countries throughout the entire post-war period. This tends to reflect the growth of import-competing industries which were partially financed by foreign capital. Moreover, in the case of Brazil, it was an attempt to save on the import of goods in the face of declining foreign exchange earnings. However, in both cases, it did tend to reflect somewhat the stringency placed on the balance of payments as a result of increasing foreign capital servicing payments. Thus, the greater relative importance of capital goods obviously reflects the desire on the part of both countries to emphasize the importation of goods directly contributing to the industrialization of their economies and at the same time to ration scarce resources, i.e., foreign exchange earnings. The above factors were also true of the increased usage of fuels in the two economies.\footnote{To a certain extent, much of the growth in fuel usage could also be attributed to the general growth of their economies.}
The composition of Brazilian and Mexican exports have been previously discussed in the above section of this chapter concerning "Growth of External Earnings." It is worth recapitulating, however, that although the relative importance of coffee has declined in Brazilian exports, it still remains the dominant item on the export list. Moreover, if the other major primary export items are added, it can be seen that primary goods still make up more than three-quarters of Brazil's commodity export structure. Mexico, on the other hand, has been widely recognized as the foremost country in Latin America for her concerted and deliberate diversification of exports.

Discounting compensatory and "autonomous" capital inflows, it is obvious from the above changing geographical distributions and patterns of trade that multilateralism in the post-war period played an important role in Brazilian and Mexican trade adjustments. In 1947, Mexico's deficit on merchandise trade with the United States was partially offset by her surplus with the rest of Latin America and Western Europe;\(^3\) while in 1957, her deficit with Western Europe was

partially offset by a surplus with the rest of Latin America.\textsuperscript{32} Brazil also illustrates similar adjustments. For example, in 1951 Brazil's deficit on merchandise trade with other Latin American nations and with Western Europe was partially offset by her surplus with the United States, Asia and Africa; whereas, in 1960 her relatively large deficit with Asia was partially offset by a surplus with the United States and Canada.\textsuperscript{33}

The contention presented here is that the multilateral process of adjustment was important for both countries not only in their trade and in the transfer of capital, but also in their foreign capital servicings and repayments. Between 1947 and 1960, Brazil met her service payments to the United States and the United Kingdom partially by surpluses on her merchandise current account in direct trade with them, but her accrued service payments and deficits with Western Germany and France were met mainly by her surplus with third countries. Mexico followed a similar pattern. Throughout most of the post-war period Mexico met relatively large service payments and merchandise current account deficits with the

\textsuperscript{32}F. Benham, \textit{op. cit.}, p. 154.

United States by her surplus with third countries and by a surplus on her invisible account (tourism) with the United States.

The Pattern of Capital Flows

From the short-run standpoint, the important question is whether the debtor country is able to meet its foreign capital service payments from year to year in the face of fluctuations in the exchange receipts. This is of special significance for debtor countries like Brazil and Mexico whose exports consist of primary products and raw materials subject to wide ranges of fluctuations in both price and volume. The higher the ratio of service payments to external earnings, the more acute are the consequences of fluctuations in exchange receipts, especially a fall in such receipts. The ability to meet such a situation is partly a function of the availability of both autonomous and compensatory financing from abroad in the form of either grants or loans. The nature and fluctuations in the rate of capital inflow, part of which can be applied to meet foreign capital service,

34Direct investment, generally being tied to specific equipment imports, is not readily applicable to this situation.
depending upon circumstances, are thus important.

Although both Brazil and Mexico experienced significantly increasing amounts of foreign capital in the post-war period, the fluctuations in capital inflows were, on the whole, quite erratic on a year-to-year basis. However, excepting in the earlier period prior to 1953, the fluctuations in the net capital inflow appeared, in both cases, to generally offset the fluctuations in current receipts.\(^{35}\) In a number of instances in both countries, a large number of these seemingly autonomous capital inflows were in actuality merely medium-term compensatory balance of payments loans or credits.\(^{36}\)

The necessity for compensatory refinancing in both countries resulted from essentially three factors peculiar to the nature of their economic development. First, fluctuations in their current receipts were relatively large because of the preponderance of the exports of raw materials and primary products. Secondly, their foreign capital service tended to

\(^{35}\)See Figures I-IV.

\(^{36}\)In the period after 1954, almost $350 million of medium-term loans were made to Brazil solely to refinance Brazilian external debt maturities. Mexico also received approximately $100 million of this nature in the latter 1950's. See Table XV in Chapter V of this study.
be more rigid and increasing because of the fixed amortization payments and the fixed interest bearing loans which predominated and were in themselves increasing. Thirdly, by the nature of the cases, the bulk of the loan capital went into public utilities and social overhead. Because of the long-run, non-export orientation and slow yielding nature of these investments, the bulk of the funds expended in this manner were not directly remunerative to the balance of payments via exchange earnings. All three of these factors necessitated compensatory financing in order to maintain essential imports, prevent default on foreign capital servicing, and, in general, to prevent thwarting further development.

The net capital outflows in the period prior to 1953 can, of course, be partially accounted for by the governmental purchases of previously existing foreign investment, lend-lease settlements with the United States, defaulted debt settlements and initial subscriptions to the international lending institutions.37 These capital outflows were, in turn, moderated by the Brazilian and Mexican accumulated exchange earnings from World War II and by the favorable terms of trade for their exports in the early period.

37See International Monetary Fund, Balance of Payments Yearbook series.
Commenting on the nature of capital movements into the primary producing countries as a whole, a United Nations report states:

The main characteristic of capital inflow, however, lay in its erratic movements from year to year and from country to country. Governed by political factors and by more complex economic factors than prices and demand for primary products, capital movements into primary producing countries seemed to have only a remote link with year to year changes in the volume and value of exports. They were, however, highly sensitive to cyclical movements during the period under review. . . . Though the timing of cyclical movements for export proceeds and capital inflow coincided to a high degree, the amplitude of the downswing was far larger for capital movements. . . .

The Brazilian and Mexican cases appear to have generally followed this pattern in the post-war years.

The Pattern of Private and Public Remittances

The impact on the balance of payments will be different depending upon whether capital servicings are regular or fluctuating or gradually rising or gradually falling. 39

Regarding repayment, there is an important distinction between direct investment (private) and loan capital (public).

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38 U. N. Department of Economic and Social Affairs, Instability in Export Markets of Underdeveloped Countries, p. 66.

The former has a definite rate of amortization or a stipula-
tion of a period after which it is to be repaid. No such
stipulation exists in the case of direct investment. Repa-
atriation of direct investment can take place by the sale of
the enterprise to the government or investors and may be
influenced by changing conditions in the given industry, a
lack of confidence in the monetary and fiscal situation of
the country or political or social factors. However, the
withdrawals of foreign firms via commercial failures or bank-
ruptcies in the course of business hardly imposes any burden
on the balance of payments of the country—unless, of course, its creditors are foreign also.

Moreover, the time when the servicing of foreign capital
starts may be different in the two cases. In the case of loan
capital, service payments would start shortly after the in-
vestment, depending upon the particular arrangement; in the
case of direct investment, however, during the gestation
period of the investment and during the early years of the
growth of the enterprise, the entrepreneur-investor may be
content with little or no return.

