Economic independence: Concepts and strategies, a theoretical investigation and an empirical case study

Eqbal Al-Rahmani

University of New Hampshire, Durham
INFORMATION TO USERS

The most advanced technology has been used to photograph and reproduce this manuscript from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book. These are also available as one exposure on a standard 35mm slide or as a 17" x 23" black and white photographic print for an additional charge.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.
ECONOMIC INDEPENDENCE: CONCEPTS AND STRATEGIES,
A THEORETICAL INVESTIGATION AND AN EMPIRICAL CASE STUDY

by

EQBAL AL-RAHMANI
Baccalaureat Degree in Economics, University of Kuwait, 1981
Master's Degree in Economics, University of New Hampshire, 1983

DISSERTATION

Submitted to the University of New Hampshire
in Partial Fulfillment of
the Requirements for the Degree of
Doctor of Philosophy
in
Economics

December, 1988
The dissertation has been examined and approved.

Marc W. Herold
Dissertation director, Marc W. Herold, Associate Professor of Economics

Richard England
Richard England, Associate Professor of Economics

Kenneth Rothwell
Kenneth Rothwell, Professor of Economics

Aline Kuntz
Aline Kuntz, Assistant Professor of Political Science

Steve Reyna
Steve Reyna, Associate Professor of Anthropology

Sept. 16, 1988
Date
TABLE OF CONTENTS

DEDICATION ........................................................................................................ iii  
ACKNOWLEDGEMENTS ............................................................................... iv  
LIST OF TABLES ............................................................................................ v  
LIST OF FIGURES ........................................................................................... vii  
ABSTRACT ....................................................................................................... viii  
CHAPTER .......................................................................................................... PAGE

I. CONCEPTS AND DEFINITIONS OF ECONOMIC INDEPENDENCE .... 1
   ECLA ............................................................................................................... 5
   The Dependencia School ........................................................................... 10
   The Soviet School ....................................................................................... 20
   The Work on Self-Reliance ....................................................................... 27
   The Work on Small Open Economies ..................................................... 32

II. STRATEGIES OF ECONOMIC INDEPENDENCE ............................. 53
   Import - Substituting Industrialization .................................................... 56
   Basic Industrialization .............................................................................. 63
   Regional Cooperation ............................................................................... 68
   New International Economic Order ...................................................... 75
TABLE OF CONTENTS CONTINUED

III. ECONOMIC INDEPENDENCE: THE CUBAN EXPERIENCE ........ 93

Historical Background .................................. 95

The Cuban Development Experience .................... 104

Cuba's Dependency .................................... 131

"Sugar Dependency" .................................... 133

"Soviet Dependency" ................................... 139

Cuba's Debt ........................................... 148

IV. CONCLUSION ........................................ 194

BIBLIOGRAPHY ............................................. 201
DEDICATION

To my family, parents and brothers, who have given me the continuous love and support without which I would not have started my graduate work; and to the memory of Bob Canney, friend and teacher with whom I shared valuable experiences in Cuba.
ACKNOWLEDGMENT

I wish to acknowledge the contribution and support of the following individuals and institutions:

University of Kuwait for providing me with a full scholarship that financed my graduate work;

Members of my dissertation committee, especially my advisor Professor Marc Herold who encouraged my independent thinking and self development, and Professors Richard England and Aline Kuntz who provided me with valuable comments and encouragement;

Dr. Brock Dethier who, beside his valuable and patient editing of this dissertation, has been a supportive friend and teacher;

Professors Alfonso Montero and Héctor Pedroso, from the University of Havana and Centro de Investigaciones de Economía Internacional, for valuable discussions and information;

The people working at the Center for Cuban Studies in New York, who organized educational trips to Cuba through which I deepened my understanding of the Cuban experience. Special thanks to their librarian Mr. Jerome Nickel who provided me with important sources;

Finally, equally important, to all my friends who have encouraged and helped me get through some difficult times.
# LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary of Definitions and Proposed Strategies of Economic Independence by Different Schools of Thought</td>
<td>48</td>
</tr>
<tr>
<td>World Trade Growth, 1973-1982</td>
<td>86</td>
</tr>
<tr>
<td>Debt Indicators for Developing Countries, 1970-84</td>
<td>86</td>
</tr>
<tr>
<td>Terms of Trade of Developing Countries, 1973-82</td>
<td>87</td>
</tr>
<tr>
<td>U.S. Direct Investments in Cuba, 1929-1958</td>
<td>159</td>
</tr>
<tr>
<td>Nationalization of Means of Production</td>
<td>159</td>
</tr>
<tr>
<td>Acquisition of Farm Machinery, 1966-70</td>
<td>161</td>
</tr>
<tr>
<td>Fabrication of Sugar Milling Equipment, 1965-69</td>
<td>162</td>
</tr>
<tr>
<td>Output of Durable Consumer Goods, 1963-80</td>
<td>163</td>
</tr>
<tr>
<td>Some Characteristics of the Cuban Labor Force, 1960-80</td>
<td>164</td>
</tr>
<tr>
<td>Output of Transport Equipment and Machine (Except Electrical)</td>
<td>165</td>
</tr>
<tr>
<td>Output of Electrical Equipment, Electric Power, and Mining Industry</td>
<td>166</td>
</tr>
<tr>
<td>Output of Sulfuric Acid, Rayon Tire Cords, Fertilizers, Insecticides, Herbicides, Paper Pulb, Newsprint, Tires and Matches</td>
<td>167</td>
</tr>
<tr>
<td>Mechanization of Cane-Cutting and Loading in Cuba, 1963-81</td>
<td>168</td>
</tr>
<tr>
<td>Percentage of Cane Mechanically Cut by Various Harvesters in Cuba, 1971-80</td>
<td>169</td>
</tr>
</tbody>
</table>
LIST OF TABLES CONTINUED

Gross Value of Production of Engineering Goods Industries,
1975-85 .................................................................. 171
Growth Rates of Various Cuban Industries .......................... 172
Industrial Output, Selected Products, 1965-84 ..................... 173
Cuba’s Imports of Goods .............................................. 174
Production, Imports and Apparent Consumption of Machinery
and Equipment, 1963-84 .............................................. 175
Origin of the Financing Resources for Investment Program .... 176
Growth Rate of Non-Traditional Exports ............................ 176
Cuba’s Balance of Payment in Freely Convertible Currency .... 177
Latin America: Evolution of Total Gross Domestic Product .... 177
Cuba’s Trade Dependency, 1946-80 ................................. 178
Sugar: Production, Exports and Export Prices ..................... 179
Percentage Allocation of Soviet Assistance to Various Sectors ... 180
Structure and Evolution of External debt ........................... 180
Cuba’s Indicators of External Indebtisness in Freely
Convertible Currency ............................................... 181
LIST OF FIGURES

Figure 1 - Composite Basic Needs Performance Indexes, 1958-80 ................................................ 182
Figure 2 - Estimated Income Distribution in Cuba in 1953, 1962 and 1978 ............................................... 183
Figure 3 - Index of Sugar and Non-Sugar Production, 1983 and 1984 ..................................................... 184
Figure 4 - Share of Manufactured Imports in Total Imports 1970 and 1983 .................................................. 185
Figure 5 - Productive and Non-productive Sectors ................... 186
Figure 5 - Cuban Terms of Trade with USSR and the West ....... 187
ABSTRACT

ECONOMIC INDEPENDENCE: CONCEPTS AND STRATEGIES,
A THEORETICAL INVESTIGATION AND AN EMPirical CASE STUDY

by

EQBAL AL-RAHMANI
University of New Hampshire, December, 1988

The main goals of this dissertation are three-folds: (i) to define the concept of economic independence through theoretical investigation of five schools of thought: 1) The United Nations Economic Commission On Latin America (ECLA); 2) The Dependencia School; 3) The Soviet School; 4) The Work on Self-Reliance; 5) and the Work on Small Open Economies; (ii) to evaluate the main proposed strategies in the literature for achieving a higher level of economic independence for Third World Countries. These strategies include: Import-Substitution Industrialization, Basic Industrialization, Regional Cooperation and the New International Economic Order; (iii) to examine the Cuban experience since the revolution in its attempt to reduce its heritage of dependency, a legacy of more than four centuries of colonial and neocolonial domination.

This dissertation views economic independence as a function of the internal level of productive and technical capacity and the degree of national integration. Economic independence is not viewed as an equivalent of autarky, nor as an absolute condition, but rather as a
process toward a higher level of national integration and of a more equal interdependence.

Utilizing such definition of economic independence, this dissertation shows that the Cuban economy, mainly through the committed efforts at industrialization and provision of basic needs, has undoubtedly become more independent since the revolution and especially since the 1970s. This achievement refutes the claim of Cuba's continued dependency especially in the forms of "Soviet dependency" and "sugar dependency". Such a claim mistakenly equates "dependency" with "dependence" and focuses only on external quantitative factors.
CHAPTER I

CONCEPTS AND DEFINITIONS OF ECONOMIC INDEPENDENCE

Introduction

Political independence from colonial powers has been perceived, by Third World leaders and liberation movements, as the necessary condition for any attempt to combat the economic backwardness and social injustice; economic independence, on the other hand, has been perceived as a sufficient condition for it. In many cases economic independence has been linked to the economic and social development of the country. Despite the dispute in the literature about the nature of the causal relationship between development and economic independence, most writers would agree that a country's economic independence is an increasing function of its level of social and economic development. A greater dispute in the literature, however, revolves around other important questions and issues such as: what is meant by economic independence? is it a goal that is confined to certain social systems? or is it pursued by all regardless of the social and political orientation, i.e. of the mode of production? what are the prerequisite conditions and strategies for achieving it? and who are the main beneficiaries of achieving it? This chapter will attempt to address these questions, through the examination of different schools of thought.

Before exploring the first question, however, it is important to tackle another fundamental question: Why economic independence? This
question is important because many theoretical contributions in the literature and the orientation of many of the international development organizations increasingly point towards economic interdependence among all countries. Therefore, why "bother" with economic independence when most of the international development conferences point towards more integration? First, it is important to clarify that economic independence should not be viewed as the opposite of economic interdependence. Emphasizing the issue of economic independence is by no means a call for a reduction of international economic relations whether in the form of trade or cooperation among nations. It is not a call for autarky, which is not a viable option even for the large and richly endowed countries. Most writers on the subject, as we will see later, would equate economic independence with a more equitable level of economic interdependence between the developing countries and the developed ones.

For most Third World countries, the long and bitter experiences of colonization remain as an important factor for their concern with economic independence. The goal of economic independence, however, has been the center of much recent attention for the following reasons: (i) the worsening financial situation of many of the Third World countries (including both poor and rich ones), manifested in the huge external debt and exacerbated by the international economic recession of the 1970s; with the consequent increased interference of the IMF through the implementation of its austerity measures; (ii) the increased volume of direct foreign investment and the much advanced role and control of the multinational corporations (MNCs) in many of the Third World countries; (iii) the theoretical development of
different perspectives about dependency and independence, which have enhanced the understanding of the underlying causes of the experienced dependency situations.

Green (1973:51) has identified seven classes of reasons of why economic independence is accepted as a priority political economic goal:

(1) Psychic satisfaction. Individuals and nations feel more human, fulfilled and confident if they have, or believe they have, greater control over decisions, forces, and institutions affecting their lives;

(2) Power to control one's economic destiny. This power is based on the assumption that only citizens, interest groups and governments of a particular country are ever concerned with their collective economic welfare;¹

(3) Altering the divisions of economic gains and opportunities from foreign to national beneficiaries. This is an important motivation which, when separated from the pattern of distributing the transformed gains, is shared by different social and political groups;

(4) Resolving of interest conflicts between external and internal economic forces;

(5) Achieving structural change in the pattern of production, resource allocation and institutions;

(6) Altering the domestic socio-economic patterns and power divisions;

(7) Altering the dominant mode of production, which means the transformation to socialism.
Some of these motivations might be specific to certain social systems. In some cases more than one motivation can operate.

Finally, the interest in the issue of economic independence is an outcome of the previous emphasis on economic dependence which is considered an undesirable state of affairs. This position, as Brewster argues, is usually presented along two lines: i) The positive proposition which views economic dependence as an inherently unstable state that would hinder attempts to predict economic performance and hence to plan for economic growth, ii) the normative proposition which views economic dependence as a state of inherent inequality (both internally and externally) which as such is condemned (Brewster, 1973:90).

It is difficult to find any country, regardless of its level of development and its social and political orientation, that does not considers economic independence as one of its major goals. Despite this shared goal, however, there is no one shared and accepted definition of economic independence. Many theorists and interest groups would differ in defining it. As a result there is no general agreement on identifying the prerequisites and the strategies for achieving it.

This chapter examines how different schools of thought in the literature have dealt with the issue of economic independence. This examination will include the following schools of thought: 1) The United Nations Economic Commission Of Latin America (ECLA); 2) the dependencia school; 3) the soviet school; 4) the advocates of self-reliance; and 5) the work on small open economies.

My focus on these schools of thought should by no means indicate the absence of other theoretical contributions. Other writers who are
not associated with these schools have written on the subject; while some reference to their work will be made, the major emphasis will be on those five schools of thought in order to focus and define the theoretical framework of this thesis.

I. ECLA

ECLA's theoretical propositions reflect a Third World perspective that has challenged the traditional international trade theory and the modernization theory that have dominated the economic development literature. From the beginning ECLA, which was established under the leadership of Raul Prebisch in 1948, has attacked the conventional international trade theory which saw all countries involved in trade relations as benefiting mutually according to their comparative advantage. To the contrary, ECLA argued that international trade has operated, since the late 19th century, against the interests of Latin American countries and for the interests of the advanced capitalist countries. As a result underdevelopment remains a characteristic of the former group. Although ECLA's argument was specifically about the deteriorating economic position of Latin American countries in the world market, it was equally applicable to other Third World countries.

ECLA's emphasis was not directly on the issue of economic independence as such, but on the unequal exchange, between the center and the periphery, which was exacerbated by the deteriorating terms of trade. This situation was caused by an outward oriented strategy based on exporting raw materials and food stuffs to the industrialized countries and importing their manufactured products. The argument was based mainly on the structural disparities of demand. ECLA has argued
that the income elasticity of demand for raw materials, imported by the center, is less than one and for the manufactured products, imported by the periphery, is greater than one. This assertion was supported by Engels' law, agricultural protectionist policies of the advanced countries and the development of synthetic substitutes. Therefore, ECLA believed that the long run impact of this disparity is a reduction in Latin American countries' earnings and a deteriorating position in the world market.

ECLA's theorists viewed the deteriorating terms of trade not only as an obstacle to development (because it curtailed foreign exchange earnings and hence capital accumulation) but also as a means for the transfer of surplus "fruits of increased productivity" from the periphery to the center (Baer, 1969). To support this assertion, Prebisch links the structural differences in the supply side between the center and the periphery to the terms of trade. He argues that while the increase of the productivity in the center leads to a higher wages without changes in the prices of both domestic and export industries goods, the increased productivity in the periphery's export sector will not lead to an increase in the wages due to the unlimited supply of labor and the weakness of its unions. However, due to the downward trend in the terms of trade part of the marginal profit of the increased productivity in the periphery will be transferred to the center.

While the centers kept the whole benefit of the technical development of their industries, the peripheral countries transferred to them a share of the fruits of their own technical progress (Prebisch, quoted in Baer, 1969:208).

ECLA's argument and proposed policies, however, were reformist in their nature. Meier cites the limits to their propositions:
Unlike Marxists who concentrate on the unfavorable efforts of imperialism, these critics did not concentrate their critique on any "deliberate exploitation" by the advanced capitalist nations. Instead, their contention was simply that the free play of the international market forces creates disequalizing effects that operate to the disadvantaged of the less developed nations (Meier, 1984:190).

As a consequence ECLA saw economic dependence mainly as an economic relation between the center and the periphery, or what could be referred to as external dependence that is perpetuated by the international division of labor. "The consequence is that due to exterior pressure the country cannot decide autonomously what it should do or cease doing" (Prebisch, 1980; quoted in Chilcote, 1984:26).

Dependency in this analysis came to mean the lack of autonomy (Roxbourgh, 1979). And the alternative clearly points towards an autonomous capitalist development as opposed to the "imitative" and dependent form that dominates the periphery.

The main proposed strategies and policy recommendations of ECLA:

To overcome the structural disparities and increase the autonomy of the peripheral economy, ECLA proposed a structural change of production and trade. As a result of his strong emphasis on the long-run deteriorating terms of trade and the structural difference of the wage-productivity relationship, Prebisch proposed policies that emphasized both industrialization accompanied by tariff protection and a redistribution of income aimed at improving the living standards of the masses. In referring to industrialization, Prebisch has emphasized, especially in his early writing, the strategy of import substituting industrialization (ISI).
Import substitution (defined as an increase in the proportion of goods that are supplied from domestic sources and not necessarily as a reduction of the ratio of imports to total income) is the only way to correct the effects on peripheral growth of disparities of foreign trade elasticity (Prebisch, 1959:253).

However, later on Prebisch included export of the manufactures as a way to overcome some of ISI limitations.

Export of manufactures by the countries of the periphery, together with import substitution, will enable their industrialization to be made increasingly efficient and in the same time promote their technological development (Prebisch, 1985:20).

Besides criticizing conventional international trade theory, Prebisch has also questioned the neoclassical theory of income distribution in which workers, entrepreneurs and capital are remunerated according to their marginal contribution in the production process. In the periphery, Prebisch argues, the increase in labor's productivity is not transferred into an increase in its wages. Instead the generated surplus is transferred, in part, to the center via the downward trend of export prices and internally to the privileged groups. Prebisch proposed deliberate measures of income redistribution to be taken by the state as the means to both retain the surplus internally and to enlarge the domestic market.

Besides the proposed redistributive measures of income, ECLA's analysis pointed to regional integration as another means to enlarge the domestic market and increase the effective demand. In addition, regional integration was viewed as a means of ISI on a regional scale. As a practical consequence, ECLA had an important role in the formation of Latin American integration efforts: Latin America Free Trade Association (LAFTA) and the Central American Common market.
Gurrieri notes in his assessment of Prebisch's work that in his later writings, Prebisch put more emphasis on the issue of the use of economic surplus as opposed to his previous emphasis on structural reforms, intensive capital formation and international cooperation. This new emphasis came about as a result of the continued internal inequality despite the increased economic growth in some Latin American economies (Gurrieri, 1983).

Finally, ECLA has always actively advocated certain measures to improve the current structure of the international division of labor. These measures form a part of the general demands addressed by many Third World countries, and which are known as the demands for a New International Economic Order (NIEO).

Prebisch asserts that the development of the periphery requires suppressing the center-periphery system and establishing a new international economic order in which the reordering of the functions of its components and the corresponding modifications in the domestic productive structures would make it possible to achieve a more equitable distribution of power and income among nations (Gurrieri, 1983:392).