Service Payments on Private Account

The largest increases in the aggregate return flows on
private direct investment (dividends) appear to have taken
place in the early post-war years, around 1951, for both countries. However, after 1953 in both countries the remittances of dividends slackened off and in Brazil the aggregate amounts of remitted earnings even declined; i.e., in 1958 remitted earnings on direct investment in Brazil were at approximately $43 million whereas in 1953 the same type of earnings were correspondingly at $102 million.40

The fluctuations in dividend remittances in both countries can be attributed to a number of factors. First, earnings on direct investment in both economies were either very low (private public utilities) or exceptionally profitable (trade and manufacturing). In those cases where operations yielded a low return, little was available for remittance. On the other hand, in those operations which were highly successful, inducement was thus offered for further reinvestment of the earnings. In this respect, over 60 per cent of direct investment earnings in Brazil were reinvested in the latter part of the 1950's.41 In Mexico reinvestment of earnings was less pronounced.

A second factor helps to explain the fluctuations of dividend remittances in Mexico. In both periods in which

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40See Figures I and II in this study.
41See Computational Appendix in this study.
Mexico experienced significant declines in dividend remittances (1949 and 1954), she also devalued her currency. Thus, it appears that the private investors used their discretionary prerogatives and refrained from remitting earnings under what they considered unfavorable exchange rates. Moreover, after a period of approximately two years in both of the cases of devaluation and the subsequent decline of dividend remittances, sharp increases in remitted earnings followed. This subsequent action apparently followed after the investors felt that the economy and the balance of payments had adjusted themselves to the unanticipated devaluations.

Finally, the impact of fluctuating exchange receipts can partly be moderated insofar as the yields on equity capital—as against the fixed yield on loan capital—fall when exchange receipts shrink, especially when it is invested in export industries. However, in the cases of both Brazil and Mexico this characteristic was apparently ineffective as only a very small amount of direct foreign investment, in both economies, was located in the export sectors. The only exception where this trait appeared to have had some relevance was in the Mexican mining industry where the bulk of export production was controlled by foreign enterprise. Apparently, the changes in the export sectors of the
economies did not always affect the national income or the particular sectors of the economy to a sufficient extent to affect the dividend remittances. Besides, there is usually no rigid one-to-one relationship between changes in realized profits and actual dividends declared and remitted abroad out of the profits earned. Thus, the relief brought by the flexible dividend remittances in times of stringency in foreign exchange of the two countries, by shifting the timing of dividend remittances to future periods, appeared to be more a matter of business policy varying from case to case. The extent of the relief appeared to be more a function of the relative importance of equity investment than to any balance of payments considerations.42

As the above cases illustrate, although the dividend remittances were potentially more flexible, this flexibility did not always operate to ease the strain on the balance of payments, especially in the period of falling current receipts after 1957. In general, this, of course, is due to the divergencies between the fortunes of the particular foreign

42 There may have been an indirect relationship in that when the countries suffered balance-of-payments problems, the governments concerned provided legislative and other favorable inducements for the direct investors to reinvest—thus providing more growth capital and at the same time preventing further exchange uses in the balance of payments.
financed enterprises and those of the whole economy or the export sector of the economy. Although it does appear that the reinvestment of earnings in Brazil at times (rather than the remittances of profits) did unintentionally on the part of the foreign investor greatly help to relieve a portion of the country's immediate balance of payments problem via foreign capital service. Moreover, the Mexican devaluations appeared to have served the same purpose in the short-run service burden.

**Service Payments on Public Account**

In the two countries under study, public debt service rose very rapidly in the post-war years. Starting from an annual level of $71 million in 1947, it rose to $546 million in 1960 for Brazil, an increase of 660 per cent. Mexico, likewise, experienced a similar trend from a level of $24 million in 1947, to over $257 million in 1960, an increase of 970 per cent.43 These increases were certainly significant when compared with rises in public debt outstanding of 68 per cent for Brazil and of 80 per cent for Mexico between the same period.44

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43 See Figures I and II.

44 Adapted from Computational Appendix of this study.
The relatively faster growth of debt service than of outstanding public indebtedness in both Brazil and Mexico was a result of several factors. First, the percentage increases of public debt service payments were influenced by the fact that the initial level of debt service in both countries was very low. Secondly, both countries resumed payments on defaulted pre-war bonds, thus adding to their public debt service. Thirdly, the rate of interest tended to rise during the post-war period, causing interest payments to increase faster than outstanding indebtedness. Finally, owing to the fact that both countries, more notably Brazil, incurred greater amounts of medium-term debt, the rate of repayment increased significantly in the latter part of the 1950's. The relative shortening of the effective period of maturity can be expressed in terms of the number of years it would take to repay outstanding indebtedness. For example, in Brazil the rate at which loans were being repaid at the end of the war (1947) would have taken an average of 12 years to repay the entire public external debt, provided no new debt was incurred. In contrast, the average effective period of repayment

45Avramovic, op. cit., p. 34.

46The average effective period of repayment was calculated by dividing the amount of loan capital outstanding at the end of the year, by the amount of amortization payments during the year.
at the end of 1960 for Brazil was four years. A similar shortening of the repayment period also occurred in Mexico—from an average of 32 years in 1948 to only five years in 1960.\(^{47}\)

**CONCLUDING OBSERVATIONS**

From the evidence available, it seems that economic growth in both countries and increasing inflows of foreign capital to both Brazil and Mexico did occur during the post-war period, despite inflationary forces, increasing foreign capital service charges and balance of payments problems. However, the experiences of the two case studies undertaken above tend to show that a satisfactory servicing of foreign capital from the long-term point of view of economic development—i.e., in the sense of generating a sufficient rise in the rate of savings and investment in the domestic economy while allowing at the same time regular payments abroad on account of interests, dividends and annual amortization—is a function of two economic factors.

First, both countries must have been able to do without an amount of domestic income and savings equivalent to their

\(^{47}\)Data was adapted from International Monetary Fund, *Balance of Payments Yearbook* series and from Computational Appendix in this study.
capital services. While their service commitments were increasing, there must also have been an increase in income and savings sufficient to have covered the higher levels of their service payments and to have left increasing amounts available for domestic per-capita consumption and investment. Secondly, the two countries must have been in a position to convert their segregated savings into foreign exchange. Accordingly, growth in their external earnings was considered a long-run condition for sustained growth in their income and for the maintenance of continuous external capital service.

The long-run necessity of the above relationships did not imply that the absence of one of them over shorter periods would necessarily be accompanied either by income stagnation or by difficulties in servicing external capital. It was shown, for both countries throughout the fourteen-year span, that a number of short-run exceptions did take place without significantly thwarting either's economic development. However, it was argued that if any of the above conditions were unfavorable for a relatively long period of time income growth and capital absorption were unlikely to be lasting sustainable positions. As the above cases illustrated, this was particularly true for Brazil, in which there was a relatively high income growth target with lagging exports (poorly
diversified) and with service charges assuming a larger share of national income, gross savings and external earnings. Accordingly, it was found that only in Mexico were the rises in service commitments accompanied by any significant increase in the long-run capacity to service foreign capital—as shown by the selected set of statistical indicators relating foreign capital service payments with growth in income, savings and foreign exchange earnings.