ECLA's emphasis on industrialization with protectionist measures and income distribution was accompanied with explicit social and political implications. ECLA's program called for a broad alliance of nearly all social classes against the landed oligarchy. Roxbourgh has summarized ECLA's social and political scenario as follows:

The peasantry, once freed from the oppressive and inefficient latifundio system would produce more foodstuffs and their income would increase. This would increase their demand of domestically-produced manufactured goods, thereby stimulating national industry. Deliberate state intervention in the economy would foster the creation of new industrial enterprises, and the industrial bourgeoisie and/or the urban middle class would take over state power from landed oligarchy. The industrial working class would benefit from
increased employment, and the policy of maximizing consumer demand by redistributing income would ensure that they would benefit in real terms from economic growth (Roxburgh, 1979:30).

Criticism of ECLA came from all directions. In his often mentioned article, Fernando Cardoso identifies three of these directions: 1) the "orthodox" line, led by Haberler who denied the possibility of inferring a constant trend toward decline in the terms of trade and criticized ECLA's argument for lacking explicit analysis of the role of economic cycles; 2) the "heterodox" liberal line, which focussed on the circularity of underdevelopment to the restriction of the markets; on the political front, the liberal right accused ECLA of being the "Trojan horse of Marxism"; and 3) the Marxist line, which criticized ECLA's reformist measures (Cardoso, 1979). Other leftist writers also criticized ECLA for its failure to denounce sufficiently the exploitation mechanisms within the capitalist system (Palma, 1979).

Despite all the criticism, however, ECLA's theoretical contributions have formed an important challenge to the previously dominant conventional theory of international trade. In addition they have enhanced the understanding of some of the obstacles facing the process of capital accumulation in the Third World. Further, ECLA's analysis constituted an important factor in the development of other theoretical perspectives, especially that of the dependencia school.

II. The Dependencia School

By the 1960s ECLA's proposed policies and strategies which had been adopted by some Latin American countries did not fulfill their promises. Besides the increased inequality of income distribution, unemployment, and balance of payments difficulties, there was a
"growing loss of national control over economic, political, social and
cultural life" (Palma, 1978:908). The dependencia argument arose
around this period was concerned with analyzing the causes of these
continuing problems and others. The dependencia theorists (or
dependistas) were influenced both by the Marxist theory of imperialism
and by ECLA. The dependencia analysis differed, however, from the two
trends of thought in its focus: it differed from the classical Marxist
theory of imperialism by focusing on the disadvantages to the
peripheral economies rather than on the gains and changes occurring in
the center. It differed from ECLA by emphasizing not only the economic
impact of the relationship between the "core" and the "satellites" but
also the internal social and political manifestations of this
relationship.

Most critics would agree that the dependencia analysis cannot be
treated as one theory; rather it should be treated as a set of theories
or a paradigm. It can be said, however, that the dependistas are
unified in their focus on the economic, social and political aspects of
the dependent pattern of development or underdevelopment that
characterize the peripheral economies as a result of their relationship
with the center.

The dependistas' main focus has been on the causes and features of
dependency and not on economic independence or overcoming dependency.
"(T)he dependency perspective tells us much more about what is wrong
and why than about what is correct and how to get there" (Gereffi,
1983:22). However, one could infer what is not dependency through an
examination of what was meant by dependency. This task, however, is
not a straightforward one mainly because of the different implications
of the term and, at times, the vague, and circular presentation which O'Brien expresses as:

The actual mechanisms of dependency are seldom spelt out in detail (...). One looks in vain through the theories of dependency for the essential characteristics of dependency. Instead one is given a circular argument: dependent countries are those which lack capacity for autonomous growth and they lack this because their structure are dependent ones" (O'Brien, 1975:24).

In an attempt to understand what was meant by dependency, perhaps it is best to start with the most quoted definition in the literature, that of Dos Santos:

By dependence we mean a situation in which the economy of certain countries is conditioned by the development and expansion of another economy to which the former is subjected. The relation of interdependence between two or more economies, and between these and the world trade, assumes the form of dependence when some countries (the dominant ones) can expand and can be self-sustaining, while other countries (the dependent ones) can do this only as a reflection of that expansion (Dos Santos, 1970:231).

Sunkel and Furtado share a similar view, though they differ from Dos Santos in their policy conclusions. Sunkel sees dependency and marginalization as inevitable outcomes of the dependent pattern of development in the periphery in which an increasing share of ownership and control of natural resources is given to foreign firms. In addition the increasing role played by these firms in the industrial, financial, marketing and distribution activities has fundamentally changed the social structure and the political system (Sunkel, 1972). Similarly, Furtado sees the alliance of certain groups (e.g. the landowners and commercial capitalists) with foreign interests as facilitating the latter's expansion and weakening the national entrepreneurial class which will necessarily exclude the "possibility
of self-sustained national development, along the lines of classical capitalist development" (Furtado, quoted in Sunkel, 1972:527). For these theorists, and others, dependency means the lack or weakness of an autonomous national pattern of development, which causes and aggravates many of the social and economic distortions of the peripheral societies. The obstacles facing an independent development are seen in: the industrial and technological expansion of the foreign firms and their monopolistic control of the world market; the skewed internal pattern of income distribution; the traditional structure of the agrarian system and; the tendency of the state to facilitate foreign expansion. These obstacles will tend to preserve the traditional export sector and hinder the development of the industrial sector. To some extent this view shares some similarity with ECLA's. The alternative is seen in the advancement of national development which Sunkel defines as "a force of national affirmation, an aspiration to self-determination and sovereignty" (Sunkel, 1969:32). As seen by ECLA, these writers find the potential leadership of such national development in the national (entrepreneurial) bourgeoisie.

A more radical line within dependencia is led by Frank. According to this line the historical relationship with the center, has not only conditioned the internal economic, social and political structure of the dependent peripheral economies, but also has determined it. This same relationship has led to the development of the 'core' and the underdevelopment or "development of underdevelopment" of the periphery by the continual transferring of surplus from the latter to the former. Frank believes that underdevelopment was not an original state but was a result of the mercantilist and capitalist expansion of the center.
Underdevelopment is not due to the survival of the archaic institutions and the existence of capital shortage in regions that have remained isolated from the stream of world history. On the contrary, underdevelopment was and still is generated by the very same historical process which also generated economic development: the development of capitalism itself (Frank, 1972:9).

Hence the only periods, Frank argues, where the satellites were able to develop were when ties to the metropolis were weakened by wars or depressions.

For this line within dependencia, dependency is viewed as an outcome of the historical process of incorporating the peripheral economies into the capitalist world system. Unlike the previous line, Frank considers the national bourgeoisie (together with imperialism) as the enemy of national development. He believes that the policies of this class will strengthen economic dependence by coinciding with the interest of capitalist class of the center.

Hence, the only way out of this dependency condition lies in breaking the ties with the center and pursuing a socialist development:

(T)he historical process of underdevelopment cannot be reversed and turned into economic and social development for the majority of Latin American people until they destroy the capitalist class structure through revolution and replace it with socialist development (Frank, 1972:19).

A third line within dependencia, advanced mainly by Cardoso and Faletto, has focussed on the analysis of the "new dependency". Unlike the previous line, it acknowledges the possibility of the development of the periphery despite its incorporation in the capitalist world. Unlike the enclave economies that perpetuated both dependency and underdevelopment, a new type of economy has developed, in some of peripheral countries, which is characterized by the contradictory notion of development and dependency. This latter situation, which
Cardoso labels as "associated-dependent development", has been caused mainly by the dynamic interaction between new forms of national political powers and new international economic forces:

Changes in the international capitalist organization have produced a new international division of labor. The moving force behind these changes is the multinational corporation. Assuming as it does the immersion of industrial capital into peripheral economies, the new international division of labor puts a dynamic element into operation in the internal market. Thus, to some extent, the interests of the foreign corporations have become compatible with internal prosperity of the dependent countries. In this sense they help promote development (Cardoso, 1973:149).

The view of this line of argument within dependencia shares some element of the classical Marxist theory of imperialism which predicted that capitalist expansion into the underdeveloped countries would bring about and facilitate the capitalist development of these countries. However, this line, though accepting the possibility of this kind of development, sees it only in a dependent form with no independent internal dynamics.

Development under this set of conditions implies, quite obviously, a definite articulation with the international market. Development in this situation also depends on technical, financial, organizational, and market connection that only multinational corporations can assure (Cardoso, 1973:149).

Thus, this line would disagree with the pessimistic view of the previous line of dependencia which foresaw nothing but underdevelopment and stagnation for peripheral economies within the capitalist system. On the other hand, it disagrees with the first line's optimism of the possibility of an autonomous capitalist development that would bring about better conditions for the majority of the people. To the
contrary, this line argues that the pattern of associated-dependent development will be based on a regressive profile of income distribution, with emphasis on luxury consumer durables as opposed to basic necessities and will contribute to social marginality (Cardoso, 1973:149). Cardoso and Faletto distinguish between the features of the capitalist development in the center and in the periphery. However, they do not subscribe or propose a "theory of dependent capitalism" or a "theory of dependency". Rather, they concentrate on "situations of dependency" that exist in concrete cases (Cardoso and Faletto, 1979).

In summary, therefore we can see two general definitions of non dependency or independent development. For some writers within dependencia the alternative to dependency is national development which will bring about a higher degree of autonomy and equal interaction relationship in the world market. For others, however, the only way out of dependency is a revolutionary change towards socialism.

The main proposed strategies and policy recommendations of dependencia:

As a result of their analytical concern with the causes of dependency and its features, dependencia's writers have not proposed clear strategies to overcome dependency and achieve a higher degree of economic independence. In his assessment of dependencia's policy conclusions, O'Brien argues that:

For policy conclusions are (...) (perhaps deliberately) left very vague. It is never clear whether the multinational corporation is to be nationalized or to be controlled by an Andean Pact-style foreign investment code, nor which specific policies are to be followed with regard to technical transfer and technical development, unemployment and income distribution, etc. (O'Brien, 1975:24).
It seems fair to argue, however, that the absence of explicit policy recommendations is a logical consequence for those writers who see underdevelopment and dependency as the only possible outcome of the center-periphery relationship. On the other hand, those who see the possibility of either an autonomous national development or dependent one, have suggested some policy recommendations.

Sunkel has argued in favor of industrialization. However, he opposed ISI which, as he sees it, not only did not "free the economy from its heavy reliance on primary exports, foreign capital and technology, (...) but has in fact aggravated the situation and nature of "dependencia" (Sunkel, 1972:518). Sunkel identifies three essential development tasks for the social groups that are trying to regain control over the economy and break out of the structure of a dependent economy. Assuming their control of the power, these tasks are: 1st, transforming the agrarian structure (which is the main root of inequality and marginalization); 2nd, using the primary export sector to support the expansion of heavy and consumer industries; and finally, organizing the industrial sector away from satisfying the conspicuous consumption of the minority into satisfying the basic needs of the majority (Sunkel, 1972:530). He further recognizes the importance of the role of regional integration in enhancing national development, though he acknowledges the possible limitations or even adverse effects. "Integration, in fact, can be either a basic instrument of national realization in Latin America; or it can be the instrument of accelerated dependence" (Sunkel, 1969:33). In order to avoid the latter possibility, Sunkel emphasizes the importance of multinational planning particularly of existing and additional basic industrial activities. Furtado, who shares a similar perspective, has emphasized
economic planning and programming as the means to regulate ISI and to broaden the industrial structure. Cardoso, though subscribing to a different perspective, sees the lack of a fully developed capital-goods sector as the crippling factor to the capital accumulation process in the dependent economy (Cardoso, 1973).

Perhaps no paradigm or school of thought, in the literature, has been more controversial than the dependencia. Their analysis has been heavily criticized by many leftist as well as bourgeois writers. They have been criticized for: over emphasizing external over internal factors that shape underdevelopment and dependency (Palma, 1978); over emphasizing national and international conflict over internal class conflict (Angotti, 1982); attributing the social, political and economic features of capitalism to dependency (Lall, 1976), which led to conceptualizing dependency as a mode of production with its own laws of motion (Cueva, 1976); failing to incorporate analysis of "socialist dependency" (Ray, 1973); and methodologically for being both static and ahistorical (Palma, 1978). The criticisms have been aptly summarized elsewhere, and hence I will not attempt to present them here. While some critics have specified the writers or the line within dependencia, some have generalized their criticism, based on the work of some writers, to include the whole paradigm of dependencia. Such generalization has been in many cases, in my opinion, unfair. For example, many dependistas (e.g., Cardoso and Falleto) are aware of the importance of internal causes of dependency. Similarly, they clearly reject conceptualizing dependency as a mode of production.

Before ending this section it is important to mention that some of the "vagueness" and multiple implications that are attributed to the
concept of dependency have arisen because of the misapplication of the concept by some other writers, especially in North America, who have attempted to analyze dependency in quantitative terms. Duvall has differentiated this group as:

The tradition of rigorous empiricism is distinguished by a commitment to precise measurement criteria and on that basis alone is distinguishable from the dependencia tradition. Unfortunately the distinction does not end here because empirical scientists have generally been guilty of ignoring the degree of precision of meaning which is provided by dependencia theorists for the concept of dependence. Instead, they have started with more common-sensical meanings of the term, and have given the impression that measurement rules developed in accord with those meanings are all that matter. Precision is provided by, and meaning is captured in, operational criteria. The result is a distortion of the primary meaning of the term as it appears in dependencia theory (Duvall, 1978:59).

As a result another conceptualization of dependency appears in the literature causing some confusion. This other concept which is differentiated by some writers as "dependence" refers to external economic relations, for example reliance on the importation of certain products from other countries. In this sense all countries can be said to be dependent. This concept is totally different from the dependency situations or structural dependency that the dependistas see prevailing in the peripheral economies.

The structural dependency of the periphery on the metropolis resulting from the asymmetrical process of penetration cannot be compared with the simple dependency of the metropolis on the peripheries for further deliveries of energy resources and raw materials. What in the first case is reflected in a special socio-economic structure; i.e. in periphery capitalism is in the second reduced to a question of the price of use value (Senghaas, 1975:290).
Perhaps this dichotomy of the concept is best expressed by Brewster in his often quoted statement: "(T)here may be a difference between a country which depends on external factors and a country which is dependent on them" (Brewster, 1975:290).

These two conceptions of the term "dependence" have caused errors in the classification of which countries are dependent, and which are not.12

III. The Soviet School

The issue of national independence in its two forms - political and economic - has been the center of the Soviet analysis of the Third World nations. As Clarkson notes in his book on the Soviet theory of development,

(the) best conceptual bridge for an outsider wanting to enter the Soviet view of the developing countries' position in the world - historically, politically, and economically - is their understanding of national independence (Clarkson, 1978:135).

The current Soviet perspective springs from the Marxist-Leninst theory. It goes further, however, by incorporating analysis of the changing internal conditions of the politically independent Third World countries (referred to as the "newly free countries") and of their international relations. In addition, the clear focus within the literature on the issue of economic independence and sovereignty is related to the official position taken by the Soviet Communist party, which has been reaffirmed by the 27th CPSU Congress.

However different the newly free countries may be from one another and whatever road they follow, their people are united by a desire to develop independently, on their own, and to run their affairs without foreign interference (New edition of the CPSU program, quoted in Rymalov, 1986:61).
The Soviet analysis of the Third World always takes into consideration the international context and especially the role played by imperialism. Soviet writers view the political independence of the Third World nations as only the beginning of a complex process of struggle for national independence. This complexity is related to the unchanged essence of imperialism. Almost all Soviet writers would agree that imperialism is

> doing everything possible to retain the former colonies within the framework of the capitalist system, to slow down their advance toward stronger independence, and social progress (Editors' introduction, International Affairs, 1978:65).

They fully analyze the new forms of imperialism or neocolonialism, which is defined as a system of indirect control and exploitation based on financial and economic monopoly (rather than the former military and political monopoly). The major difference between neocolonialism and its older form, however, is the new tendency to cultivate and facilitate some forms of capitalism in the politically independent countries (Simonya, 1985). Vernikov and Shibayev identify imperialism's current mechanisms of economic control over the developing countries as in the form of capital export, seizure and division of markets by major monopolies, machinations with interest rates and expansionism of MNCs (Vernikov and Shibayev, 1987:45). To these mechanisms, Volkov adds the growing foreign debt of the developing countries (Volkov, 1985:68).

Most Soviet writers would view the world capitalist system and the international division of labor as the main obstacle to an independent capitalist development, especially with the increasing role played by the MNCs. There are some writers, however, who accept the theoretical
possibility of an independent capitalist development. In his book, titled *The Newly Free Countries in the Seventies*, Brutents argues:

> It should be born in mind that there is a possibility for transition from dependent to national capitalist development. One cannot wholly agree with the idea, often encountered in relevant literature and tinged with fatality, that dependency is bound to increase in every instance. There is not a single influential social stratum or political group that can be regarded as forever associated with prospect of dependent capitalist development. On the contrary, we believe that, once they become stronger and more consolidated, they are more likely to start searching for a new way of development (Brutents, 1979:73).

In analyzing the different forms of capitalist development in the Third World, Simonya cites India and Nigeria as examples with a form of national capitalist development (Simonya, 1982). These writers, however, see the potentials of an independent capitalist development as highly restricted in the developing countries. And they all come to the conclusion that if it were not for the existence of the socialist system one could not speak of any genuinely independent national development (Simonya, 1985:205).

Despite the explicit analysis of issues related to economic independence, it is difficult to find just one definition because of the complexity of the issue and its national and international economic, social and political aspects. However, by presenting the different emphasized aspects in the literature, one can understand what meaning(s) economic independence holds in the Soviet view. Many Soviet writers equate the dependency of Third World countries with their unequal position in the world economy. They recognize these countries' need to engage in the world market as a means to promote their own development. Hence economic independence is defined as an equitable and mutual position in the world economy.
Economic independence in no sense means economic autarchy and isolation. On the contrary, it implies the establishment of an equitable, mutually advantageous and fair international division of labor to promote the balanced economic development of the former colonies and semicolonies (E. Tarabrin, 1978:19).

Though Soviet writers emphasize equal interdependence they oppose the Western or bourgeois notion of interdependence which is equated with "collective neocolonialism." They see this form of interdependence as an attempt to organize a single production mechanism, based on the capitalist mode of production, in which all countries are connected components (Gorokhov, 1980). As Simonya puts it:

Indeed there is interdependence between countries (...). However, there are equal and unequal types of interdependence (...). It is against their unequal status in the international division of labor, not against their interdependence as such, that the developing countries' struggle (Simonya, 1984:109).

From the political standpoint, most Soviet writers associate economic independence with the Third World countries' ability to conduct independent foreign policies. Such independence is basically manifested in the strength of the non-alignment movement.

On the national level, Soviet writers have emphasized nationalization, not in the narrow legal notion, but as a broad and deep process of transforming foreign and foreign-oriented local elements into national elements. Nationalization here is equated with economic independence. "Nationalization in the broad sense is synonymous with the gaining of the full political, economic and cultural independence of the developing countries" (Simonya, 198:109).

Some writers have defined economic independence in terms of greater domestic control over the production and capital accumulation.
process; more specifically as "self-sufficiency in the production of the means of production" (mentioned in Clarkson, 1979:139).

The main proposed strategies and policy recommendations:

Most of the proposed strategies and policies clearly stem from the emphasis given in defining economic independence. As a result of the shared emphasis on the need to achieve a more equitable interdependence in the world economy, Soviet writers have emphasized the importance of the NIEO, cooperation with the socialist and other Third World countries. Simonya sees the NIEO as a logical outcome of the Third World nations' struggle for economic independence (Simonya, 1984). And Nukhovich sees it as a major prerequisite for any successful struggle against international monopolies (Nukhovich, 1980). The cooperation with the socialist countries is proposed as a means to strengthen the demands for NIEO. Further, the cooperation with the socialist community is seen to enhance the national effort for independence.

(T)he Soviet Union and other members of the socialist community do not pursue self-seeking goals in their relations with developing countries and do not place them in subordinate position (...). The credit granted to young states and the aid extended to them are normally repaid by the deliveries of the goods produced at the enterprise built with that aid or by traditional export goods (Vernikov and Shibayev, 1987:51).

Another strategy that would strengthen Third World countries' position in the world economy is their own cooperation. Politically this cooperation is reflected in their engagement in the non-alignment movement. Another important form of this cooperation is their economic relations, especially in the form of regional cooperation. The emphasis on this latter strategy arises from recognizing the limitation of most developing countries' size and resources.
On the national level, those writers who emphasize the importance of nationalization would clearly point it out as prerequisite policy for economic independence. As mentioned earlier, nationalization is not confined to the legal ownership but to a structural transformation of the economy. In the economic sphere, it means not only the national ownership of productive assets but also the ability to control the process of production and marketing (Simonya, 1984). Soviet writers emphasize the importance of the public sector and the role of the state for both socialist and capitalist oriented economies. In his recent book devoted to the analysis of the destiny of capitalism in the Orient, Simonya argues that the only "way out" for those countries that are trying to attain economic independence while remaining within the capitalist formation is to leap over the phase of private capitalism (as experienced by the advanced capitalist countries) and move directly into the specific phase of state monopoly (Simonya, 1985:120).

One of the major national strategies put forward by the Soviet writers is industrialization. The stress on industrialization is influenced to a great extent by the Soviet Union's own experience, for this reason most Soviet writers on the Third World would agree that "economic independence is inconceivable without a certain degree of industrialization" (Levkovsky, 1973:47). Levkovsky argues that there are two economic factors vital for achieving economic independence: i) modernizing and expanding the local industry which will pave the way, technically and economically, for large scale reproduction, and as a consequence; ii) increasing the national labor productivity to the world average which will enable the Third World to become part of the world economy on equal and mutually advantageous terms (Levkovsky,
In their early references to industrialization Soviet writers have stressed heavy industrialization. However, taking account of the limitations of size and resources of most developing countries, Soviet writers have shifted their emphasis to small scale basic industrialization.

Finally, it comes as no surprise that economic planning is a policy that is continuously emphasized, whether in arguing in favor of nationalization, state involvement, industrialization, regional cooperation or any other activity. Different methods of planning are suggested: long-term economic forecasting; planning for capital investment in the state sector or inter-sectoral and project levels; current financial planning; specific state regulatory measures for the private sector. The choice of the method or combinations would depend on the level of the country's economic development and its political structure and property relations (Stanis, 1976:65).

In emphasizing the international context and the role played by imperialism, Soviet writers gave less attention to the internal class structure in the developing countries. The internal classes are identified with their position in the "anti-imperialist" struggle. While it is clear in the case of the socialist oriented countries that the vanguard Marxist-Lenist party will pursue an independent development on behalf of the majority (workers, peasants), in the case of other countries references point to an "anti-imperialist" front or groups. These latter groups would include all classes except the large land owners and compradors. In the theoretical debate of the "non-capitalist path," Soviet writers point to the progressive role played by the petty bourgeoisie who were believed to lead an anti-imperialist independent development benefiting the majority of the population.\textsuperscript{13}
It is this strength of national element and not only the unclear social barriers and the level of consciousness of the masses which allow one to explain that a division— one that would be very clear in terms of social classes— of forces standing on the opposite side of the barricade has often not yet occurred in the developing countries, and that the controversy within the bourgeoisie in those countries about position to be taken with imperialism is continuing. Motivated by nationalist considerations (...), a section of the bourgeoisie is ready (as in India) to support serious progressive measures even if they go as far as to encroach on the interests of big business (Brutents, 1979:45).

IV. The Work on Self-Reliance

The work on self-reliance in the West represents the most explicit discussion of policies to reduce dependence. The politics of self-reliance are seen as "an important part of contemporary history— an effort to undo five centuries of dependency on the West" (Galtung, 1981:173).

Self-reliance as a concept entered the debate on the Third World development during the 1970s. Self-reliance theorists represent a range of different perspectives mostly with Marxist and liberal influence. The diversity of the ideological influences is perhaps best expressed by Galtung, one of the strongest proponents of self-reliance:

The ideology of my vision encompasses some insights about inner man found in Buddhist thinking in the East and existentialist thinking in the West; anarchist thinking on the significance of local autonomy; liberal thinking on freedom and outer man in general; (...) Marxist thinking on social structure; and antiimperialist theory and practice from recent years (Galtung, 1981:177).

Such diversity of background is responsible for the lack of a well-defined conceptual socio-economic framework within which the
advocated policies would be pursued. Some theorists insist on the alteration of the existing class relationships and increased political participation as a means to achieve domestic self-reliance (Biersteker, 1980); others see the possibility of such defined self-reliance in both socialist and capitalist economies (Amin, 1977). Sometimes self-reliance seems to include the best of the two systems: "self-reliance ideology might be similar to capitalism in its emphasis on creativity and initiative, but highly dissimilar in its emphasis on mass participation" (Galtung, 1981:177). And sometimes self-reliance is presented as a "third way" in the present epoch after the previous existence of only capitalism and socialism (Ogundowole, 1985:135).

The work on self-reliance differs from that of the other schools of thought in two aspects. First, while other schools present their policies and strategies to be advanced within either a capitalist or a socialist development path, self-reliance is presented as an alternative development path aiming primarily at the satisfaction of the minimum needs of the entire population and reducing dependency. Second, while previous schools generally give more weight to the external factors, self-reliance theorists insist on the necessity of combining the three levels of self-reliance: local, national and collective, since self-reliance at one level only does not mean the absence of exploitation within the other levels.

There is general agreement among the theorists of self-reliance that there are three levels or phases of the process of self-reliance: local, national and collective. The first level includes small units like families, communes and ethnic groups; the second level represents the country as a whole; and the third includes regional cooperation, continental and sub-continental (Preiswerk, 1980). The local and
national levels are basically attempts to "depend on one's own resources" meaning using local creativity, raw materials, land and capital and directing them to produce for local consumption and the satisfaction of basic needs. Self-reliance as presented by its advocates does not mean self-sufficiency or autarky. Recognizing Third World countries' need for external finance (aid and loans), self-reliance theorists do not reject the use of external resources as long as they are not at the cost of "one's self-respect" and "one's autonomy of choice and action" (Rahman, 1980:83). Self-reliance theorists argue that trade and other economic relations should not be cut but rather redirected and recomposed by giving preference to cooperation with those in the same position and from the closer to the more distant (Galtung, 1980).

One can deduce a definition of economic independence, which is an essential objective of the development strategy of self-reliance, from examining how self-reliance itself is defined. Galtung offers us a lucid definition:

**Self-reliance is the antithesis of dependence (...).** For 'dependence' has two negations in English, both of them implicit in the idea of self-reliance: independence and interdependence. Independence is autonomy, that invaluable combination of self-confidence, a high level of self-sufficiency, and the fearlessness out of which invulnerability is forged. Interdependence is equity, which means a style of cooperation that does not engender new patterns of dependence (Galtung, 1981:173).

The main proposed strategies and policy recommendations:

Within the local and national levels, self-reliance theorists propose a set of social, political and economic policies. All self-
reliance writers emphasize the importance of mass participation reflected in a high level of popular control over the local economy and in decision making, "(Mass) participation becomes the alpha and omega of self-reliance, as necessary and, often, as sufficient condition" (Galtung, 1980:28). These writers also emphasize the satisfaction of basic needs. A report from the Pugwash symposium on self-reliance indicated that the participants viewed the central objective as the attainment of minimum needs for the entire population as speedily as possible (Pugwash Symposium Report, 1977:260). The symposium specified three key areas for public policy (Pugwash Symposium Report, 1977:260-261): (1) changing the pattern of land and resource use through redistribution of land and agricultural reforms in favor of the rural population, the construction and development of human settlements, and physical planning of the location of agricultural and industrial activities in relation to resource supply and environment; (2) linking consumption patterns to income redistribution and employment. Alternation of the pattern and level of consumption is suggested through the redirection of public finance, organizational and managerial resources to the: (a) creation of employment opportunities in services directly related to minimum needs such as health and education; (b) development and conversion of some of the existing industrial capacity towards the production of goods required for meeting basic needs such as food, clothing and shelter; (3) changing technological styles through the proper evaluation, selection and generation of technologies (appropriate technology). Third World countries are advised to develop individually and through collective cooperation, the technological styles that are suited to their
environment, their human and natural resources, and most importantly their minimum needs-oriented development strategy.

Within the collective level of self-reliance both strategies of regional cooperation and the NIEO are emphasized. At the regional level, cooperation or integration efforts are seen to enhance the industrial and technological capacities.

Industrial integration and complementarity schemes, particularly those concerning neighboring countries, can save resources and accelerate development, provided that integration takes place within a framework the objective of which is the satisfaction of basic needs for entire population rather than the benefit of small local minorities and foreign corporations" (Oteiza and Sercovich, 1976:668).

Finally, self-reliance theorists advocate the participation of Third World countries in bringing about the NIEO through their collective effort in order to enhance their independence.

It was the recognition of the true nature and the suffocating impacts of colonial relationships on their overall activities that led the new states to call for a new international economic order - NIEO. Hence the word 'self-reliance' is central to conceptual framework in which the demand for a NIEO has been put forward and expressed (Ogundowole, 1985:141).

Despite the explicit and elaborated policies and strategies in self-reliance analysis, there is no such explicit reference to the form of the internal class structure. The policy of self-reliance is believed, by its advocates, to be carried out by and for the benefit of the masses.

With the masses in control of the productive machinery, especially in the countryside, such ideas as using land for cash crops in order to "earn foreign currency" (for the elites to buy consumer good, means of destruction - arms - and some means of production) would less easily emerge (Galtung, 1980:27).
However, it is not clear what is the exact class structure of these masses nor of the state, and within which social structure can these masses pursue their control. While few writers point to socialism as the social framework within which such collective effort can be pursued (Rahman, 1980), most writers refrain from specifying the socio-economic structure and adopt a "utopian" vision or that of a "class-neutral point of view".

The driving force behind the self-reliantist transformation is (...) assumed to be inherent in the individual and the collective, or more accurately, in their togetherness, in harmonious social relationship. The horizontal orientation of the self-reliantist principle provides little room for considering antagonistic contradictions as an important driving force for social change, societal progress. The principle of self-reliantism may therefore be regarded as a class-neutral point of view (Ogundowole, 1985:145).

V. The work on small open economies

Writing around the same period as dependencia, though less recognized, William Demas has questioned the relevance of the accepted doctrine on economic development to the small countries. Similarly, he sees the Soviet Union's model of development, especially its emphasis on accelerating heavy industrialization, as feasible only in a large continental country with large population. Taking the Caribbean countries as an example, Demas finds their economies suffering from certain disadvantages in terms of their autonomous economic development. "These disadvantages are the legacy of external dependence combined with small size of population and narrow range of natural resources at the individual country level" (Demas, 1978:237).

Demas argues that because of the small economies' size and limited resources, their leading sector is the export one; and the rate of
growth of experts is more tied to the rate of growth of the gross domestic product (GDP) than in the larger economies. Therefore, foreign exchange always constrains the small countries.\textsuperscript{15}

In his book published in 1965, Demas in his analysis of the small economies, elaborates the notion of "self-sustained growth," which was introduced by Rostow. The previously accepted notion of self-sustained growth implied the ability of a country to rely on its own domestic savings to finance its domestic investment. Demas criticizes the underlying assumptions of this notion: (1) the level and rate of change of the per capita income of a country are uniquely related to its state of development and; (2) the country has a closed economy which is also likely to be very large (Demas, 1965:6). Demas then links the notion of "self-sustained growth" to the structural transformation of the economy.

It is my view that the fundamental criterion of underdevelopment is the extent to which an economy has undergone structural transformation and has acquired the continuing capacity to adapt and to apply innovations. Furthermore, within the category of transformed economies, it is possible to have different degrees of self-sustenance in the growth process (Demas, 1965:6).

Demas defines this transformation process to include the following seven elements (Demas, 1965:8):

(1) The capacity to transform, which is determined by political and social processes. This implies the development of the economy's capacity to apply innovations continually and to adapt to changing situations.

(2) The unification of the fragmented localized markets into a national market, so all potential economies of scale can be utilized.
(3) The continuing shift and reallocation of production and labor between sectors of the national economy in accordance with changes in relative productivity and demand.

(4) The development of an increasing degree of interdependence among domestic industries and activities. The interdependence manifests itself in the development of a whole network of forward and backward linkages within the internal structure of production.

(5) Changes in the importance and composition of foreign trade.

(6) The reduction of dualism in the economy. This step involves the reduction (though not necessarily an equalization) in the disparities between returns to factors of production.

(7) The development of appropriate institutions such as a capital market and other financial, educational and training institutions.

Taking all these elements into consideration, Demas distinguishes between structural transformation and what has been experienced by some countries as the growth of either short or long duration in the export sector. This type of growth has been experienced by countries that enjoyed a relative surplus for exporting certain minerals or raw materials which led to a high GNP and per capita income without, however, changing the production structure of their economies.

Demas further argues that in order to be more independent from changing external conditions, the smaller economies have to be structurally more flexible and adaptable, a condition they can obtain by achieving a higher degree of structural transformation. However, given their small size and their large dependence on both trade and capital flows, these economies will not be fully self-sustaining even though they might achieve structural transformation (Demas, 1965:20).
He concludes that "the fullest degree of 'self-sustenance' in the growth process is possible only in a very large continental-type economy" (Demas, 1965:33).

More recent theoretical and empirical studies have elaborated the analysis of small open economies with special focus on the socialist ones.16 Though these studies have focussed mainly on the development process of the small open economies' transition to socialism, many of the analytical aspects and policy recommendations are similar to those presented by Demas. Because of their small size and limited resources, these countries are "forced to play by the rules of the global game in trade, finance, and investment" (Fagen, et al., 1986:11) which affects their degree of control over the internal process of accumulation. Based on the work of Kalecki and Dobb, Fitzgerald (1985 (a), (b)) has presented a theoretical model for small open economies in their planned process of capital accumulation and income distribution. In this model the primitive socialist capital accumulation is not generated from the labor or peasants' surplus as experienced by larger socialist economies, but rather from the differential rent earned in the international market. Like Demas, Fitzgerald sees the export sector as the leading sector or as the "heavy industry" of the economy, and the foreign exchange as the major constraint. For this reason the small peripheral economy cannot be completely planned; in addition this economy is "far more vulnerable than its larger cousins, in terms both of the exposure to fluctuations in the world market and macro-economic effects of single investment projects." (Fitzgerald, 1985 (a):105).

Thus, in the case of small open economies (both socialist and capitalist) the issue becomes, in a sense, attempts to "diversify dependence" rather than reduce it. Even though the economy cannot be
completely "self-sustained" or "planned" it can be structurally transformed to reduce the level of its dependence.

Similarly, Thomas, in his book on Dependence and Transformation (1974), addresses the problem of underdevelopment and dependence of the small economies. He argues that the most important forms of economic dependency to the economic structure are: 1) reliance on foreign technology, 2) the critical role of foreign decision-making plays in domestic employment, output, and income generation, and 3) the persistent income drains via the transfer of surplus from the economy to the owner of capital, technology and managerial skills in metropolitan countries (Thomas, 1974:51). Thomas, however, does not view the smallness as a constraint imposed by nature on the social development but that which will affect the form in which production is organized. And that the major constraint on an economy's development is not the size of its market but rather the size of its social surplus and its allocation. He believes that a socialist form of organization is the only form (for the small countries) within which the economy can develop the capacity to overcome underdevelopment and dependency. Hence in Thomas's view, independence is a function of the internal organization and development. Unlike many neoclassical and socialist writers, Thomas believes in the possibility and ability of such small countries to pursue comprehensive planning, industrialization and transformation.

We believe that transformation becomes possible in the context of a strongly entrenched worker/peasant alliance seeking to establish a socialist society - despite the widely held (and quoted) views that even then they cannot have a modern and highly differentiated economic structure (Thomas, 1974:301).
The main proposed strategies and policy recommendations:

One of the main strategies proposed for the small economies to overcome the limitations of their size is their regional integration and cooperation. Demas argues that economic regionalism offers an important avenue to achieve a more fully self-sustained pattern of growth (Demas, 1965:35). Taking the Caribbean countries as an example, he argues that:

the prospects for autonomous development of the Caribbean Archipelago and the more geographically limited Caribbean community would obviously be enhanced by schemes of integration and economic cooperation bringing a wider market and a wider range of human and natural resources (Demas, 1976:239).

In addition, he links regional integration to another strategy, that of ISI,

the value of regional economic integration in terms of development patterns it makes possible a strategy of development based on import-substitution rather than export creation and therefore a less 'dependent' pattern of development (Demas, 1965:36).

The latter strategy is seen also as a means to maximize foreign exchange earnings. Furthermore, Demas has suggested another pattern of industrialization that would provide some of the basic needs (e.g., food, textiles and shelter) and a limited range of intermediate goods such as cement, wood and other building materials. The output of this type of basic industrialization could be utilized in the construction sector which "could assume a more propulsive role in such economies" (Demas, 1965:49). In addition to the two types of industrialization that are directed to home consumption, Demas sees the development of an industrial structure that is geared to export as another way to enhance the economy's capacity to transform (mainly by virtue of export
diversification). Recognizing the negative effect of the unfavorable terms of trade on the amount of the generated surplus in the international market, Demas points to the importance of the small countries' participation in the demand for a NIEO (Demas, 1976). Finally, Demas has emphasized the importance of economic planning as a means to accelerate the small economy's process of transformation. However, because of the small size and the openness, both the private sector and the international investors play an important role in the planning process.

It is interesting to note that while Fitzgerald's model specially addresses the experience of the small socialist economies, the model's policy recommendations coincide with all those suggested by Demas (which indicates the dominance, in some cases, of the material conditions of an economy over its social and political orientation). Rather than a reduction of dependency as such the diversification of dependency is the aim; by the same token, the maintenance of a wide range of exports and negotiation of long-term supplier's contracts of barter agreements are aimed at mitigation of the negative effect of the external terms of trade on accumulation. Nonetheless, in the longer run, the transition strategy must involve a greater degree of "industrialization" to overcome the structural heterogeneity (...); this will have to take the form of integration with other economies in the region (Fitzgerald, 1985(a):108).