Certain other observations concerning the servicing of foreign capital may also be suggested in the light of the experiences of the two debtor countries studied above.

Foreign borrowing can be associated with large inflationary pressures, if the central bank financing, stimulated by acquisition of foreign exchange resources, tends to exceed productivity as did happen in Brazil because of the lax credit policies of the commercial banks and the inadequacy, institutional or otherwise, of the powers of the monetary authorities to exercise effective control over the money supply and the terms of lending. This is especially important for other present-day underdeveloped countries which already have

inflationary biases in monetary and fiscal policy and whose money markets are not organized enough to mobilize and to make effective the necessary credit control measures. Efforts in developing the domestic monetary and financial mechanism once again prove to be a necessary supplement for the long-run effective absorption of foreign capital.\(^49\) The case of the Mexican central bank is, on the other hand, a suitable illustration of the role of a relatively sound banking system in the process of foreign capital absorption. It moderated the fluctuations in the foreign exchange resources arising out of fluctuating capital inflow from year to year. It restrained the inflationary pressure of a large inflow in one year by letting its foreign exchange reserves rise and counteracted the deflationary pressure in the years of falling capital inflow by drawing down its foreign exchange reserves. Sometimes it lent in advance of anticipated borrowing, depleting its foreign exchange reserves to be replenished by subsequent borrowing, for which it often acted as an issuing and underwriting institution.\(^50\) Although Mexico did experience a "moderate" amount of post-war domestic inflation, this

\(^49\)See Chapter II.

was a result of problems and policies quite separate from those discussed here.\textsuperscript{51}

Regarding the repayment of foreign investment, it can be said that the totality of foreign capital can never be repaid at any one time under any likely set of circumstances. This resembles the practice of a banking system in that, if withdrawal of all deposits was attempted at any one point of time, the cash reserves of the banks would not be enough to meet the demand and the only result would be bank failures and bankruptcies. Similarly, in both of the countries examined, the export surplus generated in one of the few favorable years would have been pitifully inadequate if the withdrawal of all the foreign capital were attempted at one time. In fact, if at any time during the fourteen years under study attempts were made to withdraw all of the foreign capital loaned and invested in either country, all their current account exchange receipts coupled with the capital inflow of the year previous would not have been sufficient to meet all the claims. When the loans in both countries did fall due, they were met by new loans; and even when net repayment was

made in the latter 1940's, in both countries, there were large amounts of gross capital inflow. Moreover, as far as direct investment was concerned, there were no large scale repatriations in either country as a result of their balance of payments problems. The only exceptions were through ordinary business failures or the early disinvestments of British and French public utilities in the late 1940's. In both cases where private repatriation did take place, there was at the same time a large amount of foreign direct investment taking place in other sectors of their economies.

In both of the countries, the importance of trade with third countries other than the creditor countries increased relatively in the course of their economic development, changing patterns of trade and foreign capital servicings. Their exports were directed relatively more towards third countries than to the more mature creditor countries. Moreover, in the case of imports, a similar shift took place in moving away from the creditor countries and more towards third countries. Even in the case of Mexico, where the absolute volume of trade with the creditor countries increased, her trade with third countries increased relatively more. Thus, the shifting patterns of trade and the possibility of a multilateral system of adjustment were mutually helpful in the sense that
the processes of adjustment of trade patterns and foreign capital servicings between the mature industrialized creditor countries and the new industrializing debtor countries were rendered less abrupt by allowing part of the adjustment to be diverted to the trade between the debtor countries and third countries.

The cases of both Brazil and Mexico in the post-war period also demonstrate that foreign capital need not be concentrated in the export sector to enable transfer of service payments in foreign currencies. In both countries part of the foreign capital inflow was used to meet the foreign capital service payments when the growth of the current receipts did not keep in step with the growth in the service payments—most notably in the case of Brazil. At the same time, when external earnings did increase in Mexico, the direct participation of foreign capital was conspicuous by its absence. In this respect, it is important to remember that Mexico took important domestic measures to stimulate and diversify exports and to curtail imports, especially of consumer's goods, in order to release as much foreign exchange as possible for the importation of capital equipment and to ease the strain on her balance of payments. Moreover, the growth of foreign exchange earnings on the service account
(tourism) was an important factor.

The post-war experiences of both Brazil and Mexico also suggest that primary exporting debtor countries continue to be vulnerable to temporary fluctuations in external receipts arising from changes in international demand and over-expansions or breakdowns in the supply of major export products. Especially in Brazil, external earnings remained dependent on a narrow range of primary products. Moreover, fixed debt service commitments in both countries rose significantly over the fourteen year span and by 1960 they accounted for a phenomenal share of external earnings. This, of course, certainly increased the element of rigidity in their balance of payments and their susceptibility to short-term fluctuations.
Figure 3: Brazil
(In Cross Section)

Interest and Dividend Service in Million Dollars
Current Receipts in 10 Million Dollars
Investment Service Payments in Million Dollars
Net Capital Inflows in Million Dollars

Sources: Adapted from Computational Appendix in this study and International Monetary Fund, Balance of Payments Yearbook series.
FIGURE 4. MEXICO (In Cross Section)

Current Receipts in 10 Million Dollars
Investment Service Payments in Million Dollars
Net Capital Inflows in Million Dollars
Interest and Dividend Service in Million Dollars

SOURCES: Adapted from Computational Appendix in this study and International Monetary Fund, Balance of Payments Yearbook series.
CHAPTER VII

SUMMARY AND CONCLUSIONS

Excepting Soviet Russia—where the mechanism of the free market and prices was replaced for the most part by collectivist methods—and England during the industrial Revolution—where the cultural traits, a rapid succession of technological innovations, and her geographical position created a highly favorable situation—most of the countries in the world today, which have undergone striking periods of economic growth and progress, have both borrowed and received public and private capital from abroad in varying degrees.

Since the end of World War II, Brazil and Mexico have been among those countries most heavily dependent on external capital. Net foreign long-term capital—in the forms of grants, loans, credits and direct investment—increased in Mexico by almost $1.5 billion in the fourteen years between 1947 and 1960. Brazil, likewise, experienced an increase in long-term foreign capital of over $2 billion in the same period. Of these aggregate amounts, public and quasi-public
borrowing was the most important vehicle of capital inflow in both cases—ranging from 60 per cent in the case of Mexico to over 70 per cent in the case of Brazil. Grants composed only 3.2 per cent of the total inflow in Brazil and less than 5 per cent in Mexico over the entire period. Private direct investment, which went mainly into the manufacturing sectors, composed almost all of the remaining amounts in both economies. Moreover, as an indication of the significance of the foreign capital in each of the two economies, a number of ratios were derived. In the period between 1953 and 1960, foreign capital constituted 21 per cent of domestic fixed capital formation in both economies. In the same period, foreign capital as a proportion of foreign exchange receipts was 24 per cent in Brazil and almost 16 per cent in Mexico. These figures, along with other supporting data in this study, certainly tended to reveal the significance and importance of external capital in the post-war economic development plans of the two countries.

PRIVATE PORTFOLIO REPLACED BY PUBLIC PORTFOLIO

Traditionally, much of the overhead capital in developing economies, not being directly remunerative from the point of view of private profitability in the short-run, was
financed by public authorities drawing extensively on private foreign money markets. However, the decline, since the Great Depression, of private portfolio investment has hit particularly hard the financing of overhead capital in most underdeveloped countries like Brazil and Mexico. Moreover, insofar as direct investment in such overhead facilities as public utilities (which are directly remunerative) is concerned, it has been discouraged by the post-war increases in the extensive governmental regulations of the operation (including the rates) of such enterprises coupled with the rising trends toward nationalization. The uncertainty of the eventual transfer of whatever compensation was decided upon has acted as a further deterrent—especially in view of the large amount of investment involved in such high capital intensive projects relative to the current foreign exchange resources of the host country.

The post-war experiences of both Brazil and Mexico, however, tend to reveal that while portfolio-type investment by private foreign investors has declined, three important new sources of such investment have emerged to fill the gap: (1) intergovernmental loans and grants; (2) loans by multilateral lending institutions; and (3) medium-term credits and loans advanced by private enterprises but guaranteed by the governments.
Whatever may be the source, a foreign government or a private investor, the revival of portfolio type investment to the governments or quasi-public institutions of the two underdeveloped countries (Brazil and Mexico) has greatly increased the total flow of foreign capital.

THE CONFLICT OF POLICY AND PRACTICE

The post-war expansion in public capital flows to both Brazil and Mexico tends to reveal a conflict between the official policy and practice of the lending sources. The evidence in this study certainly reveals significant increases in public and quasi-public capital flows taking place in the underdeveloped economies. On the other hand, however, official policies of the major lending institutions and capital exporting nations are still based on nineteenth century criteria for economic development. Most of the important capital exporting nations and international lending institutions still tend to favor greater reliance on private capital as the main vehicle of assisting early and initial economic development abroad.

During the course of the two country studies undertaken above, mention was made of most of the kinds of public enterprise and undertaking to be found in the underdeveloped
economies. The role of each was briefly examined, and reasons were given for entrusting the function that it performed to a public institution rather than to a private one. It was not suggested that, in given cases, the government concerned had confined public enterprise to the minimum necessary for the achievement of economic development, nor, on the other hand, that better results might not have been obtained with a public sector extended beyond its actual limits. No attempt, in fact, was made to discover the "best balance" between public and private; but at least some light was shed on the part which the public sector in each economy and foreign public loan capital has to play in a developing economy.

In both countries, the government was not only the main agent of modernization in the post-war era, but also was the main channel of foreign borrowing which was integrated with the measures for encouraging domestic savings and investment. Broadly speaking, it was from public capital and enterprise that the greater part of their dynamic economies and growth arose. The use of foreign funds obtained via portfolio investment by the public and quasi-public agencies can be dovetailed with the operations of the domestic investment institutions and can also be more evenly and widely distributed in the economy of the debtor country. This facilitates
the development of a balanced economic structure (in the broad sense of the term), in which the profitability of a particular industry can be judged in the light of the other supply-creating or demand-generating and mutually reinforcing industries, as was so effectively done in parts of Mexico and in a few isolated sectors of Brazil.

Prominent among the public's function in both economies was the provision of power and transportation facilities. Equally important were the improvements of agriculture productivity. It was clear, moreover, that the extension of public enterprise and foreign public capital in such fields did in many cases accelerate the pace of their economic development even though the government had no coherent economic plan and lacked an adequate economic planning agency. Only Mexico was distinguished for its economic planning, but both countries, particularly during the post-war period, stepped up the pace of their economic development by borrowing abroad and by making heavy public investments in certain sectors of their economies. "Public enterprise without a plan can achieve something; a plan without public enterprise is likely to remain on paper."¹

Moreover, the portfolio type of foreign public investment facilitated the flow of foreign capital in cases where direct investment was hampered in the two economies under study by such factors as fear of governmental control or interference, dissimilarity of business procedures and organization, high taxation, regulation or screening of fields of investment, export or import quotas, multiple exchange rates and low direct profitability. Furthermore, access to the foreign capital markets, via governmental guarantees of medium-term credits, on the part of the domestic enterprises in both countries operated to mitigate their competitive disadvantage vis-à-vis the rival foreign enterprises within their economies.

Foreign private capital in both Brazil and Mexico had an important part to play in all this; but the question should be approached in the light of criteria different from certain nineteenth century concepts whose influence is felt even today.

Each act of foreign direct investment was an isolated and unique venture and its profitability was viewed, by the nature of the cases, in the context of the present operations of the parent concern and in relation to the immediate domestic consumer demand rather than in the context of an
integrated and balanced pattern of growth such as public investment would provide.

Nineteenth century capitalism, which so successfully helped the United States and other advanced Western World countries to achieve economic development, evolved under conditions which today are not present in the majority of the underdeveloped countries.² Such conditions as the following are necessary complements for private enterprise to achieve cumulative growth, but are lacking in the majority of cases in countries similar to Brazil and Mexico: easily exploit­able resources, a literate populace, freedom from govern­mental control, centralized and stabilized financial centers, multilateralism and full convertibility, and stabilized political conditions.

Presently, private direct investment, which has only been flowing into the manufacturing and distribution sectors of the Brazilian and Mexican economies, can provide very

little diffusion and development of the above factors into the major streams of their economic development. Perhaps the post-war emergence of joint ventures was a concrete step in this direction; however, it occurred only in a limited number of industries and only on a limited scale.

Thus, a limited degree of internal development implies inadequacy of social overhead and the absence of the above complementary factors—all factors which in an accelerated course of present-day development can only be readily supplied by public action.

Years ago Alfred Marshall wrote:

...it is becoming clear that England and every other western country can now afford to make increased sacrifices of material wealth for the purpose of raising the quality of life throughout the whole population. A time may come when such matters will be treated as of cosmopolitan rather than national obligation; but that time is not in sight.3

The post-war international public capital movements have probably heralded the faint beginnings of such an era. The next step for most of the major capital exporting nations and for the international lending institutions is a major re-evaluation and re-adjustment to bring their formal policies into line with their present practices and with the expanding

needs of the underdeveloped economies.

The following synopsis points up the post-war and present policy orientation of the major public lending sources in the Western World. Immediately following World War II, President Truman stated that "... private sources of funds must be encouraged to provide a major part of the capital required. ... All countries concerned with the program should work together to bring about conditions favorable to the flow of private capital." The influential Gray Report in 1950 stressed: "Private investment should be considered as the most desirable means of providing capital and its scope should be widened as far as possible." In 1954 the Randall Report stated: "The United States Government should make clear that primary reliance must be placed on private investment to undertake the job of assisting in economic development abroad. It should point out that United States resources for public loans are limited and inadequate in relation to total investment needs, and that public lending

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or other forms of public financing will not be a substitute for private investment."® Congress has also consistently expressed itself in favor of an organization that "... would encourage the growth of enterprise under the private control and management that has proved its strength and dynamic thrust in the United States, instead of encouraging the further encroachment of Government operations upon fields to which that form of control is ill-adapted."® This approach is furthermore embedded in United States laws. The Act for International Development states: "The participation of private agencies and persons shall be sought to the greatest extent practicable."® The old International Cooperation Administration was similarly oriented. "Under the law, ICA has been directed to use private channels as much as possible and to emphasize private channels."® All the other aid and


®Tbid., p. 84.
loan programs of the United States have several provisions concerned with preference for private investment. Near the end of his second term, President Eisenhower reaffirmed United States foreign aid emphasis on private investment and private enterprise.