In addition to regional integration, ISI, basic industrialization, NIEO and planning, Fitzgerald has emphasized another strategy, that of the provision of basic needs. This strategy is emphasized for two major reasons:
at the center of economic strategy must be the increasing supply of basic needs; this is an end in itself (and a necessary condition for continued popular support in peace time) and a requirement if the effective contribution of the work force to production is to be realized (Fitzgerald, 1985(a):99).

In Thomas's analysis, the main proposed policies are constructed within the general strategy of structural transformation towards socialism. He has criticized both neoclassical and radical analyses for the limited recognition of the possibility of industrialization in the small economies. Thomas views the major structural problematic features of the small underdeveloped countries as: (1) the lack of an organic linkage between the pattern and growth of domestic resource use and those of domestic demand; and (2) the divergence between domestic demand and the needs of the broad mass of the population (Thomas, 1974:59). Both could be overcome by pursuing a structural transformation of the agricultural and industrial sectors, based on indigenous technology, geared to the production of basic materials and the satisfaction of basic needs as defined by the society. In addition Thomas does not share other theorists' enthusiasm for the strategy of regional integration.

(At) present there is little likelihood of meaningful political/economic integration among a significant enough number of states to permit a serious combined effort at structural transformation. It follows that other strategies, apart from waiting for the achievement of economic integration, will have to be devised (Thomas, 1974:192).

His major emphasis is on the strategy of industrialization that is geared to the production of basic materials (e.g. textile, cement, glass, industrial chemicals) which would create the organic linkage between the domestic demand and output. Furthermore, Thomas emphasizes
the necessity of a comprehensive planning of both production and consumption and the transformation of the agriculture structure. Finally, while Demas did not pursue his analysis within a specific social structure, both Fitzgerald and Thomas present their analysis of the small open economies within a socialist framework. Fitzgerald's model assumes a mixed economy in transition to socialism with a relatively small size of the proletariat, peasant majority and remnants of the capitalist and petty mercantile sectors. The State in controlling the "commanding hights" tends, during the transition to strengthen the former two at the expense of the latter. Thomas, on the other hand, starts his analysis with the assumption that the dominance of a worker/peasant alliance has been established. These classes form the social structure of the state, and are the beneficiaries of the social and economic transformation of the economy.

Conclusions and further remarks:

The five theoretical perspectives reveal, either explicitly or implicitly, two definitions of economic independence: (1) Delinking from the world capitalist system and the pursuit of an anti-capitalist path, i.e., of a socialist development; or (2) the development of the productive structure of the economy, with increasing the level of integration (linkages) among its productive sectors and between them and the domestic resources and needs. This process requires increasing the national control over the internal process of capital accumulation and hence over the social product. In addition, the attempt to increase the benefit of interdependence; i.e., structural transformation of the economy towards a higher degree of national integration and equal interdependence in the world economy. These two positions
are shared by many other writers who are not necessarily associated with any of the presented theoretical perspectives. The debate concerning which definition is more "correct" continues in the literature and in both academic and political conferences. A recent conference in Jordan on *Independent Development in the Arab Countries* reflects clearly this division of opinion.\(^{17}\) While some of the participants (e.g., Ismael Sabri) equated economic independence with socialism, others (e.g., Sa'ad Al Deen Ibrahim) argued that economic independence stems from the development of the productive structure which can be achieved by socialist, capitalist, or cooperative means. The two distinct positions are also reflected in the collection of studies on *Economic Independence in Africa* edited by Chai (1973). Some writers in these studies (e.g., Saul) argue that economic independence should imply a disengagement from the capitalist system and the adoption of a socialist strategy. Others (e.g., Chai and Green), however, take it to imply a national control over the economic structure.

Economic independence can be formulated as a situation in which national institutions (including private business and interest groups) have the right, capacity and power to take and implement decisions affecting the national economy and its component units without a de jure or de facto veto power being held by foreign individuals, enterprises, interest groups or governments (Green, 1973:46).

These two definitions of economic independence are directly related to the discussion on the possibility and ability, both theoretically and empirically, of the Third World countries to achieve an independent capitalist development.

In this dissertation I will take the second definition as the starting point for different reasons:
(1) While the two definitions represent two different orientations of thought, I believe that the first one is a special case of the second definition. Economic independence, as defined in terms of greater domestic control over the internal process of accumulation and not in terms of more welfare and social equality, is theoretically compatible with capitalist development.

(2) Analysis of the conditions and strategies for economic independence according to the first definition should, in my opinion, be viewed within the more general conditions and strategies of constructing the material basis of a socialist society with all its specific social, political, and economic aspects.

(3) Many of the strategies and policies advocated for economic independence that have been applied in different social structures are generally based on the second definition. This second definition is not clearly spelled out in the literature, with the exception of the work of some writers within the fifth school of thought (the work on small open economies) specifically in the work of Thomas Clive and William Demas.

In working with the second definition, it should be emphasized that economic independence is perceived as a gradual process towards a relatively higher degree of national integration and not as an absolute condition. In this sense we cannot speak of countries or economies that are independent and those which are not, but rather of degrees of dependence or independence. Thus, a historical perspective becomes a necessary framework in evaluating economic independence since an observation at one time will not reveal the dynamic changes in the productive structure, whether towards a reduction or aggravation of
dependence. In evaluating the case of India, Kelkar has emphasized the importance of a 'time-frame' and argued for the necessity of distinguishing between short duration or 'tactical' dependence and long duration or 'strategic' dependence.

(It) is perfectly possible that for a short duration an economy can be 'dependent' on other economy for increasing rapidly the state of accumulation or capital formation. However, such process itself can lead to the limitation of 'asymmetry' due to its increased economic and technological power via accretion of capital stock, technology etc. (Kelkar, 1980:247).

Hence, utilizing some external sources of finance (e.g., loans and aid) in the development of the productive structure of the economy might be considered a 'tactic' or short duration dependence. Yet, utilizing a similar amount of external finance (or even less) totally for consumptionist products and services might lead to a long duration dependence.

Taking the second definition with its two emphasized aspects - national integration and equal interdependence - the answer to the question 'independent of what?' should be clear: national integration reflects the endogenous aspect of the process, a higher degree of articulation among the different sectors of the economy and among these sectors and domestic resources and needs. In addition, it is a higher capacity to manipulate the operative elements of the economic system in order to structurally transform it according to the national objectives; i.e., to rephrase Brewster: a system which is 'independent' from its own weaknesses (Brewster, 1973:91). Equal interdependence, on the other hand, implies that economic independence is not autarky, and is not independence from 'others', but rather interaction on an equal basis with them.
Another question that could be raised here is: is it possible to measure the degree of economic independence, and how? I am not familiar with studies that have attempted to measure economic independence as such, however, some studies have attempted to measure the opposite situation, economic dependence. Evans and Gereffi, in their assessment of Brazil’s and Mexico’s dependency situation, argue that direct foreign investment gives the external owners of capital the right to decide how and what to produce, and how to utilize the generated surplus (Evans and Gereffi, 1982:116). Hence, they consider foreign ownership as a "good 'first cut' indicator of external control of the internal productive apparatus" (Evans and Gereffi, 1982:117). This indicator is accepted by many writers.  

18 (A) country can hardly be characterized as economically independent when a substantial proportion of its assets and jobs are in foreign hands" (Ghai, 1973:xii).

Brewster argues, however, that such an orthodox measure as the proportion of foreign to local ownership (as well as import and export coefficients, ratios of foreign to domestic investment) has to be downgraded (Brewster, 1973:92). While national ownership is an important factor for economic independence, the absence of foreign ownership in one country does not necessarily imply the economy's higher level of national integration and the capacity to manipulate the domestic operative elements, nor its equal participation in the world economy and hence its independence. Defining economic dependence as the wide and growing disparity between the structure of the domestic demand and the structure of domestic resource use, Brewster suggests using a matrix of inter-relationships between the operative economic
functions of the system. He has constructed a partial matrix of the
association between the changes in a small selection of variables
(employment, wage rate, export, import ratio, output, consumption,
prices, and investment) in Trinidad and Tobago. The values of the
coefficients of correlation were insignificant which he considers: "a
major distinguishing feature between a dependent economy like Trinidad
and Tobago and an economy depending on external trade like Britain"
(Brewster, 1973:92).

Sylvan has argued against measuring the degree of economic
dependence by computing the percentage of total accumulation and
investment accounted for by foreign sources. Instead, he is concerned
with "the contingency of domestic processes on foreign sources"
(Sylvan, 1979:20). In an attempt to measure this concept, he takes the
per capita liquid surplus as a measure of the adequacy of domestic
capital accumulation, and the level of money incomes as a proxy for the
degree of the "heaviness" of investment and hence the adequacy of
domestic technology. These two factors, Sylvan argues, account
mainly for the contingency of domestic processes on foreign sources.
The measure suggested by Sylvan is, in my opinion, based on a rigid
causal mechanism that cannot be generalized to different economic and
social structures. I do, however, agree with his emphasis on
technology as defined not in terms of machines only but as all means of
production.

The major problem in reducing economic dependence
is to find a way of increasing accumulation while
at the same time channeling that capital into
domestic rather than foreign technology
(Sylvan, 1979:160).

Caporaso has correctly argued that while economic dependence as a
pure economic relation is easily measured, dependency is a much more
complex concept and thus is more resistant to measurement suggestions (Caporaso, 1978). As mentioned earlier, many of the conducted quantitative studies, by incorporating only some external factors (e.g., volume of trade and foreign debt), have reached the misleading conclusion that many of the advanced industrial countries (e.g., Canada and Japan) are more 'dependent' than many developing countries. This is not to argue against quantitative studies, but rather to signify the importance of examining different economic, political and social factors. One might examine a set of indicators such as: changes in the level or ratio of national to foreign ownership; changes in the domestic ability and capacity to produce the needed capital and technology; changes in the composition (domestic vs. foreign) of scientific and managerial expertise; and changes in the ability to conduct independent domestic and foreign policies. The following definition by Helleiner points to some additional important indicators of economic independence:

No state without an economy basically oriented to production for national needs, without a high capacity for generating nationally at least the bulk of the investable surplus and educated-skilled manpower necessary for rapid and sustained growth has the economic base for fully meaningful independence (Helleiner, 1979b:223).

Because of the difficulty of incorporating many of the social and political indicators (in terms of data and the use of proxy), I believe in the necessity of undertaking a qualitative examination of specific cases within a historical perspective.

Finally, the examination of the different schools of thought has revealed a set of different proposed strategies and policy recommendations (summarized in Table (1)). The major proposed economic
strategies are: Industrialization either as ISI or basic industry, regional cooperation, and the demand for the NIEO. The evaluation of these strategies will be the subject of the next chapter. Both nationalization and economic planning, which have been emphasized by many schools, are necessary policies with which a higher degree of economic independence can be achieved. While nationalization lays the foundation of the structure of a more independent economy (by allowing a higher control over the productive assets), planning enhances the implementation of the development process and reduces the ill effect of conflicting interests that might develop within this process. Another policy recommendation that has been emphasized by all schools is income distribution. The emphasis on this policy, however, is justified differently. ECLA sees income redistribution as a means to increase the aggregate demand and hence the domestic market. Some writers within dependencia see income redistribution as a means to reduce the transfer of surplus to the center via the depressed level of domestic wages. The other schools see the redistribution of income towards the provision of basic needs as means for increasing both the mass support and the level of productivity. Therefore, whether the attempt at increasing the level of economic independence is conducted within a socialist or a capitalist oriented development, there is a need to link the process to a certain level of income distribution. Though this policy will not be theoretically analyzed separately in the second chapter, I will take it into consideration in discussing other strategies and in evaluating the Cuban experience.
### Table (1)

**Summary of Definitions and Proposed Strategies of Economic Independence by Different Schools of Thought**

<table>
<thead>
<tr>
<th>School of Thought</th>
<th>Definition of Economic Independence</th>
<th>Proposed Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) ECLA (50s-60s)</td>
<td>National integration and Equal Interdependence</td>
<td>ISI, RC, ID, planning</td>
</tr>
<tr>
<td>(2) Dependencia (60s-70s)</td>
<td>National integration/ Socialism</td>
<td>BIS, RC, ID, planning</td>
</tr>
<tr>
<td>(3) Soviet (60s-80s)</td>
<td>National integration/ Socialism</td>
<td>BIS, RC, ID, planning nationalization, NIEO</td>
</tr>
<tr>
<td>(4) Self-Reliance (70s-80s)</td>
<td>National integration/ Equal Interdependence</td>
<td>BIS, RC, AT, PBN, NIEO</td>
</tr>
<tr>
<td>(5) Small open Economies (60s-80s)</td>
<td>National integration/ Socialism</td>
<td>ISI, BIS, RC, planning, PBN, NIEO export diversification</td>
</tr>
</tbody>
</table>

ISI: import substituting industrialization.  
BIS: basic industry strategy.  
RC: regional cooperation.  
ID: income distribution.  
PBN: provision of basic needs.  
AT: appropriate technology.
1. Green, however, acknowledges that the converse of this assumption does not hold. He recognizes that in certain cases some national groups may see their interest best served by uniting with external economic forces.

2. Roemer correctly points that

Western economics has not yet accepted national independence as a national goal of development(...). (The) goal of independence raises fundamental differences on which economists from the North and South are likely to find much less common ground(Roemer, 1981:429).

It is important to note that though the concern with economic independence is not addressed in contemporary Western economics, it was the concern of some of the now advanced countries in their early stages of development. Such concern was reflected, for example, in the writings of Friedrich List who addressed the issue in relation to the American economy in the late 19th Century. For a review of List's argument see Otfried Garbe, 1977.

3. Prebisch's theoretical contributions on related issues started long before the establishment of ECLA. His analysis appeared in Revista Economica as early as 1937. For a presentation of the economic and social background within which Prebisch's thoughts have evolved see Love, 1980.

4. In the 1940s, studies made by Kindleberger, Hilgerdt, and Singer have similarly questioned the conventional international trade theory and advanced an opposite hypothesis of a secular trend in
the terms of trade. Singer and Prebisch, however, extended the argument further to indicate the tendency for a steady decline terms of trade of the developing countries (Sarker, 1986:355).

5. Prebisch has elaborated this argument in recent articles; see for example Prebisch (1980).

6. The presentation on this section will only cover some of the original work associated with dependencia in Latin America. Other influential writers (e.g., Samir Amin) have elaborated the analysis for other regions.

7. For an assessment of the evolution of the dependencia school see Palma (1978).

8. Many critics have classified the writers within dependencia differently. For a summary of some of the classifications see Chilcote (1981).

9. There is, to a certain extent, an overlap between the work of ECLA and that of the dependencia school. Some critics (e.g., Chilcote, 1984) associate the work of both Sunkel and Furtado with ECLA. Other critics (e.g., Palma, 1978), however, consider their work as a distinct approach within dependencia. Both critics, however, agree that Sunkel's and Furtado's main emphasis is on the obstacles to national development, and that both have enhanced the social and political perspective of ECLA.


12. Based on such confusion, some writers have argued that Cuba depends on the Soviet Union as it did on the United States before the revolution. This point will be analyzed in chapter III.


14. Berger has traced the origin of the term self-reliance to the Chinese phrase that translate as "regeneration through our own efforts" which appeared in Mao Tse-Tung's speech in 1945 (mentioned in Galtung, 1980:19). Another writer has traced its origin to Ghandi's philosophy (mentioned in Sagasti, 1976:939).

15. In his more recent article Demas incorporates the "political economy constraints". These constraints reflect a complex set of psychological, economic, political and social phenomena (e.g., inappropriate level of consumption, high level of unemployment, inappropriate system of education). These phenomena are influenced by historical and external factors (e.g., impact of western consumption patterns brought about by media and tourists) (Demas, 1976).

16. The most recent collection of these studies is in Fagen et al., 1986.

17. The collection of these studies has been published in Arabic under the title: *Al Tanmia Al Mustakela Fi Al Watan Al Arabi* (Independent Development in the Arab Countries), Markaz Derasat Alwehda Al Arabia, Lebanon, 1987.

18. See for example the collection of studies in Ghai (1973).

19. Sylvan argues that the higher the level of money incomes (wages, salaries or peasant receipts) the less the money that is available...
to buy the complex machinery needed for heavy industry. In addition, the higher this average level of money income the greater is the pressure for capital to be invested in consumer goods rather than in producer goods. Finally, by assuming that heavy industry requires higher reliance on foreign technology than light industry, Sylvan argues that a rise in the income of the average person implies a diminuation in the contingency of investment on foreign technology.

20. Sylvan's suggested mechanism implies that as the income of the "average" person increases, the contingency of investment on foreign technology will decrease and hence the degree of economic dependence will also decrease. However, there are many cases where this mechanism does not apply. In some countries (e.g., some oil producing ones) the income of the average person was raised substantially leading to an increase demand for consumption goods. The demand, however, was not met by domestic production but rather by increased imports of these goods. On the other hand, in a country like Cuba, the gradual move toward heavy industry was neither at the expense of suppressed incomes of the "average" person nor has it led to increased dependence on foreign technology.

21. President Kennedy remarked once that the most dependent powers in the world were the super powers (Saunders (ed), 1981:74): The Political Economy of New and Old Industrial Countries, Butterworths, London & Boston.
CHAPTER II

STRATEGIES OF ECONOMIC INDEPENDENCE

Introduction

This chapter focuses on the four main strategies that have been advocated by most schools of thought reviewed in the previous chapter. They include the nationally conducted strategies of import-substituting industrialization and basic industrialization and two strategies constructed within the broader international context: regional cooperation and the demand for the new international economic order.

The focus on industrialization at the national level should not imply the neglect of agriculture and the role of external trade. None of the presented schools in chapter I advocates autarky or the neglect of agriculture. Rather, policies to benefit the trade and agriculture sectors are conceived as important short and medium run strategies. Besides fulfilling domestic consumption needs, agricultural products can serve as basic material in some of the industries and as exported products which could secure additional foreign exchange needed for capital goods imports. Industrialization, however, is conceived as the long-run strategy with the greatest potential for accelerating the development of the other sectors (as a direct stimulus to other new activities through linkage effect) and for increasing the economy's productive capacity, its flexibility, and hence its economic independence (see chapter I).

Industrialization has also been cited as contributing to other goals. Most writers would agree that "the principal potential of
industrialization was seen in its contribution to rapid economic growth" (Hughes, 1978:1). To economic growth, others add the elimination of human poverty and increasing the material standard of living (Sutcliffe, 1972) by increasing the employment level, labor productivity and supply of goods. Beyond any theoretical justification, however, industrialization has been perceived as one of the most important strategies by many political leaders "for whom industrialization represented progress, stability, diversification, high wages and development. Above all, it meant economic independence" (Pazos, 1985-86: 58).

The process of industrialization in the now developed countries took different forms. It proceeded from a light industry emphasis to heavy industry in Britain; a similar, but shorter process took place later in other European countries and in the United States. The opposite of this sequence was pursued by the Soviet Union where priority was given to the development of heavy industry. The debate continues in the economic development literature about the differences and similarities between the pattern of 19th century industrial development in the now advanced countries and the pattern in the Third World. While many writers, especially within the dependencia perspective, see these two patterns as having different internal dynamics and hence different outcomes, others (e.g., Gunnarson (1985) and Warren (1980)) emphasize their similarity. This debate will not be presented here; it is sufficient to quote here Sutcliffe's evaluation of these two positions:

The available statistics suggest to me that both extremes in the argument over the industrialization record of the Third World are wrong: both Warren's optimistic view that
industrialization, the equivalent of the process which transformed the advanced countries, is now taking place quite rapidly in the underdeveloped ones; and the orthodox dependency view that hardly anything significant is happening. The truth seems not to be midway between the two but more complex and ambiguous than either. A form of industrialization has been taking place in quite a wide spread manner. But in many countries it is composed of different elements which are not homogeneous and do not unambiguously represent economic modernisation (Sutcliffe, 1984:128).

Various theorists classify the types of industrialization in different ways. Some classify them according to their emphasis on capital intensive vs. labor intensive industries, or on large vs. small scale industries. Roemer (1981: 166) further classifies the industrial strategies into those which emphasize: (1) import-substituting industrialization (ISI), (2) further processing of primary exports, (3) promotion of diversified, mostly manufactured exports (an outward-looking strategy), (4) basic industrialization (with specific emphasis on heavy producer goods industries), and (5) small-scale labor intensive industries. The "choice" of the industrial strategy will depend on the social nature of the state and its goals, and also to a large extent, on the level of economic development, the economy's size and the available human, financial and natural resources.

In this chapter, I will concentrate on ISI and on the basic industry strategy as the two major strategies that have been advocated in the literature, with the former being more pursued by many of the Third world countries. As argued by Ahmad,

(given) the current structure of international trade, it was inevitable that any attempt at industrialization in the less developed countries will result in import substitution (Ahmad, 1978:25).
I. Import-Substituting Industrialization (ISI)

ISI as a strategy aims at producing domestically the manufactured goods which were formerly imported. ISI is generally perceived to follow a sequence similar to the process of industrialization that took place earlier in the advanced capitalist countries, i.e., starting from the manufacture of finished consumer goods and then, through backward linkage effects, moving on to the production of intermediate and capital goods. Different definitions of ISI appear in the literature.² In this dissertation, ISI is taken as the replacement of the foreign supply of goods and services by domestic production regardless of the sequence of the process.

ISI was pursued by some Latin American countries in the 1920s-30s mainly as a response to some external events (World War I and the Great Depression). Production of mostly consumer goods took place in that period in many Latin American countries as a result of a decline in their foreign exchange, decline in non-military production in Europe and United States and interruption of shipping. It was only after the Second World War and the elaborated work of ECLA that ISI became a deliberate economic policy of development in many of the Third World countries. Different countries used different policy instruments in their application of ISI. These instruments included protective tariffs, overvalued exchange rates, credit and cheap loans by the government to certain industries.

Theoretical assessment of ISI:

One gets the impression in reviewing the literature that ISI is an outdated strategy (Bhagwati, 1986) that led to many disappointing results (Ballance et. al., 1982). As noted by Ahmad: ISI "has been
portrayed as the single greatest disaster that has ever happened to the LDCs" (Ahmad, 1978:8). ISI has been criticized from the conservative, liberal and radical perspectives. Neoclassical economists decry the limits on free trade and specialization according to comparative advantage. They oppose its main policy instruments of protection and government intervention. Accordingly they believe that ISI has led to inefficiency and misallocation of resources. Liberals point to ISI's negative social consequences, such as its failure to create direct employment opportunities and its contribution to social and regional inequality. In addition, they criticize other structural consequences such as the bias of ISI towards production of non-essential luxury goods and its inevitable slowing down and exhaustion stage. Radical writers, on the other hand, view ISI as a development strategy that serves the interest of the bourgeoisie (national and foreign) at the expense of the poorest majority (Loup, 1983: 196).

3

By its own definition, by its deliberate inward direction, and by its economic and political aim of increasing the economy's self-sufficiency and independence, ISI is incompatible with the basic neoclassical view of maximizing world welfare through the specialization of each country according to its "given" comparative advantage. Hence any socio-economic consequence of ISI is condemned by neoclassical writers.

In pointing to inefficiency and "waste", these critics tend to decry the difficulties that are bound to occur in any initial attempt at industrialization, planning or any other economic activity.

It is well to remember in this connection that initial low productivities in manufacturing activity are simply the cost of learning. Low productivities, in any event, are neither unique
to import substituting industries nor are caused by them. They are a pervasive fact of life in all less developed countries (...). It makes no sense to isolate import-substituting industries as the only ones with low productivity and imply that abandoning them will somehow increase productivity (Ahmad, 1978:38).

Most critics cite ISI's inevitable tendency toward slowing down and stopping after "easy" import-substitution opportunities are taken. These critics seem to ignore the different possibilities for ISI extension. As Hirschman suggests, ISI can be expanded by the possibilities of enlarging the market size, through some policies of income redistribution and by the formation of common markets. In addition, ISI can open up new opportunities for further domestic manufacture through the creation of new incomes and through backward linkages (Hirschman, 1968:14). Furthermore, this limitation would tend to disappear when ISI is extended to intermediate and capital goods production. In a recent assessment of Latin American countries, Pazos argues that many countries have been progressively able to manufacture substitute goods that are more difficult to produce as their technical and managerial ability has developed (Pazos, 1985-86:61). Hirschman further challenges the claim that ISI tends to concentrate on non-essential luxury goods. He argues that ISI leads to a bias in favor of non essential industries only when it is motivated by balance-of-payments difficulties. The main reason Hirschman gives is that the control will aim at permitting continued supply of the more essential goods traditionally imported at the cost of shutting out non-essentials and thus cause domestic production of the latter to become specially profitable (Hirschman, 1968:5).

However, a "deliberate development policy, is likely to produce exactly the opposite bias "(Hirschman, 1968: 5).
While income and regional inequality have been exacerbated in many countries adopting ISI, the underlying cause of such social inequality must be understood within the dynamics specific to certain social structures. The profile of the productive structure after the pursuit of ISI reflects the demand profile which existed before. This demand profile was based, in most cases, on unequal income distribution (Georgescu-Roegen, cited in Baer, 1972: 108). The existing relations of production which determine the pattern of income distribution will define the type of products (e.g., luxury goods vs. mass consumption goods) that ISI domestically supplies, and not the other way around. However, while ISI may contribute to different economic and social problems and is not socially neutral, it is important to acknowledge that these problems were already in existence. In other words, it is misleading to attribute social and economic ills of a certain social structure to the pursuit of a specific industrial strategy.

The main question here, however, remains: what is the effect of ISI on the broader attempt at increasing the country's level of economic independence? In his evaluation of the effect of ISI on different forms of dependence, Roemer (1981) argues that ISI intensifies rather than ameliorates at least four types of dependence: market dependence, technological dependence, foreign capital dependence and economic inflexibility (the lack of the capacity to transform); with positive impact only on reducing dependence on foreign managers and entrepreneurs.

Many writers within the dependencia perspective believe that ISI has encouraged the penetration of foreign interest in the economy through the import of foreign capital and technology, which has aggravated the situation of "dependencia" (Sunkel, 1972). The level of
economic dependence has indeed increased in those economies where ISI (and industrialization in general) meant only the establishment of large "assembly plant" operations. In these cases MNCs have the dominant control over decision making in production, employment, marketing and other activities. In addition, these plants often act as isolated pockets in these economies with no backward or forward linkages, and with small opportunities, if any, to develop indigenous technological capacity. By the same token, similar consequences may develop when ISI is confined to the production of consumer goods (especially durables), without developing the capacity for capital goods production.

Countries with no local capital goods capacity, then, are forced to import not only the capital goods but very often the whole package that goes with it. In so far as various aspects of the package are inappropriate they have to accept inappropriate patterns of development (Stewart, 1976:132).

Some critics use different statistical indicators (e.g., imports coefficients) to determine the impact of ISI on the economy's level of dependency. These indicators, while helpful in assessing specific cases, are misleading when generalized. The basic problem with most of the theoretical evaluations of ISI is that they are done in isolation from reference to the specific socio-economic structure of each country. They tend to be methodologically static (ignoring dynamic factors such as "accumulation of experiences and skill" (Stewart, 1982) and linkages). The impact on economic independence through the changes in import composition, technology, and foreign finance, should be evaluated within specific case studies. Specific considerations should be given to the long-term effects of the
structural change in the industrial process, the change in the import components of the produced goods, the development of externalities and linkages, the increasing level of productivity from operating experience and technological advances, and the changes in ownership of the employed capital. Taking all these factors into consideration will provide a more profound evaluation of actual experiences. Therefore, while ISI has intensified in many cases market, foreign capital dependence and economic inflexibility, as argued by Roemer (1981), these outcomes are not the general case for all countries. As will be shown in chapter III, Cuba's adoption of a certain form of ISI (with emphasis on utilizing domestic resources) has decreased its market and technological dependency, and has significantly increased the country's economic flexibility.

The attribution of many negative social and structural consequences to ISI reflects a naivete similar to the common attribution of all the "evil" to machinery. It ignores the social context within which the strategy (or machinery) has been applied. ISI will definitely exacerbate income inequality and unemployment when it is directed to the production of narrowly consumed goods.

The dominant classes in every society define a "standard of living" which in turn defines a range of required goods. When the range of goods that can be produced internally is narrow relative to the socially defined range of required goods, then reliance on external sources of those goods becomes a central part of maintaining the "standards of living" (Evans and Geriffi, 1982:115).

Further, ISI will exacerbate economic dependence (through increased foreign penetration), when the groups with power are those whose interests coincide with those of foreign capital. A national state (with national bourgeoisie or workers/peasants base) that
actively intervenes in the economy would tend to use stricter measures with foreign capital. In this respect, the state's regulation of foreign investment becomes an important complementary policy to ISI.

Citing all the alleged negative impacts of ISI, many writers (e.g., Bhagwati, 1986) and financial institutions (e.g., World Bank) announce its failure and advocate export-oriented industrialization (EOI) as an alternative strategy. These writers ignore two aspects of this conclusion: First, the cited examples of successful EOI (e.g., Brazil and South Korea) are in countries that have developed the strong base for their industrial export through their experience acquired from ISI (Pazos (1985-86) and O'Brien (1979)); Second, the pursuit of EOI will not necessarily alleviate the social and structural problems attributed to ISI, since they are mostly an outcome of the specific social system within which they are pursued. Therefore, instead of abandoning ISI in favor of EOI, the latter can be adopted, in a later stage, as a complementary strategy and not as a substitute. In addition, instead of greater reliance on the market forces, the social and structural limitations associated with ISI can be reduced or countered by pursuing additional policies such as:

1. A more comprehensive process of economic planning. This policy would help in reducing the problems of the wasteful misallocation of resources and regional inequality. Such a policy has been pursued by many socialist countries.

2. Emphasis on applying ISI in intermediate and capital goods sectors and not in the consumer goods sector. Contrary to what many critics of ISI believe, UNECLA argued that
import substitution with respect to a particular consumer good, specifically if it is a consumer durable, may cause more severe demands with respect to investment and technical know-how than other alternative substitution possibilities in the field of capital goods or intermediate products (quoted in Havenvik, 1978:143).

Focus on these two sectors would have the dynamic tendency to reduce foreign investment by developing an indigenous technical capacity. Such policy has been pursued by some developing countries (e.g., China, India).

(3) Emphasis on the utilization of domestic resources in the different industries. Such utilization will reduce the country’s import of raw materials, and would increase the technical capacity by increased experiences in adapting available resources to final needs.

(4) Both regional cooperation and the demand for NIEO should be perceived as policies complementary with ISI. These complementary policies could expand the market and counter the "exhaustion" possibilities.

Therefore, instead of dismissing ISI offhand because of its alleged inefficiencies and limitations, Third World countries should make a conscious choice based on a careful examination of the implications of ISI.

II. Basic Industrialization (BI)

While ISI has been advocated mainly by ECLA, forms of BI have been supported by Soviet theorists, self-reliance writers, writers on small open economies, and some of the dependencia school writers (see chapter I). ISI has been pursued for decades in many different Third
World countries; as a result many theoretical and empirical assessments exist in the literature, which is not the case for BI.\(^6\)

This strategy emphasizes investment in the producer-goods sector. Such emphasis has been the center of the "Soviet industrialization model" of heavy industry which was theoretically supported by Feldman's model. Similar versions, adapted to developing countries, have been put forth by Mahalanobis, Raj and Sen and De Bernis.\(^7\) BI, however, differs from these models in some aspects. These models presuppose the existence of large continental countries, where the requirement and range of heavy industry is feasible; BI is a model for the small underdeveloped economies which characterize most of the Third World countries. Another important difference is that these previous models neglect the problem of technology and deal with technology as a parameter and not as a variable (Stewart, 1976). BI, on the other hand, strongly emphasizes the development of an indigenous technology as part of the process of industrialization. In addition, and as a result of their awareness of dynamic technological changes, BI's advocates acknowledge a certain level of flexibility in the resources base,\(^8\) which other models do not. Such level of flexibility implies a higher degree of linkage between the industry and the available domestic resources. Finally, while the previous models focus on the conflict of investment allocation between the producer-goods sector (Department I) and the consumer-goods sector (Department II), BI's main focus is on the convergence of domestic resource use, domestic demand and domestic needs and the consequence development of the technological capacity (with emphasis on heavy industry as a complementary policy). As Thomas argues:
Our basic strategy for transforming these economies (the small underdeveloped) is to plan the convergence of domestic resource use, domestic demand, and needs in such a way as to create the basis of an indigenous technology (Thomas, 1974: 195).

BI involves the production of basic goods (basic in the Sraffian sense) i.e., goods that are used, directly or indirectly, in the production of all other goods. They consist essentially of wage goods and the means of production. Analyzing the case of Tanzania, Rweyemamu argues that: "these are the only goods that can transform our economy from a dependency relationship to one of economic independence" (Rweyemamu, 1973:181). More specifically, Thomas identifies these basic goods with the two main industries: iron and steel and textiles. To these main elements, he adds other important basic goods which include: paper, plastic, rubber, glass, cement, fuel, industrial chemicals and other intermediate and final materials. The production of these goods, by providing strategic linkages, forms the backbone of the industrial structures.

(If) these goods are not produced locally the organic linkages between domestic demand and domestic output will forever lie abroad in the countries from which these imports are derived. The growth of domestic demand will then simply result in transferring the bulk of the value added (Thomas, 1974:196).

Stressing the importance of the linkage effects has been long addressed in the literature (Hirschman, 1958). However, in addition to the inter-sectoral and inter-industrial linkage, the advocates of BI stress the general linkage among the selected industries (providing basic goods) and domestic resources and domestic needs. This additional linkage reduces the possibility of the negative outcome of some of the "consumption linkages" that occurred in some developing
countries. In addition, the early writing of Hirschman (1958) on the importance of the linkages effects have singled out the relation between the market size and economic size of the plant as the key factor that would trigger private and public investment in backward and forward linkages (Hirschman, 1977:77). On the contrary, advocates of BI, while stressing the importance of inter-sectoral and inter-industrial linkages, undermine the market size as a determinant factor; instead they point out the size of generated surplus and its allocation to industry (Thomas, 1974). Finally, the advocates of BI consider the linkage among domestic resources, demand and output as the necessary condition for the growth of an indigenous technology.

Many theoritical and empirical studies have shown that indigenous technology develops when the industrial production is geared to producer-goods. In an attempt to supply certain intermediate and final basic goods, local technological innovations would gradually, through a process of accumulated experiences, skills and organization, adapt the use of available resources to the production of these goods.

Theoretical assessment of BI:

In his survey of the literature on resource-based industrialization, Roemer argues that because of the low direct labor coefficients of most of these industries (typically capital intensive), they do not seem to be a good instrument for generating employment. He further argues, however, that the case for these basic industries should rest not so much on the direct impact as on their indirect effects through the linkage to other sectors (Roemer, 1979: 185).
Further, because of the high capital/labor ratio, labor productivity in these industries is higher than in other sectors, hence wages tend to be higher. As a result, these industries might increase income concentration. However, as I argued earlier in the case of ISI, the unequal income distribution is an outcome of certain social relations, and not of industrial policy per se.

What is the effect of BI on economic independence? BI has the potential to overcome the limitations of ISI. By linking the structure of production to domestic consumption, BI has a higher potential for supplying wage goods (instead of luxury goods); and by linking the production structure to domestic resource use, it has a higher potential in the development of an indigenous technology.

The early stages of BI in most Third World countries, like those of any other strategy, require external economic and technological assistance. In its initial stages, BI might increase dependence on foreign technology and management. However, this "dependence" can be considered as "tactical" or "short-run" (as was argued in Chapter I) when it is utilized for the development of a technological and productive base of the economy.

(The) approach is basically one of adaptation and selection in order to strengthen the existing basis of the machines sector. It soon becomes possible for internal technological advances and adaptations to take place (Thomas 1974:215).

In addition, because of its domestic orientation, BI has the potential of reducing "market dependence" (Roemer, 1981). Emphasis on the domestic economy does not mean, however, the absence of foreign trade. Foreign trade is conceived as an extension of the internal dynamic. As BI succeeds in creating a convergence of domestic resource use and domestic demand it creates the "capacity to convert domestic
savings into investment goods and thereby allows for the potential development of an export capacity in industrial goods" (Thomas, 1974:221). Hence, a better level of equal international exchange can be achieved as a result of domestic changes.

Finally, Thomas suggests four other industrial activities to complement BI: (1) the development of machinery tools industry which is "one of the most important areas of the capital goods sector which has to be planned and integrated into the basic materials sector" (Thomas, 1974:212); (2) the provision of infrastructural and overhead facilities, particularly power and transportation; (3) the development of small scale industry which would help in narrowing rural/urban industrial differentiation (reducing regional inequality); (4) the development of agricultural industries which would increase the dynamic interaction between the basic materials sector and all other sectors. On one hand, the basic industries provide necessary input for the agricultural sector (e.g., fertilizers, machinery). And on the other hand, the agriculture sector provides inputs for further manufacturing (e.g., textiles, food processing).

Specially when implemented with these complementary industrial activities, BI has a higher potential than ISI for increasing the economy's capacity to evolve towards a higher degree of economic independence.13

III. Regional Cooperation

The Third World and the advanced capitalist countries differ in terms of their motivation for regional cooperation. The Third World embraces regional cooperation to reduce its dependence on the
international market and fostering domestic industrialization. The advanced capitalist countries' cooperation experiences, however, have been driven mainly by the political motive of maintaining security and peace (Mytelka (1979: 10), and Axline (1981: 171)).