The only real investment that is going to flow into countries that will be useful to them in the long term is private investment. It is many times the amount that can be put from the public coffers. And normally, the public loans are made so as to encourage and make better opportunities for the private investments that follow.

The international programs to which the United States and Western Europe allot most of their funds are also those which are private-enterprise-oriented. The International Bank for Reconstruction and Development, the International Development Association, and the International Finance Corporation are all intended "... definitely to encourage private enterprise." At the same time, the United States and the other chief donor nations have been unwilling to allot substantial

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funds to the United Nations economic aid programs because under this organization, as it is now composed, they feel that they may not be able to control the orientation of the programs.

At the beginning of the new decade in the 1960's, however, there are hopeful signs that there might be greater availability of international public financial assistance and a trend toward a change in policy to face reality. These changes have taken place in such forms as the doubling of the capital resources of the I.B.R.D., the 50 per cent increase in I.M.F. quotas\(^\text{13}\) and the inauguration of operations by the Inter-American Development Bank, the Development Loan Fund, and the "Alliance For Progress" program of the United States. In view of the present adverse pressures on the United States balance of payments, there is some concern over the burden of external economic assistance which it can carry during the 1960's. On the other hand, however, there is a growing recognition that virtually all the other industrialized countries can and should "... devote their energies to furthering the development of less-developed countries ... ."

[and] should pursue policies directed to the sound use of (public) economic resources."¹⁴ Brazil and Mexico, and countries similar to them, are not going to realize any major part of their potential for economic development over the next decade without increased investment by public sources as well as expanded credit and loans from the international lending agencies and without further grants and assistance in the form of those encompassed by the United States' "Alliance for Progress."

The problem remains, however, that in most instances formal policies of old institutions and legislative authorizations still in force tend to remain in conflict with their actual operations. Recognition must be made to the fact that if the policies were brought into closer agreement with present needs and actual practice a great deal more loan capital and public aid would become available for economic development abroad. At the same time, policy integrity would become reconciled with actual operations, thus preserving the element of realism in international affairs.

There is something paradoxical in all this, since the endeavor to reproduce the outworn patterns of capitalistic

¹⁴Ibid., p. 49.
development is precisely what is preventing the system of private enterprise from making the most of its potentialities in countries such as Brazil and Mexico.

THE ROLE OF MULTILATERAL INVESTMENT CHANNELING

The use of European countries and Japan as a sort of financial entrepot for channeling private investment funds to underdeveloped countries such as Brazil and Mexico can be suggested from information in this study concerning private investment practices and characteristics. Similarity of general business conditions and practices between the prospective creditor and debtor countries or familiarity or experience on the part of the former country with the conditions of investment in the latter, are important factors influencing the flow of capital. Such experience and familiarity are present in Europe and Japan, vis-à-vis the present-day underdeveloped areas, preparing them to invest there "... free of many inhibitions which frustrate the American investors." 15 The investment by the United States, on the other hand, in Europe and also in Japan—with which it is more

familiar—would enable the latter in turn to invest in the underdeveloped countries and would undoubtedly result in a greater and more efficient total flow of foreign capital.

The American investor contemplating manufacturing abroad has shown a definite preference for those countries which have already attained a degree of industrialization. Our predilection for advanced techniques of production gives the investment in more complicated types of manufacture a better commercial position, if volume production based on volume markets can be expected. In smaller markets, where simpler production techniques are usual, or where the goods consumed are simpler, this inducement is not present for U.S. entrepreneurs, so either native or European entrepreneurs must be found to fill the role.¹⁶

NECESSITY OF PRIOR AND SIMULTANEOUS EXPANSION

It was found, in the cases of both Brazil and Mexico, that a certain degree of prior development and expansion proved helpful in facilitating a further inflow of capital from abroad. It is easier to attract foreign capital where profitable opportunities of investment have been partially exploited and have been shown to be worthwhile. It is especially important where social and cultural differences are greater, and hence familiarity on the part of the foreign

investors and governments is less. Even with regard to the investment of foreign capital itself, the process of investment is cumulative and the initial success of a certain amount of foreign capital breeds the prospects of further success. Both Brazil and Mexico were fortunate in this respect, especially in regards to the manufacturing sector of their economies.

NECESSITY FOR GOVERNMENTAL ACTION

It was found, in the cases of both Brazil and Mexico, that a certain degree of governmental action proved helpful and at times necessary for capital importation and for effective economic development in the post-war period. It appeared that direct investment increased only after substantial government borrowing and investment began to pave a way for it or else simultaneously expanded with it.\(^\text{17}\)

It was further observed that the dynamic expansions of internal markets in the two economies were accelerated by tariff and quota policies integrated with the expanded, publicly financed, social overhead facilities. It was remarkable that in both cases, to a greater or less degree

\(^{17}\)See the above section in this chapter concerning "The Conflict of Policy and Practice."
depending upon the product, tariffs played an important part in attracting foreign investment to manufacturing production and subsequently, at times, to the merchandising of their products.

The fact that the flow of private foreign capital was quite large in both absolute and relative figures in Mexico, where exchange controls were not applied, as compared to other underdeveloped countries where such controls exist, seems to suggest that a rather close positive correlation has developed between freedom from exchange controls and inflow of foreign capital. Clearly, however, other contributing factors also came into play—in particular the opportunities offered by her natural resources, by her relatively successful fiscal and monetary policies, and by her rapidly expanding internal markets. However, the government ownership and regulation of certain industries, combined with the prohibition of foreign ownership in certain others, did tend to discourage the free flow of independent private foreign capital in all but the manufacturing and distribution sections of the economy in the post-war period.

Foreign direct investment in Brazil, which was chiefly concentrated also in manufacturing and distribution, increased considerably in spite of having been subject to similar
restrictive regulations and in spite of more intensive ex­
change controls than in Mexico. There can be no doubt that
the rapid development of Brazil's economy and the encouraging
prospects opened up by the size of her market carried more
weight than the economic and exchange regimes in determining
the decisions of foreign investors. Moreover, the extension
of private manufacturing investment was further induced in
some cases by such additional governmental actions as tax
reduction, favorable import quotas and also negotiation
with and persuasion of individual companies.

Moreover, the extensive borrowing and grants received
by the two countries required in almost all cases some sort
of inter-governmental action as was evidenced by the joint-
technical studies and joint-assistance programs; the partici­
pation of both countries in the provisions of the United
Nations, the International Monetary Fund, and the International
Bank for Reconstruction and Development; the close political
and economic liaison with the principal lending and investing
country—the United States; and the Brazilian and Mexican
governmental guarantees on almost all of the public loan
capital flowing into the two economies (which were later
strengthened by similar provisions afforded by the creditor
countries of Western Europe). It may be instructive here for
other underdeveloped countries that some sort of action— not necessarily "formal" agreements— on the inter-governmental level was necessary to increase public capital, as well as to indirectly induce further investment from private sources.