Regional cooperation is conceived by its main proponents as mainly the means to expand the internal market with the consequence of accelerating industrialization, and strengthening the bargaining power of the member group.

If economic integration results in a larger markets and the achievement of scale economies, it can be an important catalyst for increased production, investment and employment. Such economies seem especially important in manufacturing processes like steel, machinery and chemicals. Since these items are often inputs into other production processes, the scale economies may have important linkage effects (Yeats, 1981:35).

The Third World experiences in economic cooperation have taken different forms such as: free trade association (e.g., Latin America Free Trade Association - LAFTA), trade preference associations (e.g., Latin America Integration Association-LAIA), common markets (e.g., Central American Common Market), or other integration units (e.g., Southern African Development Coordination Conference - S.A.D.C.C.). Mytelka (1979) has classified integration efforts into three distinct forms:

1. Type I, a laissez faire integrative system (e.g., LAFTA). It involves three main issues: freeing trade within the region, the application of a certain level of a common external tariff, and the mobility of factors of production within the region.
2. Type II, a modified laissez faire system (e.g., East African Community). It includes compensatory and corrective measures and policies for regional planning.

3. Type III, a dirigiste integrative system (e.g., The Andean Group). It emphasizes both planning and regulatory measures within the regional context.

Haskel (1974) has classified the integration efforts as those "expansive" in nature and those that are "distributive" in nature. The former would correspond to type I (in Mytelka's classification); the latter corresponds to type III and the mixture of the two corresponds to type II.

Theoretical Assessment of regional cooperation:

Like ISI, regional cooperation has been criticized from varying perspectives: the neoclassical, the liberal and the radical writers. Neoclassical writers either reject regional cooperation in general as an obstacle to free trade, or raise doubts about its suitability to the Third world Countries on the ground that it will lead to trade diversion instead of trade creation. Liberal writers, on the other hand, point to cumulative regional inequality experienced by the participating countries. As a result of these countries' initially unequal levels of economic development, the gains from the integrative efforts are likely to be distributed unevenly. In addition, they point to the failure of regional cooperation in reducing income inequality at the national level. Radicals view regional cooperation that focuses on trade liberation without prior policy changes at the national and regional levels, as another means to facilitate the penetration of foreign capital.
There exist various possible combinations of alliances among domestic and foreign groups promoting processes of integration which can accentuate external dependency and/or generate benefits which accrue basically to transitional enterprises (Vaitsos, 1978:721).

External factors have great effect on regional cooperation than on either of the two previous strategies. The regional cooperation experiences of the Third World have been affected by other non regional governments' actions and by the MNCs.

Perhaps no issue has contributed more than that of "external penetration"—attempts by extra-regional powers to take advantage of the newly created regional opportunities and the consequent fear that these outside powers would derive more benefit from integration than would the intra-regional participants (Schmitter, 1972:1).

In many of the established forms of cooperation and integration, foreign monopoly domination in the regional area has increased, attracted by improved facilities and market expansion. In his analysis of the industrial development in the Central American Common Market (CACM), Herold argues that "the benefits of tariff reductions have accrued mainly to large foreign firms (...). Local enterprise appears to have gained very little" (Herold, 1976:174). Many other studies have provided examples of different attempts by some of the developed countries governments' (especially the United States) to influence the terms of economic integration among the less developed countries (LDCs) to serve foreign interests and to increase the LDC's dependence (Schmitter, 1972; Axline, 1977; and Vaitsos, 1978).

Throughout history, government of hegemonic powers have shown, in many cases, a marked opposition among less developing areas. (...) there have been multiple attempts to formally integrate less developed economies in customs unions, free trade zones (or other trade arrangements) with certain hegemonic powers. Such efforts had the dual objective of both increasing the dependence of the
former on the latter as well as excluding other powers from interfering in established zones of influence. Finally, there have been efforts by government of developed countries to influence or even dictate the terms of economic integration among LDCs so that such regional cooperation will serve the interest of the non-member yet intervening foreign forces (Vaitsos, 1978:727).

The negative social and economic impacts and more important in our case, the increased level of economic dependence, should not be attributed to regional cooperation as such. It is necessary to differentiate among the different types of cooperation efforts, and to examine the process within a dynamic framework. For this purpose, the framework presented by Mytelka proves useful. Most of the experienced negative impacts were a result of integration efforts of type I, and to a lesser extent of type II. By its own definition and orientation, type I, a laissez faire system does not include any deliberate mechanisms that would equalize the distribution of gains among the participating countries. Its main goal is to enhance industrial development as a result of market expansion. Such a goal without the prior attempt to change the existing production structure would limit the rapid gains, "exaggerate economic asymmetries and produce unequal gains among the participants" (Mytelka, 1979:12). Assessing this type of integration within the African context, Green concludes similarly.

Free trade in economic community rules may hamper regulation of both production and trade in ways which would not serve the interests of the community and its members considered individually; they may even make impossible steps to ensure net gains to all members and thus create stresses threatening the community's previous existence - a situation which clearly did develop in the unregulated pre-Treaty East African Common Market (Green, 1973:50).

In addition, the laissez faire attitude of this type of integration is extended to dealings with foreign capital. The absence
of regulatory measures towards foreign capital has led, in many cases, to further penetration of MNCs activities into the regional area and their increased benefits and generated surplus, as the member countries compete with each other to which will provide the most favorable terms to foreign investors, "war of incentives" (Vaitsos, 1979:730). Examples of such foreign penetration occurred in the case of LAFTA where a set of reciprocity agreements, initiated by MNCs, dominated the Pharmaceutical, electronic and machines sectors (Mytelka, 1979:19). Some of these limitations are avoided in type II system where the main objective is to equalize the distribution of gains among the members. It includes compensatory and corrective measures that tend to reduce distributional inequality.

Despite its superiority to type I regarding the distributional impacts, type II integration system does not directly adopt the goal of increasing the level of economic independence; and as such it lacks certain essential measures. A regional policy regulating foreign investment and technology transfer is the most important measure of reducing external dependency. The lack of such measure, as in the case of types I and II, lead to the penetration of direct foreign investment (DFI) into the regional area. DFI implies both the control or strong influence over decision making and over the generated surplus, hence the aggravation of the region's dependency.

The starting point for a policy aimed at reduction of dependence is the adoption of regional measures regulating foreign investment and transfer of technology, including the designation of certain sectors of the economy in which foreign participation will be limited or totally excluded (Axline, 1977: 97).
Considering both economic and political aspects of integration, Mytelka argues that type III integration (the dirigiste integrative system) is superior to type I and II in reducing both the polarization effects and external dependence. In addition to the inclusion of compensatory and corrective measures, type III includes direct measures to control and regulate foreign investment and the transfer of technology.

Therefore, when addressing the issue of economic independence, both theoretically and practically, only type III should be considered since it is the only type that from the outset takes economic independence as a goal and advocates specific measures for achieving it.

While type III integration is the most effective in reducing economic dependence, it is also the most difficult to achieve. Besides requiring the establishment of a well-functioning complex system of institutions and a high level of coordinated planning, type III requires the strong commitment of the member states. The latter, in return, requires the support of internal social forces whose interest is strongly related to the development of domestic productive capacity.

Besides differentiating between the types of integration systems when evaluating the impact of regional cooperation on economic independence, one should also adopt a dynamic framework. This framework would take into consideration such elements as: the accumulation of experiences in dealing with MNCs and the increasing bargaining power of the Third World Countries (Vaitsos, 1973); the increasing efficiency in multinational planning; and the changes in the balance of the internal social forces.15
Regional cooperation, as argued before, is more affected by external elements than the previous strategies; it is confined not only by the national social structure and political forces, but also by the regional ones. Therefore, despite its importance in strengthening national and regional power once successful, regional cooperation confronts more practical obstacles than the other strategies. 16

IV. The New International Economic Order (NIEO)

NIEO is a demand by Third World nations for a more genuine interdependence in the world economy. It stems from the continuing frustrations of these nations with the present economic order. Despite the growth of manufactured goods exports from the developing countries, this growth has been confined to certain products and few countries (specifically the newly industrialized countries (NICs)). The majority, however, still rely on exporting raw materials and in many cases face deteriorating terms of trade, given the repeated economic crises of the advanced countries and their increased protectionism. In addition, the increasing volume of debt and its accumulated interest payments continue as a major problem facing both rich and poor developing countries (see indicators in Tables (1), (2), and (3)).

The demand for changes in the international economic order by the Third World countries goes back to the mid 1950s. 17 The recent attention, however, stems from the Declaration and Programme of Action of NIEO which was adopted in a special session of the United Nations (UN) General Assembly in 1974, and from the Lima Declaration and Plan of Action in 1975. The desire for both national independence and
mutual interdependence was emphasized in the main principles of these declarations:

Full permanent sovereignty of every state over its natural resources. In order to safeguard these resources, each state is entitled to exercise effective control over them and their exploitation with means suitable to its own situation, including the right to nationalization or transfer of ownership to its nationals, (...). No state may be subjected to economic, political or any other type of coercion to prevent the free full exercise of its inalienable right (The Declaration on the Establishment of NIEO, (in: Laszlo, et. al., 1979: 159).

The Third World demand for a NIEO covers different economic, political and social issues. These issues are:18

1. Aid and assistance issues: attaining the UN development assistance target (0.7% of the advanced countries' GNP); securing technical assistance and eliminating brain drain; renegotiating the developing countries' debt; undertaking special measures to assist the least developed countries among the Third World; and using funds from disarmament for development.

2. International and trade issues: Improving the terms of trade of the developing countries (through tariff and non-tariff negotiations); adjusting the economic policies of the advanced countries to facilitate the expansion and diversification of exports of the developing ones; strengthening the economic and technical cooperation among the developing countries.

3. International financial issues: reforming the international monetary system; assuring a fuller participation of the developing countries in the World Bank and IMF decision making; and increasing the transfer of resources through these financial institutions.
4. Industrialisation, technology transfer and business practices issues: negotiating the redeployment of industrial productive capacities to developing countries; establishing mechanisms for transfer of technology; regulating and supervising the activities of the MNCs (to prevent their interference in the internal affairs and regulate the repatriation of profit).

5. Social issues, which include nationally oriented policies providing a more equitable income distribution and raising the standards of living.

6. Political and institutional issues, which focus mainly on policies that would assure economic sovereignty of the Third world nations, their control over their natural resources and property, and their choice of economic and social system.

These demands would obviously require major concessions from the advanced countries, and as such are not acceptable, and in many cases are opposed by them. In addition, these demands have been also rejected by the MNCs because they limit and regulate their activities and hence reduce their potential profit.

(The) large industrial countries need secure sources of raw materials so badly that they will be willing to pay the price of neutralizing economic nationalists who threaten to upset the old and dependable system. There is nothing in history or logic to suggest that corporate boards of directors (...) will simply sit and let the price and terms of supply be dictated to them by outsiders, if they have other options available to them (Moran, 1974:238).

Magdoff notes that such rejection takes one of two forms: "(1) outright refusal to institute the proposed reforms, and (2) advocacy of counter proposals that either are mere window-dressing or are
designed to meet their own needs, such as obtaining more secure flows of raw materials from the Third World" (Magdoff, 1978:4).

**Theoretical assessment of NIEO:**

The opposition to NIEO is also stated in some theoretical perspectives. Traditional trade theory, which is based on a harmonious view of the world (where economic relations are assumed to lead to mutual economic benefits to all parties involved), sees NIEO as an intervention in the free play of the market. This position was reflected, in more concrete terms, in the Brandt Commision report (prepared for the World Bank). The report emphasized the shared economic interests between the "North" and the "South" and the need for further cooperation, with the consequent implication of undermining the need for a NIEO.¹⁹ Liberals, as with other strategies, question NIEO's ability to reduce income inequality within the developing countries (Tucker, 1977). Some radicals, on the other hand, raise doubts about NIEO's proposals ability to significantly alter the present order, and view NIEO as only a reformist movement (Magdoff, 1978; and Amin, 1982). Therefore, even if NIEO succeeds in affecting the form of the distribution between the advanced countries and the developing ones, radicals question its ability to alter the underlying unequal relationship between them.

The dichotomized distribution of agricultural and raw material production, characteristic of the colonial and post-colonial periods, is now to be replaced by one in which DCs reserve for themselves the new technologies while the UDCs (under developed countries) specialize in the old, low technology industries. The content of the dichotomy changes, but the dichotomy remains (Baumgartner and Burns, 1981:322).
If one accepts that the underlying nature of economic relations is that of conflict and not of harmony, and that the international market structure is of a monopolistic and/or oligopolistic nature and not of perfect competition, the neoclassical objection to NIEO becomes irrelevant. On the other hand, NIEO should not be expected to change the internal income distribution. As with the case of the previous strategies, the pattern of income distribution is an outcome of specific relations of production and not of a specific strategy per se. The gains from NIEO may be reaped only by certain groups when these groups are in control of the national economy, while being distributed in a more egalitarian manner when the social forces in power are those which represent the interests of the majority. Assessing the impact of NIEO on the provision of basic needs, Stewart shows that there is no support for claims that NIEO leads to a redistribution of income. She also argues that NIEO measures will be favorable to basic needs only in cases where the government is supportive of basic needs strategy (Stewart, 1982:56-7).

The radical critique is the most relevant to the main issue here, namely economic independence. The argument that NIEO has not succeeded in altering the existing order is acknowledged even by the strong proponents of NIEO:

The results of the NIEO programme's first decade show that the developing countries have achieved very little in changing the international trade system, while finding themselves in even greater financial dependence on Western monetary and credit agencies (Obminsky, 1984: 87).

The main reasons for these limitations are: the continued resistance of the advanced countries and MNCs; and the heterogeneous political and social nature of the participants in the demand for NIEO,
a heterogeneity which limits their common position and reduces it, in many cases, to some redistributional issues (Tarabrin, 1982:25).

The evaluation of the impact of NIEO on economic independence should be viewed, however, within a dynamic perspective. Therefore, NIEO should be evaluated not as a mere list of demands but rather as a dynamic process, and taking into consideration the impact of the changing balance of forces in the international arena.

While earlier attempts by the developing countries to reap concessions and recognition from the advanced countries were not successful, the recent attempts in the 1970s were backed up by certain historical factors: the increased power of the oil producing countries through their organization OPEC and the increased number of the independent Third World countries in the UN. Neerso (1978) has pointed out another changing factor: the growing consciousness in the developing countries that foreign investment became too expensive for them and has negative impacts on their economies. This factor "reflects that even in the non-socialist developing countries governments and local industrialists have become more nationalistic because they feel themselves dominated by foreign investors" (Neerso, 1978:113).

In addition, NIEO should be viewed, despite its associated limitations, as a collective means to increase Third World countries’ economic and political power in the world economy. However, the utilization of this power and of the economic gains (e.g., better terms of trade, improved terms of the debt, and reduced economic barriers to their exports) will differ according to the social context and national objectives. These gains can be utilized for example to further develop the domestic basic industries where such strategy is nationally
adopted, and hence facilitate the economy's transition to a higher degree of economic independence.

Without a capital goods industry, the developing countries, if they realize the rates of growth corresponding to the Lima objectives cannot escape from dependence. The latter will be accentuated by industrialisation (Tiberghien, 1979:242).

Such positive impact of NIEO on economic independence requires the prior national objective and commitment, pursued by the state, toward increasing the level of economic independence.

In the third world version of NIEO, a strong and activist state becomes the guarantee that industrial scene will consist of integrated manufacturing process rather than a collection of partial units without local linkages (Amin, 1982:11).

Therefore, NIEO can be considered as an important complementary strategy to national industrialization for achieving a higher degree of economic independence. In addition, because of its broad demands that would benefit all developing countries and hence its higher potential in uniting different social and economic systems, NIEO seems more feasible and less restrictive than regional cooperation.

**Conclusion and further remarks:**

In this chapter I have examined four strategies - ISI, BI, regional cooperation, and NIEO - in an attempt to assess their impact on achieving a higher degree of economic independence for the Third World. The examination of each of these strategies revealed important relevant policies that should be taken into consideration:

First, developing countries need to regulate foreign investment and MNCs' activities in the domestic economy. They need to reduce the outflows of surplus, and the social and political interference
in the domestic economy. The form of regulation and its outcome will differ depending on the nature of the economic activity and on the bargaining power of both the host country and the foreign investor. One of these important forms, which has been adopted in many developing countries, is establishing a joint venture (with public or private local ownership) instead of a fully owned subsidiary. The host countries can also limit the outflow of surplus by limiting the amount of money foreign companies are allowed to invest, and by forcing foreign investors to reinvest part of their profit in the domestic economy (Neerso, 1978:118). In his analysis of the relations between the host country and foreign investors, Moran offers an alternative dynamic model to the "reactionary alliance" or "mutual advantage" models. Instead of adopting the static notion of the "host country", his "balance of power" model acknowledges the different outcomes of the domestic social interaction and the consequent different outcomes in dealing with foreign investors (Moran, 1974: chapter 6). Such dynamic perspective takes into consideration the changes in the social power within the developing country and its accumulation of experience in dealing with foreign investors.

Second, developing countries need to regulate the transfer of technology and to develop an indigenous technological capacity. This need stems from the recognition, by many writers on the subject, that technological dependence continues to be the main form of dependency of the developing countries. Regulating technology transfer should not imply the termination of technology imports nor the advocacy of the use of "appropriate technology". Rather it implies adaptation and selection of certain technologies that would strengthen the productive
sector (e.g., of certain basic industries). These technologies should be used in accordance with the planned process of developing an indigenous technological capacity which in turn, as argued earlier, requires the development of the capital goods sector. "(Probably) the crucial question is thus: how can we mix technologies with distinct technological features such that social and political results correspond to desired ones (...)?" (O'Brien, 1979:514).

Third, developing countries need a deliberate policy of income redistribution. In evaluating each of the strategies it was emphasized that these strategies do not in themselves contribute to reducing income inequality (and similarly to unemployment and regional inequality). However, as was argued in chapter I, income redistribution is an important policy in the process of attaining a higher degree of economic independence (as a means to increase aggregate demand, to reduce the outflow of surplus, and to increase the level of productivity and mass support).

Fourth, the three above "necessary" policies call for an interventionist role of the state in the economy (instead of relying on the market forces). Without this "sufficient" condition, the three above policies would have little, if any, impact on achieving a higher level of economic independence. The strong active role of the state will, in turn, depend on three basic factors (White, 1984:98-100):

1) The social nature of the state: the state may embody the interests of three different forces: a) the state itself as a matrix of distinct "autonomous" interests; b) a hegemonic class or class coalition; c) the nation vis-a-vis other nations, where the state asserts an independent national interest and opposes foreign interests.
ii) **The state's politico-administrative capacity** which involves three dimensions: a) its political capacity to mobilize widespread support for industrialization programs; b) the existence of reasonably efficient administrative institutions; and c) technical capacity to analyze problems and formulate feasible solutions.

iii) **The specific modes of involvement** of the state in the organization of the social and economic processes to further industrialization.