Because of the increased risks of investment in the post-war era, the case for special governmental action relative to private investors has probably been strengthened. The investment treaties concluded recently between the United States and some of her debtor countries have sought to cover some of these risks— although neither Brazil nor Mexico was included. The systems of guarantees to the private direct investors in the United States, covering expropriation and convertibility, should properly be extended to portfolio and other types of quasi-public loans and credits. The provision of tax incentives to investors in foreign securities, the creation of special investment institutions which would draw funds from both individual and institutional investors in the United States to invest in foreign securities, and the liberalization of laws regulating investment policies of the United States insurance companies coupled with propaganda and persuasion (as was effectively done in the case of the I.B.R. D. issues) are all likely to facilitate a greater flow of foreign capital— especially of the form necessary for
implementing social overhead facilities.

Finally, in the course of economic development, recognition must be made of the fact that even when the dynamic drive comes from foreign capital (both private and public) which may introduce innovation, open up new lines of production and consumption, provide a portion of the necessary social overhead and earn a satisfactory rate of return in the process, the continuation of the process on a cumulative basis is a function of the debtor countries' governmental action via the generation of indigenous forces of savings and investment. This is especially important since in recent years the advanced countries themselves, contrary to the Marxian hypothesis, have offered a strong counter-attraction for capital investment and therefore the amount of surplus savings available for investment abroad is limited. Moreover, a particular country can be deprived of further inflows of capital owing to the opening up of more profitable sources of employment of capital elsewhere.

The close interrelations of internal and external sources of finance and their productive utilization can be found in many respects. The development of internal financial institutions to mobilize domestic savings opens up more channels for the importation of foreign capital, provides
supplementary domestic savings to be combined with foreign capital for expenditure on local resources, moderates the inflationary impact of the introduction of foreign capital and enables the exploitation of new opportunities and the growth of subsidiary activities in response to the foreign financed sectors. The Mexican Financiera and the Brazilian National Bank for Economic Development, among other similar institutions, were established with these prospects in view. Domestic measures to mobilize a large part of the income generated by domestic and foreign investment not only increase the rate of domestic capital formation, but also tend to set in motion a self-sustaining process of growth, and permit the successful servicing of foreign capital and the maintenance of credit standing abroad.

The case of Mexico, in contrast with Brazil, clearly illustrates a relatively successful pattern of domestic action. In Mexico, the rapidly increasing productivity of agriculture and manufacturing, under the impact of reinvested earnings, foreign capital inflows and improved techniques and methods, soon outstripped the increase in population and provided the main source of savings in the post-war years. High taxation on consumption, a relatively well organized state banking and investment system mobilizing savings and undertaking
long-term industrial and agricultural overhead financing, coupled with a stable government interested in providing the necessary leadership and social overhead, also made for a very high rate of savings and subsequently increased Mexico's capital absorption capacity and effective long-term growth.

POSITIVE SERVICING POLICY

From the evidence available in this study, it was shown that the satisfactory servicing of foreign capital in the long-run was not a question merely of earmarking foreign capital for use in the production of existing export products, orientated towards the particular creditor countries, but of over-all positive monetary, fiscal and exchange policies.

Positive monetary, fiscal and exchange policies must be undertaken by the underdeveloped debtor countries in order to maintain sufficient increases in the rates of their domestic savings and investment. These increases are necessitated in order to make available increasing domestic per capita incomes while at the same time insuring service payments abroad.

In the dynamic context of economic development and changing demand and technology at home and abroad, comparative
cost situations change, new export lines develop, old ones are replaced, inflationary pressures set in, import substitution develops, and more and more new foreign capital flows into the economy, bringing with it increasing demands for service. All these factors tend not only to necessitate positive monetary and fiscal policies—to curtail and control inflation and to readapt the internal occupation and industrial structures—but they also necessitate readjustments, which may be major readjustments in certain cases, in the pattern of trade between the debtor and creditor countries. Special measures to increase the efficiency of export industries and to promote diversified exports, as were undertaken by Mexico, may be necessary in such a dynamic context.

Moreover, the possibility of multilateral settlements of trade balances helps to ease or smooth the process of readjustment, by spreading its burden over to third countries, rather than by concentrating it on the bilateral balancing of payments between the specific creditor and debtor countries. A breakdown in multilateralism, intensified by exchange control and strong trade restrictions, would tend to make foreign capital servicing even more difficult and also would tend to direct foreign and domestic capital only into those product lines which could be directly sold to the creditor countries.
Even when foreign loans are productively used and export earnings are expected to increase in the long-run, there may be a lack of coincidence between the timing of yields on the capital and its schedule or time-shape of service payments. This was especially true in Brazil where a large number of heavy and slow-yielding public investment projects were simultaneously launched, sometimes with long periods intervening between their inception and completion. This caused a pressure in the balance of payments in the short-run which in turn led to a high ratio of exchange earnings to the service payments. This problem can be partially met by a sustained capital inflow and by a more even distribution of the total investment program (not merely of foreign capital) between the projects of different time-shapes, including a few quick-yielding and export-increasing projects, as was the experience in Mexico. The role of the banking system in moderating the inflationary impact of capital import or even in counteracting the cyclical effect of a fluctuating capital inflow, as evidenced by the contrasting experiences of Brazil and Mexico, is also important.

The year-to-year problem of foreign capital service payments in the case of the primary producing debtor countries arises from the variability not merely of the money proceeds
of exports but also of the real proceeds measured in terms of their purchasing power over manufactured imports. Even though capital goods fluctuate considerably in price, the whole range of manufactured goods fluctuates, on the average, much less and sometimes in the reverse direction. Moreover, the imports of essential consumer or capital goods cannot be curtailed without upsetting domestic investment programs or without causing a severe cut in consumption. Therefore, the margin between the export earnings and the cost of such essential imports, which is available for service payments, is even more variable. For underdeveloped countries of the Brazilian and Mexican nature, the narrow limit placed by this margin tends to present the greatest short and medium-term hindrance to foreign capital absorption via subsequent servicing—since the major portion of service payments (service on public capital) are of a fixed nature.

Long-term capital movements, no less than current foreign exchange receipts, have been subject to erratic fluctuations. At times during a period of falling current receipts the pressure on the balance of payments has been aggravated by a fall in the rate of "autonomous" capital inflow. (In the case of Mexico, since most of the capital inflow was by means of government borrowing, reserves were built up out of
borrowing abroad in good years in order to utilize them in lean years. Brazil, on the other hand, made no such attempt in this type of positive policy.) Adequacy of foreign exchange reserves of a country can only be judged in relation to the range of fluctuations in its current exchange receipts. Underdeveloped debtor countries, being subject to a greater range of fluctuation in their current receipts, should require larger reserves relative to the volume of their trade than do the advanced economies exporting manufactured goods. But the primary producing countries, such as Brazil and Mexico with their relatively low levels of per capita income, are placed in a difficult position. In order to build up large international reserves they would have to sacrifice large amounts of their much needed imports. The importance of short-term compensatory loans and credits from international agencies or creditor countries to tide over temporary or medium-term difficulties is obvious. In the absence of more basic measures aimed at the stabilization of violent swings in the world commodity markets, such short-term additions to the international reserves from foreign sources will certainly help to tide over any recession of demand like that of the late 1960's. The importance of employment, commercial and stock-piling policies of the advanced creditor countries
in enabling satisfactory foreign capital servicing by the debtor countries also cannot be exaggerated.
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UNITED STATES GOVERNMENT PUBLICATIONS


INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT PUBLICATIONS


**UNPUBLISHED PAPERS**


COMPUTATIONAL APPENDIX
### TABLE IV

**MOVEMENTS OF FOREIGN LONG-TERM CAPITAL, 1947-1960f**

(Millions of Dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Direct &amp; Other Long-Term Private</th>
<th>Official Donations</th>
<th>Public Loans</th>
<th>Total Inflow</th>
<th>Amortization &amp; Repayment of Public Loans</th>
<th>Other Capital Outflow</th>
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<th>Net Foreign Capital Movement</th>
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<td>6.9</td>
<td>41.6</td>
<td>81.9</td>
<td>973.8</td>
</tr>
<tr>
<td>1953</td>
<td>41.8</td>
<td>4.6</td>
<td>31.6</td>
<td>78.0</td>
<td>30.7</td>
<td>8.1</td>
<td>38.8</td>
<td>39.2</td>
<td>938.1</td>
</tr>
<tr>
<td>1954</td>
<td>104.6</td>
<td>5.7</td>
<td>78.7</td>
<td>189.0</td>
<td>50.0</td>
<td>18.1</td>
<td>68.1</td>
<td>120.9</td>
<td>1055.1</td>
</tr>
<tr>
<td>1955</td>
<td>106.8</td>
<td>3.8</td>
<td>77.8</td>
<td>187.9</td>
<td>54.4</td>
<td>18.9</td>
<td>73.3</td>
<td>114.6</td>
<td>1332.1</td>
</tr>
<tr>
<td>1956</td>
<td>118.0</td>
<td>2.4</td>
<td>105.6</td>
<td>226.0</td>
<td>66.4</td>
<td>20.8</td>
<td>86.7</td>
<td>139.3</td>
<td>1398.7</td>
</tr>
<tr>
<td>1957</td>
<td>131.6</td>
<td>3.2</td>
<td>165.1</td>
<td>299.9</td>
<td>83.0</td>
<td>4.1</td>
<td>87.1</td>
<td>212.8</td>
<td>1337.3</td>
</tr>
<tr>
<td>1958</td>
<td>100.3</td>
<td>2.6</td>
<td>241.6</td>
<td>344.5</td>
<td>129.2</td>
<td>24.5</td>
<td>153.7</td>
<td>190.8</td>
<td>1345.4</td>
</tr>
<tr>
<td>1959</td>
<td>81.2</td>
<td>3.0</td>
<td>239.0</td>
<td>223.2</td>
<td>255.3</td>
<td>8.6</td>
<td>263.9</td>
<td>59.3</td>
<td>1440.6</td>
</tr>
<tr>
<td>1960d</td>
<td>80.0</td>
<td>3.0</td>
<td>217.0</td>
<td>300.0</td>
<td>(n/a)</td>
<td>(n/a)</td>
<td>127.8</td>
<td>172.2</td>
<td>1493.0</td>
</tr>
</tbody>
</table>

aI.M.F. and I.B.R.D. subscriptions: $10 million in 1947; $37.5 million in 1948; $112.5 million in 1949.
TABLE IV (CONTINUED)

\( ^b \) Purchase of British investments: $39 million in 1948; $29 million in 1951.

\( ^c \) Long-term credits to Finland and Paraguay under bilateral agreements: $10 million in 1947.

\( ^d \) All estimates for 1960 are approximations based on partial and incomplete data in the primary sources.


\( ^f \) See notes for Table V in this Computational Appendix for further tabulation details.

\( ^g \) Throughout this study, "private donations," chiefly immigrants' remittances, have been included with "Direct Investment and Other Private Capital."

### TABLE V

**COMPUTATION OF AGGREGATE AMOUNTS OF LONG-TERM FOREIGN CAPITAL IN BRAZIL AND MEXICO**

*(Millions of Dollars)*

<table>
<thead>
<tr>
<th>Description</th>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Total Direct Foreign Investment, 1952</td>
<td></td>
<td>$732.0</td>
</tr>
<tr>
<td>b) External Public Long-term Debt, 1950</td>
<td></td>
<td>309.6</td>
</tr>
<tr>
<td>c) Net External Public Long-term Debt, 1950-52</td>
<td></td>
<td>20.5</td>
</tr>
<tr>
<td>d) International Grants, 1947-52</td>
<td></td>
<td>$97.9</td>
</tr>
<tr>
<td>e) International Grants, 1953-60</td>
<td></td>
<td>$27.8</td>
</tr>
<tr>
<td>f) International Grants, 1947-60</td>
<td></td>
<td>125.7</td>
</tr>
<tr>
<td>g) Net Foreign Long-term Capital Flow, 1947-52</td>
<td></td>
<td>$279.8</td>
</tr>
<tr>
<td>h) Net Foreign Long-term Capital Flow, 1953-60</td>
<td></td>
<td>$1,079.6</td>
</tr>
<tr>
<td>i) Net Foreign Long-term Capital Flow, 1947-60</td>
<td></td>
<td>1,359.4</td>
</tr>
<tr>
<td>j) Aggregate Long-term Foreign Capital, in Mexico, 1947</td>
<td></td>
<td>$782.3</td>
</tr>
<tr>
<td>(a+b+c-g=j)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>k) Aggregate Long-term Foreign Capital in Mexico, 1952</td>
<td></td>
<td>$1,160.0</td>
</tr>
<tr>
<td>(j+g=k)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a+b+c+d=k)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>l) Aggregate Long-term Foreign Capital in Mexico, 1960</td>
<td></td>
<td>$2,267.4</td>
</tr>
<tr>
<td>(a+b+c+f+h=l)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(k+h+e=l)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(j+f+i=l)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# TABLE V (CONTINUED)

## Brazil:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) External Private Long-term Debt in Default, 1960</td>
<td>$74.0</td>
</tr>
<tr>
<td>b) External Public Long-term Debt, 1960</td>
<td>$1,218.6</td>
</tr>
<tr>
<td>c) Estimated Private Direct Investment, 1959</td>
<td>$3,500.0</td>
</tr>
<tr>
<td>d) Net Private Long-term Capital Flow, 1960</td>
<td>$138.0</td>
</tr>
<tr>
<td>e) Net Foreign Long-term Capital Flow, 1947-52</td>
<td>$-103.7</td>
</tr>
<tr>
<td>f) Net Foreign Long-term Capital Flow, 1953-60</td>
<td>$2,010.0</td>
</tr>
<tr>
<td>g) Net Foreign Long-term Capital Flow, 1947-60</td>
<td>$1,906.3</td>
</tr>
<tr>
<td>h) International Grants, 1947-52</td>
<td>26.5</td>
</tr>
<tr>
<td>i) International Grants, 1953-60</td>
<td>$119.0</td>
</tr>
<tr>
<td>j) International Grants, 1947-60</td>
<td>$145.5</td>
</tr>
<tr>
<td>k) Aggregate Long-term Foreign Capital in Brazil, 1947</td>
<td>$3,024.3</td>
</tr>
<tr>
<td>(m-(j+g)=k)</td>
<td></td>
</tr>
<tr>
<td>l) Aggregate Long-term Foreign Capital in Brazil, 1952</td>
<td>$2,947.1</td>
</tr>
<tr>
<td>(m-(i+f)=l)</td>
<td></td>
</tr>
<tr>
<td>m) Aggregate Long-term Foreign Capital in Brazil, 1960</td>
<td>$5,076.1</td>
</tr>
<tr>
<td>(a+b+c+d+j=m)</td>
<td></td>
</tr>
</tbody>
</table>

---


2Ibid., p. 17.