Therefore, the state's active participation is an important condition in: regulating foreign investment and MNCs' activities in a way that insures a positive contribution to the development of the productive capacity of the economy, adapting foreign technology in accordance with the national objective of developing the productive and technological capacity, and establishing direct measures for income redistribution. These regulatory socio-economic factors would increase the four strategies' potential for achieving a higher level of economic independence.²⁴

In evaluating the four strategies I have argued that national industrialization, especially in the form of BI, has the highest potential in increasing the economy's level of economic independence. Both regional cooperation and NIEO can be considered as long run strategies basically because they face more external obstacles, and because their outcome, if successful, will be different at each national level according to the internal social and economic structure.

While stressing the importance of the internal processes of development in leading to a higher level of economic independence, I
am not downplaying the importance of the international or external factors. These include: the huge accumulated debt and its increasing interest payment, the negative social and economic impact of some of the MNCs' activities, the continued economic crisis of the advanced countries and their increased protectionism and the consequent deteriorating terms of trade of the developing countries' exports, and the covert and overt political and military intervention in those countries that attempt establishing a more independent economy (the examples of Grenada and Nicaragua are still fresh in mind). To argue that these factors play no role ignores both the historical impact of colonization in these countries, and the deficiencies of the present economic order that has largely served the interests of the advanced capitalist countries. However, while these external factors might, in some cases, shape the internal structure, I believe that the national factors (e.g., the internal pattern of income distribution, the production structure and the industrial and technological capacity), which are defined by the internal social structure and the interests of the social groups in power, in most cases play the principal role in the process of development towards a higher level of economic independence.
### Table 1

**World Trade Growth, 1973-82 (percent)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>World trade growth</td>
<td>12.5</td>
<td>4.0</td>
<td>-4.0</td>
<td>11.5</td>
<td>4.5</td>
<td>5.0</td>
<td>6.5</td>
<td>1.5</td>
<td>0.0</td>
</tr>
</tbody>
</table>


### Table 2

**Debt Indicators for Developing Countries, 1970-84**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ratio of debt to GNP:</td>
<td>14.1</td>
<td>15.4</td>
<td>18.1</td>
<td>21.0</td>
<td>20.9</td>
<td>22.4</td>
<td>26.3</td>
<td>32.3</td>
<td>33.8</td>
</tr>
<tr>
<td>Ratio of debt to export:</td>
<td>108.9</td>
<td>80.5</td>
<td>100.2</td>
<td>113.1</td>
<td>89.8</td>
<td>96.8</td>
<td>115.0</td>
<td>130.8</td>
<td>135.4</td>
</tr>
<tr>
<td>Total debt (Bilions of Dollars):</td>
<td>68</td>
<td>141</td>
<td>204</td>
<td>313</td>
<td>430</td>
<td>488</td>
<td>546</td>
<td>620</td>
<td>686</td>
</tr>
</tbody>
</table>

Table 3

Terms of Trade of Developing Countries
1973-82 (1978-100)

<table>
<thead>
<tr>
<th>Developing countries</th>
<th>Changes in terms of trade (percentage)</th>
<th>Changes in purchasing power of export (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>12.1</td>
<td>-3.2</td>
</tr>
<tr>
<td>Africa</td>
<td>-15.3</td>
<td>-13.8</td>
</tr>
<tr>
<td>Middle-income</td>
<td></td>
<td></td>
</tr>
<tr>
<td>oil importers</td>
<td>-9.5</td>
<td>-10.7</td>
</tr>
<tr>
<td>oil exporters</td>
<td>59.9</td>
<td>31.8</td>
</tr>
</tbody>
</table>

Notes

1. Gerschenkron has examined early in the 1960s the differences that existed between the industrialized countries and backward ones. He argued that as a result of specific institutional instruments (e.g., the state, the banks) that existed in the backward countries, the rate of industrial growth and the productive and organizational structures of the industry differed in the advanced countries and backward ones (Gerschenkran, 1962: chapter 1).

2. For a classification of these definitions see Ahmad (1978) and Havnevik (1978).

3. This view is shared by most writers of the dependencia school.

4. Cline has concluded, in his review of literature article, that income distribution is insensitive to the industrial structure or industrial policies (Cline, 1975).

5. In evaluating the industrial experiences in Latin America, Havnevik concludes that the structural characteristic of underdevelopment (e.g., high income and regional inequality, distorted sectoral growth and financial and technological dependency) continued in the case of Brazil even after adopting EOI. Another study, by Morley and Williamson, testing export-led growth and ISI showed that the range of Gini coefficients was only 0.42 to 0.45 at the end of a 12-year period (Roemer, 1979:187).
6. For this reason the analysis of this section will depend mostly on the work of Rweyemamu (1973) and Thomas (1974), the two main proponents of this strategy.

7. For a critical assessment of these models see Stewart (1976), and Aliouche (1987).

8. Thomas cites six technological considerations which allow further flexibility in the resources base (e.g., various technological processes which allow the physical substitution of one resource input for another in producing the same product; and technological development which leads to increasing output per unit of input (Thomas, 1974:202-5).

9. In examining the input/output matrices of different industrial countries, Thomas notices that, despite the multiplicity of final products, the material content of these products is skewed in favor of these two elements (Thomas, 1974:195).

10. In his recent assessment of the linkages effects, Hirschman notes that

   during the first phases of export expansion in the countries of periphery an important effect, is not the creation of new industries to satisfy rising consumer demand, but the destruction of established handicraft and artisan activities as labor is withdrawn from them for staple production and as new imports of consumer goods compete successfully with them (Hirschman, 1977:72).

11. See for example Stewart (1976), Rosenberg (1976) and the different studies in Ernst (1979).

12. For example, sponge iron, which is an essential component in the steel industry, can be reduced from iron ore using natural gas instead of coke. This process was first developed in Mexico and then adopted by several industrial countries (Roemer, 1979:181).
13. This conclusion is also supported by Roemer (1981).

14. See list of references on this position in Axline (1974:84). Neoclassical writers who argue in favor of regional cooperation advocate type I, the laissez-faire system.

15. The form and development of the integration system are defined by the internal social forces. The declining power of the landed oligarchy and its replacement by financial, commercial and industrial bourgeoisies explains the replacement of LAFTA (type I) by the Andean Group (type III).

16. The different social forces in each country affect, for example, the adopted measures of regulating foreign investment and transfer of technology. Even among the capitalist oriented economies of the Andean Group, the differences in the economic and social power of the national bourgeoisie have affected the implementation of Decision 24 (regulating foreign investment) and eventually its replacement with less restrictive measures (Mytelka, 1979:73). For an additional analysis of the impact of the domestic social forces on the different positions adopted by the Andean countries see Mytelka, 1973.

17. In 1959 twenty nine countries met in the Asian-African conference in Bandung and called for establishing new measures to eliminate the fluctuations in the prices of raw materials exports.

18. The following classification is based on a UNCTAD study by Laszalo et. al., (1978) which offers a valuable detailed presentation of all these issues. For another summary of the proposals and demands see Edwards (1985:236).

20. This outflow is reflected in the high profits extracted from: low domestic wages, low interest on domestic loans and other concessions guaranteed by the local government, and overpricing of some inputs practiced by the MNCs.

21. For an excellent account of such interference see Barnet and Muller (1974).


23. This term is frequently used in the literature with the implication that only "appropriate" forms of technology transfer are suitable for the developing countries. However, the "appropriateness" is defined differently by different writers (e.g., Small scale production, and labor intensive). As O'Brien correctly argues this notion cannot be discussed in isolation from the social structure and the objectives pursued by the social and political groups in power. Hence, the exact definition of "appropriate" will depend on who is defining it and for what purpose (O'Brien, 1979:512).

24. In stressing the state's role, however, I do not view the state as an autonomous entity independent of the rest of the economy; but rather as a social institution that perpetuate the dominant class's interests through the process of capital accumulation. For a critical analysis of the "relative autonomy of the state" position see Gulalp (1987).
25. For an excellent recent assessment of such economic and military interventionist policies in the Third World by the United States, see Halliday (1987).

US economic power, as much as or even more than its military power, gives it the capacity to exert forms of control on third world societies and states and to impose its wishes on them, whether directly and bilaterally, or through influence on the policies of multilateral agencies (Halliday, 1987:16).

26. In most cases certain internal social groups facilitate the expansion of the MNCs' role in the domestic economy. MNCs, for example, reap higher profits in these economies where the state (pushed by certain powerful groups) guarantee these profits by different means such as: extensive tax holidays, suppression of workers' real wages and weakening and eliminating their strikes and trade unions.
CHAPTER III

ECONOMIC INDEPENDENCE: THE CUBAN EXPERIENCE

"The only wealth and liberty that last and bring good are those that are created and won with one’s own hand".

(Jose Martí)

"Sovereignty is the right of a nation to choose its direction and control its destiny. Without this basic condition, everything else - state, government, culture - lacks national sense; it is folly. The paramount objective of the Revolution, therefore, is to affirm the full sovereignty of Cuba".

(Nuestra Ruzon: Manifesto - Program of the 26 of July movement)

"The Pillars of political sovereignty that were built on January 1, 1959, can only be consolidated when absolute economic independence is achieved".

(Ché Guevara)

Introduction

The theoretical investigation of economic independence, its concepts and the proposed strategies for achieving it, were the subject of the first and second chapters. An empirical investigation, the subject of this chapter, entails examining specific cases within the Third World.

This chapter examines the Cuban experience in reducing its previous heritage of dependency, a legacy of colonial and neocolonial domination. I shall examine the actual transformation process that took place utilizing the theoretical concepts raised in the first
chapter, and then compare the actually adopted strategies with those discussed in the second chapter.

Two reasons underlie choosing Cuba as a case study for the theoretical theme of economic independence:

i) Economic independence is one of Cuba's declared and continuously emphasized objectives;

ii) Cuba's economic and social development and the question of its independence have been the center of a continuous debate since the 1960s. While some writers recognize Cuba's profound achievements in changing its economic and social structure and hence reducing its previous dependency, others argue that Cuba has simply replaced one dependency with another, exchanging its previous relationship with the United States (U.S.) for its current one with the Soviet Union (U.S.S.R.). In this chapter I argue against the latter position, demonstrating that Cuba has successfully altered its economic and social structure towards a higher level of economic independence.

In demonstrating this transition I utilize the concept of economic independence as a higher level of national integration; this approach differs from that of focusing on some external factors (e.g., trade ratios and orientation) which has been utilized by other studies which also demonstrated Cuba's increased level of independence (e.g., LeoGrande (1979), Brundenius (1984)). This study also differ from other valuable studies (e.g., Edquist (1985), UNIDO (1986)) by its specific focus on the issue of economic independence.

Viewing economic independence as a process necessitates adopting an historical perspective in assessing this process. Such a perspective allows one to understand the different internal and
external social, political and economic factors that shaped the initial
status of the long process under examination, and hence leads to a
better understanding of the process itself and its future prospects.
In assessing the Cuban experience, an historical presentation is
indispensable in clarifying the nature and extent of dependency that
characterized the Cuban economy for more than four centuries; and
hence, in facilitating the understanding of the extent of its success
in reducing this dependency and achieving a higher level of economic
independence in a period of less than thirty years. The following
historical background will highlight the unequal and exploitative
nature of the pre-revolution Cuban-U.S. relationship.

Historical Background:¹

[A] Cuba under Spanish domination²

Cuba was claimed for Spain by Columbus in 1492, and was settled by
the Spanish starting in the 1510's. Because of its strategic location
and lack of substantial minerals, Cuba served as a service colony for
the commercial and military Spanish fleets. The native Indian
population was mostly employed in minor economic activities and in
serving the settlers. Due to the brutal treatment, poor health and
economic conditions, the native population was gradually eliminated.
They were replaced by black slaves brought onto the island from Africa.
While engaged basically in tobacco and coffee cultivation, Cuba moved
in the latter 18th century into sugar cultivation on a large scale.³

With the expansion of sugar production, an increasing number of
black slaves was brought to the island. The sugar expansion also
brought unprecedented wealth to the island, wealth that was mainly
appropriated by the Spanish oligarchy which consisted of two white
groups: the Creoles (born in Cuba) and the Peninsulares (born in
Spain). Sharing the same opposition to abolishing the system of
slavery, the two groups conflicted in their political and economic
aspirations. The pro-Spain peninsulares favored Spanish colonial
control, while the Creoles, politically and economically restricted,
favored independence. However, as Spain accepted the agreement
initiated by England to abolish the system of slavery (in hope of
receiving a loan from England for military needs) Spain's role as the
defendant of white Cubans against the black population was undermined.
Rejecting Spain's new policy on slavery, some of the wealthy Cubans
formed the annexationist movement (Club de Havana) which allied with
the United States. In an proclamation they declared:

Cuba, united to this strong, and respected nation
[U.S.], whose southern interests could be
identified with hers, would be assured serenity
and future prosperity; her riches and her whole
territory triple its value. Liberty would be
given to private enterprise and the system of
hateful and harmful restrictions which paralysed
commerce would be destroyed (in Hugh Thomas, 1971:
212).

The movement was supported by pro-slavery groups in the United
States and by business groups who recognized the tremendous economic
potential of the island. In a letter sent to the Minister to Spain in
1823, the Secretary of the State John Quincy Adam stated the U.S.
interest in Cuba:

These islands (Cuba and Puerto Rico) from their
local position are natural appendages to the North
American continent; and one of them, Cuba, almost
in sight of our shores, from a multitude of
consideration has become an object of transcendent
importance to the political and commercial
interests of our union. (...) (The) nature of its
productions and its wants, furnishing the supplies
and needing the return of a commerce immensely
profitable and mutually beneficial; give it an importance in the sum of our national interest (...). (In) looking forward to the probable course of event, for the short period of half a century it is scarcely possible to resist the convention that the annexation of Cuba to our federal republic will be indispensable to the continuance and integrity of the union itself (in Smith, 1963: 27) (emphasis added).

In 1847, the U.S. government made a secret offer to buy Cuba from Spain for $100 million, an offer that was strongly rejected by Spain (taxes in Cuba already brought Spain $10 million a year).

The annexation schemes ended, however, with the ascending power of the anti-slavery groups within the United States and the outbreak of the Civil War in the United States in 1861.

Facing internal economic and political difficulties, Spain imposed a new tax on the island in 1867. Suffering already from enormous taxes and economic depression, the Cubans opposed Spanish control. A revolutionary upheaval took place in 1868 involving small coffee planters and poor black Cubans. The first independence war against Spain continued for ten years without Cuba's liberation.4 Despite the unsuccessful outcome of the first independence war, the struggle had profound national effects. Leaders of this war (e.g. Máximo Gómez and Antonio Maceo) were to have a tremendous impact in stimulating the nationalist aspirations. In addition, the continued revolutionary activities succeeded in firmly eliminating the slavery system, providing the ground for the second independence war that started in 1895.

In the meantime, while Cuba was still a Spanish colony the American capitalists began, in the 1880's and 1890's, investing in the island, buying mills and land from Cuban owners who had been harmed by the drop in sugar prices and who lacked the necessary capital for more
efficient production. By 1896 American investment was reported to be $50 million of sugar and mining properties (Huberman and Sweezy, 1961:13).

While the Cuban revolutionary forces, led by Jose Martí, Maximo Gómez and Antonio Maceo, were involved in preparing for the second independence war, American interest in the island increased and the calls started again for the annexation of Cuba. While the justification for a U.S. intervention was based on "security" and "humanitarian" appeals within the United States Congress and the business community, the economic interest was not a secret. In a letter to General Draper (congressman from Massachusetts) Edwin Atkin (a Massachusetts capitalist and businessman who had significant investment and property in Cuba) wrote in 1896:

.....to whom can the American property - holders look for protection? We could hardly expect that Spain would continue to defend our rights; the insurgents are not in position to do so, even if they were disposed, and in my opinion the only alternative would be the landing of United States troops. Whether the country would be prepared to take such extreme action is a question that should be considered, and whether the sentimental feeling of sympathy with the Cubans should out weigh the property interests amounting to $30,000,000 of United States citizens in Cuba (in Smith, 1963:94).

The eventual U.S. intervention took place in 1896. While enhancing the Spanish defeat, the American intervention deprived the rebels their objective of establishing an independent and sovereign republic. As the Treaty of Paris was signed between Spain and the United States, Cuba was "liberated" as a Spanish colony to become a U.S. protectorate for three years. Shortly after the end of the war the New York World correctly predicted that, "whatever may be decided
as to the political future of Cuba, its industrial and commercial future will be directed by American enterprise and stimulated with American capital" (in Foner, 1972 (v.2):466).

[B] Cuba under United States domination:

In 1900, in an attempt to lay the groundwork for Cuba's "independence", the American military governor General Wood was instructed by the U.S. Congress to call for a constitutional convention in Havana. The constitution was to outline, among other things, the future relations between Cuba and the United States. In 1901, the United States submitted to the convention delegates a set of articles known as the Platt Amendment. The articles dictated terms that restricted Cuba's sovereignty in order to serve the U.S. interest:

Article I: That the government of Cuba shall never enter into any treaty or other compact with any foreign power or power which will impair or tend to impair the independence of Cuba (...).

Article III: That the government of Cuba consents that the United States may exercise the right to intervene for the preservation of Cuban independence, the maintenance of a government adequate for the protection of life, property, and individual liberty (...).

Article VII: That to enable the United States to maintain the independence of Cuba, and to protect the people there of, as well as for its own defense, the government of Cuba will sell or lease to the United States land necessary for coaling or naval stations of certain specific points to be agreed upon with the President of the United States.

As recognized by Huberman and Sweezy (1961) Cuba had no choice but to accept. This acceptance in no way reflected the national consensus, as expressed by one of the Cuban delegates, Juan Gómez:

To reserve to the United States the faculty of deciding for themselves when independence is
menaced, and when, therefore, they ought to intervene to preserve it, is equivalent to delivering up the key to our house, so that they can enter it at all hours, when the desire takes them (...). If it belongs to the United States to determine what Cuban government merits the qualification "adequate" (...) only those Cuban governments will live which count on its support and benevolence (Huberman and Sweezy, 1961:17).

Gomez’s reservations were to prove accurate. Under the treaty (though the military occupation was ended in 1902), U.S. troops intervened in Cuba in 1906-1909, 1912 and 1917. In addition, all the governments that have succeeded since then (with the limited exception of Grau’s government) were those supported by the United States. However, at the same time radical and progressive national movements (e.g., Cuban Committee of National and Civil Renovation, the University Students Federation and the Communist Party) reviving Jose Martí’s ideas, opposed U.S. hegemony.