All grants and unilateral transfers were considered as long-term public capital. However, only grants after 1947 were included on a gross basis.


Ibid., p. 10.

Ibid., p. 12.


NOTES: The total value of existing foreign capital and investments in Brazil and Mexico is not accurately known, as no reliable estimates have been made in these two countries during the past decade. Therefore, this has necessitated consolidating all available sources and arriving at this study's own approximations. In this study, reasonable estimates were made, based on old studies, national and international institutional sources and the flows of capital into
and out of the two countries each year in the estimates of the balance of payments, but even here the estimates are tentative.

This study includes as long-term capital all transactions which result in a permanent net addition to total resources available for economic development. This concept implies the inclusion of all grants which have economic value and all loans and credits which are used productively. The period for which a loan is made employs the same definition for long-term loans as used by the International Monetary Fund. This definition includes as long-term capital all loans with a schedule of repayment extending for one year or more, with the exception of I.M.F. swing-credits in the balance of payments. Although this definition includes a large proportion of medium-term industrial credits, it is nevertheless the most comprehensive and accurate definition that can be derived from the available data sources.

The analysis for this study requires data on private and public foreign long-term capital received by Brazil and Mexico which are not directly available in existing sources. New series have therefore been constructed, in which foreign flows are defined according to whether at any point throughout the transfer process the capital flow has been influenced or handled by a public body (see Chapter IV for a more detailed discussion). Since the International Monetary Fund's balance of payments statements utilize a definition of "public" and "private" according to the sector in the receiving country, the underlying data in this study are the result of revisions and adaptations of the I.M.F. data in the tabular detail and country notes in the Balance of Payments Yearbooks and International Financial Statistics, and of a number of other sources. These sources are noted for each table in which data are compiled throughout this study.

The items included from the I.M.F. data are private donations and private long-term capital flows (Yearbook items B9, C11.1, C11.2, C11.3); and official donations and official long-term capital flows (Yearbook items B10, C11.2, C11.3, C11.4, C13, C15 and C17).
The figures for private banks and quasi-public financial institutions have been included in the data shown for public capital as almost all of these funds have been either guaranteed or absorbed by a public body in the transfer process.

All estimates are given in United States dollars. In cases where the country data were published in units of national currency, conversion was made at rates given in the I.M.F. Yearbooks and at recommended United States Department of Commerce parity rates.

There are a number of additional limitations to the data in this study. First, there is an underestimation of direct investment in both countries as only reinvested branch profits show up in the balance of payments. Subsidiary earnings show on international account only as they are remitted out of the country to the parent organization abroad. One source estimates that the annual gross foreign direct investment in Brazil has been underestimated by over 20 per cent because of the reinvested subsidiary earnings not showing up in the international accounts. Additionally, private investment from abroad in portfolio types of investment has not been estimated for amounts outstanding at the end of 1947 for Mexico. No reliable figures could be found. However, the discrepancy is not significant as there appears to have been very little private investment, other than direct investment, outstanding during the period just prior to 1947 in Mexico. One further limitation of the data in this study includes the fact that data pertaining to United States direct investment is not directly comparable with the annual tabulations made by the United States Department of Commerce in their monthly publication, the Survey of Current Business. In the United States Department of Commerce yearly census and tabulation all of the firms operating in Brazil and Mexico are not included. A few small firms do not report and only those firms with United States control are included. Also, data in the Department of Commerce tabulations have been adjusted for exchange rate changes and inflation effects on the current working assets of United States firms abroad. On the other hand, in the bulk of the
data used for tabulations in this study the current working assets have been carried as original value in United States dollar terms. This value was determined and recorded at the time of the transfer into the country.
### TABLE VI

**NATIONAL INCOME AND GROSS DOMESTIC CAPITAL FORMATION IN MEXICO AND BRAZIL**

<table>
<thead>
<tr>
<th>Years</th>
<th>National Income</th>
<th>Gross Domestic Fixed Capital Formation&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mexico&lt;sup&gt;c&lt;/sup&gt;</td>
<td>Brazil&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>1947</td>
<td>26289</td>
<td>134.0</td>
</tr>
<tr>
<td>1948</td>
<td>28575</td>
<td>146.6</td>
</tr>
<tr>
<td>1949</td>
<td>31262</td>
<td>172.0</td>
</tr>
<tr>
<td>1950</td>
<td>37500</td>
<td>212.6</td>
</tr>
<tr>
<td>1951</td>
<td>46800</td>
<td>252.9</td>
</tr>
<tr>
<td>1952</td>
<td>52000</td>
<td>292.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1953</td>
<td>50200</td>
<td>356.7</td>
</tr>
<tr>
<td>1954</td>
<td>59180</td>
<td>451.3</td>
</tr>
<tr>
<td>1955</td>
<td>74760</td>
<td>573.3</td>
</tr>
<tr>
<td>1956</td>
<td>84000</td>
<td>726.7</td>
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<td>1957</td>
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<td>1959</td>
<td>109000</td>
<td>1403.9</td>
</tr>
<tr>
<td>1960</td>
<td>120100</td>
<td>2300.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1947-60</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup>Excludes increase in stocks.


<sup>c</sup>Millions of pesos in Mexico and billions of cruzeiros in Brazil at current market prices.

VITA

Darrell Richard Lewis, the son of Mrs. Lucille Odegarden, was born July 31, 1936 in St. Paul, Minnesota. He is married to the former Marilyn Lucille Glenna. They have one daughter, Sheryl Lynn.

He was graduated from Chatfield Public High School, Chatfield, Minnesota in June, 1954. After serving as an enlisted man with the United States Army in Europe for three years, he entered Luther College, Decorah, Iowa as a freshman in January, 1958. In August, 1960, he was graduated from Luther College with the Bachelor of Arts degree, magna cum laude.

In September, 1960, he was awarded a three-year National Defense Fellowship in Economics at Louisiana State University. At the present time, he is a candidate for the Doctor of Philosophy degree.
Candidate: Darrell Richard Lewis

Major Field: Economics

Title of Thesis: The Role of Foreign Capital Movements in the Economic Development of Brazil and Mexico, 1947-1960

Approved:

R.A. [Signature]
Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

R.A. [Signature]

B.F. [Signature]

T.R. [Signature]

[Signature]

Date of Examination:

May 27, 1963