Though formulated in political terms, the Platt Amendment was really an expression of the U.S. economic interest in Cuba. In 1903, a trade treaty followed the Platt Amendment providing 20-40 percent tariff preferences to U.S. goods and allowing U.S. capital further penetration. In addition to the flow of U.S. capital, thousands of Haitian, Jamaican and Chinese workers were brought to Cuba to insure a steady supply of cheap labor (Huberman and Sweezy, 1961:19).

Though mainly dominating the Sugar industry, American investment penetrated the electrical, telephone and railway services, the mining industry, and real estate (20-30 percent of Cuban territory was owned or leased by American companies (Huberman and Sweezy, 1961:19). From 1906-1924 American investment increased from around $50 million to $500 million (Benjamin 1977:14). After the collapse of the high sugar prices between 1919 and 1920 many Cuban banks, unable to meet their
obligations, were forced to close. They were replaced by foreign banks mostly American. The financial crisis of 1921 further affected the Cuban sugar merchants and planters, and increased the foreign banks' possession of the Cuban properties.

In 1933, Cuba experienced a major social and political change. As a result of the continued frustration with the repressive and corrupt government of Machado, different heterogeneous social and political forces forced the government out. The change took place with U.S. involvement which advised Machado to take a "leave of absence", and prepared for another figure (Cespedes) to succeed him. However, the new government was overthrown in a coup led by Batista who handed the power to a five-man executive committee headed by Grau. Though advocating new reforms, the government was unable to bring about structural changes. Facing both domestic and external pressures (from the United States) the Grau government resigned in 1934 replaced by Batista who remained in power till 1944. Between 1944 and 1952 different presidents from the Autentico Party (which proposed moderate nationalist reforms) governed until the second coup d'etat by Batista who seized power and remained president until 1959.

During this period an intensive union of students, workers and farmers organized, demanding radical reforms. The potential threat of these groups on foreign and domestic business and commercial interests was temporarily neutralized by Batista and his reformist attempts. However, as recognized by O'Connor,

Batista was caught in an enormous contradiction, one which he helped to create twenty years earlier. Unlike economic growth (...), economic development required national autonomy; political stability, the precondition for foreign
investment, required dependence on Washington (O'Connor, 1970:30).

During this period and especially after the Second World War, the Cuban economy became yet more tied to the United States. Perhaps one of the best indicators of the volume of involvement of the U.S. capital in Cuba was stated in the U.S. Department of Commerce report on Cuba in 1956 (see Table 1).

The only foreign investments of importance are those of the United States. American participation exceeds 90 percent in the telephone and electric service, about 50 percent in public service railways, and roughly 40 percent in raw sugar production. The Cuban branches of United States banks are entrusted with almost one forth of all banks deposits (...). Cuba ranked third in Latin America in value of United States direct investments in 1953, outranked only by Venezuela and Brazil.

In his critical assessment of Cuba's history Francisco Segnera (1972:148-50) pointed out three main characteristics of U.S. investment in Cuba:

1) while taking place in Cuba, U.S. investment benefited mostly the United States: a) the input supply of equipment, machines and some of the raw materials was brought from the United States which did not allow the creation of linkages in the Cuban economy; b) the high payment of salaries went to American administrative employees; c) most of the generated surplus was sent out and/or invested in the same sectors, which did not help in diversifying the economy.

2) The American investment established an international division of labor (characteristic of that era of colonialism) where the Cuban economy was basically specialized in sugar, tobacco, and mineral exports.
The Cuban economy was gradually denationalized as a result of increased U.S. ownership and economic and financial control over major sectors. In addition, the different services (banks, transportation, electricity... etc.) were not, as in other developed economies to serve the industrial development, but were artificially created as channels to serve American capital without developing the Cuban economy.

As recognized by Boorstein (1968), decisions about investment in Cuba were governed by foreign interests. In addition, American investors kept significant parts of the land unutilized in order to prevent the fall of sugar prices. Moreover, as a result of the total sugar production quota determined by the U.S. Congress, each sugar mill was confined to a certain maximum production. Furthermore, as Ritter notes these "quotas were not conducive to output - increasing innovations (...). It is not surprising that grinding techniques remained relatively stagnant in post war years" (Ritter, 1974:38).

In addition to the economic impact on the Cuban economy, American investments significantly impacted the social structure. The economic domination of the U.S. capital weakened and in many cases eliminated the independent small property owners of agricultural land and sugar mills. In addition, thousands of tobacco and sugar planters lost their farms and became tenants and sharecroppers. In 1927, Ramiro Guerra wrote:

When all this toil of centuries seemed to be almost completed and fruits could at last be enjoyed by their children, the sugar latifundium which had ruined the West Indies with its two formidable instruments, foreign capital and imported cheap labor, invaded the island. Its appearance marked the beginning of the whole destruction of our small and medium-sized properties and the reduction of our land owners
and independent farmers, backbone of our nation, to the lowly condition of a proletariat being stifled by that economic asphyxiation which afflicts the country today from one end to the other (quoted in Foner, 1971 (v.2):480).

In addition, American investment further weakened the already weak national bourgeois class. This class, unlike that in other Latin American countries (e.g., Mexico, Brazil and Argentina), had been almost destroyed in the long war against the Spanish, leading to a stronger position of the landed oligarchy who did not oppose Spanish domination. The remnant of this weak bourgeois class was either further destroyed by American investment, or was incorporated in a dependent relation (e.g., importers, bankers, real estate operators and retail stores owners). And finally, economic and social conditions deteriorated for the largest and poorest section of the Cuban population; the economic conditions of the cane fields workers (who were unemployed for six to nine months a year) were further depressed by the high profits of the sugar industry and the importation of cheap labor.

It seems appropriate to end this section with the conclusion of a Foreign Policy Association study: in winning political freedom from Spain "Cuba lost control over its economic resources" (quoted in Foner, 1972 (v.2):483). In addition, Cuba, in its asymmetric relationship with the United States, lost its own decision making, and its political and economic independence.

The Cuban Development Experience:

The economic and social program of the movement of 26th of July (M26J) that led the revolution in 1959 was inspired by the historical national sentiment of the Cuban people as expressed in the writings of
Jose Martí. The program was stated before the revolution in Castro's speeches at his trial in 1953, in the manifesto - program of M26J (Nuestra Ruzon), and in other speeches and declarations. The program called for structural change of the economy that would solve the "problem of land, the problem of industrialization, the problem of housing, the problem of education and the problem of the people's health, (...) along with restoration of civil liberties and political democracy" (Castro, 1984:24). In more concrete terms, the M26J manifesto-program specified different political, economic, education, judicial, and international measures. The economic measures included the following (in LLerena, 1978:301):

- Government policy aimed at ensuring economic independence of Cuba.
- Development of new sources of production and employment.
- Agrarian reform.
- Creation of production centers (e.g. factories and farms).
- Diversification of agricultural production and measures to assure a market for farm products.
- Study and promotion of cooperative system.
- Nationalization of public utilities.
- Encouragement of investment of domestic capital.
- Progressive increase of productivity per worker and per capita income.
- Expansion of foreign trade.

The Cuban transformation process passed through different stages as a result of changes in both objective and subjective factors: the internal and external material reality facing the economy, and the
evolution in leaders' understanding of these factors and their accumulated experiences in dealing with them.

The First Stage (1960-1963):

Immediately after taking power, the revolutionary government embarked on an attempt to implement the M26J program which corresponded, to a large extent with ECLA's propositions: emphasis on land reform, industrialization (specifically in ISI form), and income redistribution. The new government was very keen on diversifying agricultural output to achieve food self-sufficiency and to break away from the historical dependence on production and export of sugar. There was a strong sentiment against sugar production which was viewed as the cause and manifestation of Cuba's economic dependency. In addition, there was a strong desire to expand and intensify the industrial base by installing a wide range of ISI and heavy industry (including metallurgy, chemical products, heavy engineering and machinery transportation equipment). The goal, as expressed by Boti, the minister of the economy, was to "transfer the Cuba economy from an agricultural and colonial structure to an industrialized and independent structure" (quoted in Ritter, 1974:134).

The expected pace of achieving the ambitious goals was unrealistic given mainly the underdevelopment of the economy and lack of experience. The ambitious program of simultaneous rapid industrialization, agricultural diversification and income redistribution soon came into conflict with the hard material reality. The initial attempt at agricultural diversification did not bring about the expected output; absolute physical output in 1963 was 86 percent of the previous general level (Ritter, 1974:146). And as a result of the
de-emphasis on sugar, foreign exchange earnings from its export declined. Meanwhile the industrial program of ISI put tremendous pressure on the economy. Due to the lack of a basic industrial structure and misidentification of the appropriate industries to utilize domestic resources, there was a high increase in imports of raw materials and capital goods. As expressed by Che Guevara, then the Minister of Industry:

We failed to put the proper emphasis on the utilization of our own resources; we worked with the fixed purpose of producing substitutes for finished imported articles, without clearly seeing that these articles are made with raw materials (quoted in Ritter, 1974:153).

As a result there was a further pressure on foreign exchange, leading ultimately to a balance of payment deficit. The economy was further constrained by the underdevelopment of the productive forces. In addition to the lack of technical and capital equipment, Cuba lost many of its skilled and professional workers who immigrated. "Of the 300 agronomists working in Cuba in 1959 approximately 270 left the country" (Gutelman, in Bonachea and Valdes, 1972:234). In addition, the absence of consistent and comprehensive planning due to lack of planning experience played a role in the sluggish outcome. Besides these internal emerging difficulties, the economy was further constrained by U.S. hostility, its cancellation of the sugar quota import from Cuba, and its economic embargo.10

As a result of these difficulties and of the continuous debates and evaluation, the Cuban leadership decided by 1963 to change its economic policies.

This period should not be viewed, however, as a failure. The first four years of the revolution were critical ones in which the new
political system was established and its stability against internal and external political and military pressures was insured. It was also a period of radical transformation from a market economy to a centrally planned one, with massive nationalization (see Table 2) and the external economic orientation shifted from dealing with the international capitalist system to the socialist one. More importantly, the period was one in which the new revolutionary government applied its strong social commitment to a massive income redistribution (see Table 3), provision of social services and reducing unemployment. In addition, during this stage serious attempts were made to develop the mechanical and technical capacity of the economy. Early in 1961, the Ministry of Industry established The Commission for the Mechanization of the Cane Harvest (Edquist, 1985:34). Early prototypes were designed and constructed for the harvest. However, most of the machines developed (e.g., the MC-1) did not achieve satisfactory results in increasing productivity, and production was discontinued while further experiments continued. Before 1959, all cane was loaded manually. As the result of shortage in labor, efforts were directed to design and produce machines to ease sugar cane. In the early 1960s, the construction of lifting machines (the "criollas") started in Cuba producing between 400 and 500 units. The criollas units were used in the 1963 harvest; however, the machines led to less than 1.5 percent of mechanized loading at that time (Edquist, 1985:36).

The Second Stage (1964-1970):

While industrialization and economic diversification continued to be the general goals, the Cuban government came to realize that these
goals should be carried on as a long-term process given the immediate need to increase both the productive capacity of the economy and the economic and social conditions of the Cuban people.

The new policy (adopted in the medium range plan of 1964-70) brought back emphasis on sugar production. The Cuban government gradually abandoned the previous conception of sugar production as a mere product of colonial and neocolonial domination, and hence as a symptom of Cuba's dependency, and came to recognize sugar as the major national source of capital accumulation needed for any attempt to increase the country's level of development and independence. This new realization was expressed by Guevara as:

The entire economic history of Cuba has demonstrated that no other agricultural activity would give such returns as those yielded by the cultivation of sugar cane. At the outset of the revolution many of us were not aware of this basic economic fact, because a fetishistic idea connected sugar with our dependence on imperialism and with the misery in the rural areas, without analysing the real cause: the relation to the unequal balance of trade (quoted in Pollitt, 1986:200).

In 1963, Castro announced that increasing debt could not be tolerated and that industrialization would be financed by expansion of sugar production (Edelstein, 1981:234). Thus the new policy emphasized accelerating sugar production for exports, utilizing the high comparative advantage of sugar production in Cuba. This new emphasis is justified as sugar cane's production cost in Cuba is relatively less than world beet sugar production costs, and the relatively low cost of import inputs needed for the development of the sugar industry compared to import input costs for other sectors of the Cuban economy. Sugar export became the source of primitive capital accumulation, and the sugar industry was acting as department I of the economy. As was
described earlier, the source of primitive capital accumulation in the small open economies is mainly generated, not from the labor or peasants' surplus, as experienced by larger socialist economies (e.g., USSR), but rather from the differential rent earned in the international market. Hence, the export sector act as the leading sector in these small economies (see Chapter I, section on small open economies).

In addition to serving as the major sector for generating the needed foreign exchange and hence to finance future heavy industrialization, the sugar industry was also a stimulant to other economic activities through backward and forward linkages. For example, fertilizers, pesticides and farm machinery would be developed as backward linkages, while forward linkages provide cattle food (utilizing molasses), paper production (utilizing bagasse), and other chemical and plywood complexes (utilizing sugar derivatives) (Ritter, 1974:167). Therefore, unlike the first strategy that attempted to substitute for all imports (ISI), the new strategy emphasized those that would utilize domestic resources.

The emphasis on sugar production, however, was not the only focus of the plans in this stage. Other agricultural products (e.g., rice, beans, vegetables) were also considered as means of satisfying domestic consumption, and as future export possibilities.

In addition to industries geared to the sugar production (e.g., milling machinery), emphasis was given to other industries that supplied inputs for agriculture sectors and used its output, and those that provided some basic materials (e.g., farm machinery, food processing, textile, construction materials and cement production).
Thus, in this stage, industry was strongly linked to the agricultural sector (see Table 4). In addition, attention was given to developing other non-agricultural industries e.g., the extractive and fishing industries.

One of the important features of this stage was the goal of producing ten million tons of sugar which was the highest to be achieved yet. By 1970, the target year, the production fell 1.5 million tons short of the target volume. However, the 8.5 million tons was the highest in the country's history. The failure to produce the margin difference was not, however, the problem; the mobilization of the human and capital capacity towards that target had much greater negative impact. The leadership came to realize that the economy's productive capacity was not yet ready for the achievement of this goal.

In addressing the first congress in 1975, Castro explained the problems that hindered the target production:

This endeavour was one of the most noble and enthusiastic undertaken by our people in this period of the construction of socialism. Nevertheless, it could not be achieved. Industrial investments were not yet yielding fruit. Great imbalances in the rest of the economy were caused by pressing problem of labor force required in ever growing quantities for the sugar cane harvests, circumstances in which the mechanization of the harvest was being delayed for technical reasons. There were also shortcoming in organization, and inadequate direction and economic management methods. Reality proved to be more powerful than our intentions. It was necessary to rectify this situation and give up the achievement of this objective for some years (Castro, in Griffiths and Griffiths, 1979:71).

Despite the failure to produce the targeted output of sugar, and despite the pressure that this target put on the economy, Cuba was able to develop a structural productive capacity. In the agricultural sector, Ritter describes the important accomplishments as:
In attempting to achieve its ambitious agricultural objectives, Cuba has laid a solid foundation for agricultural expansion in the 1970s. Though the objectives for 1970 may not have been fulfilled, Cuba has irrigated vast areas, planted extensive areas under fruit trees, trained agronomists, agricultural specialists, and established research capabilities in some lines of agriculture (Ritter, 1974:198).

The development of human, physical and technical capacity was also clear in other non-agricultural sectors. In this stage different mechanical workshops were developed as part of the Ministry of Sugar Industry and the Ministry of Basic Industry which produced some of the needed equipment and machinery (see Table 5); however, the import content of this equipment was still high. While still importing mechanical harvesters and loaders from Australia and the Soviet Union, Cuban engineers and technicians continued their experimental work in both adapting these harvesters to the Cuban condition\textsuperscript{11} and in designing new harvesters. As recognized by Edquist, the early experimental attempts though sometime costly

... created a very important pool of knowledge and experience. For example, thousands of workers had been educated to operate, maintain and repair harvesting machines. There has also been considerable "learning by trying" in harvest design and production. In addition the attempts to mechanize cutting had pointed to the crucial importance of preparing the cane fields in such a way that they were suited to the use of cane harvesters (Edquist, 1985:45).

In addition to the mechanical workshops, different research institutions were established in this stage (e.g., the Digital Research Center and microelectronic laboratory) to construct and develop some prototypes of silicon transistors and minicomputers (Montero, 1987:37).

In general, the high rate of investment in plant and equipment, increasing the capital stock by 50-75 percent during this period
(MacEwan, 1981:158), furthered the expansion of the physical and technical capacity of the economy.

While some of the agricultural output, agricultural industries and non-agricultural industries expanded, a similar expansion in the light consumer industries was not matched at this stage (see Table 6).

One of the strong achievements of this stage was establishing a strong link between the agricultural and industrial sectors of the economy. This link can be seen in the development of backward and forward industrial linkages. Contrary to the previous "simultaneous battle", the new strategy fitted with what is known in the literature as the "unbalanced growth model" or the "turnpike" strategy which emphasizes the development of the most efficient sector as the leading one and then utilizing the generated surplus to finance the development of new industries (Barkin, 1972: ).

Another important accomplishment has been further provision of basic needs in the form of public services (e.g., health, and education), reducing income inequality and increasing the employment level (see Figure 1, 2, and Table 7). Though the total level of consumption did not significantly increase, regional inequality in income and consumption was reduced by providing more services (e.g., new houses, schools, etc.) to the rural areas than to the urban ones.

While gross national product per capital may well have declined in revolutionary Cuba, an average of 0.5 percent per year in the 1960-76 period according to one estimate (World Bank, 1979:20), the various equalizing policies might be expected to have increased the well-being of the population at large (Gugler, 1980:37).

The urban-rural disparity has been greatly reduced by different direct and indirect measures. These measures include: elimination of unemployment among agricultural workers, introduction of a rationing
system, provision of free social services in rural as well as urban areas, establishment of a wage scale in 1963 which minimized the rural-urban wages differentials and finally the total elimination of this differential in 1968 (Gugler, 1980:31).

The Third Stage (1970-80):

As a result of the failure to produce the target output of ten million tons of sugar in 1970 and the pressures this attempt put on the economy, a new strategy called for a more balanced development. The emphasis on sugar production was reduced, though remaining at an important level. Higher emphasis was put on industrialization as the top priority without, however, creating a new imbalance. In his report to the Party Congress, Castro expressed this new direction:

The industrialization process in the country is to be significantly accelerated. During the first years of the Revolution, there was no other alternative but to concentrate on agricultural production. At this stage, the closest attention is to be given to agriculture, but the main emphasis is to be on industrialization (quoted in MacEwan, 1981:201).

The main guideline for this stage was establishing and expanding industrialization especially in export branches (sugar and nickel), those industries that replace imports, those that supported agriculture production (e.g., chemical and machine industries), those of consumer goods (e.g., the food and textile industries), and those related to the production of construction materials (Montero, 1984:18). In addition, attention was given to the development of the light industry that would provide a wider range of consumer goods (e.g., clothing and furniture); emphasis on the provision of public consumption goods continued.
At this stage the government stressed the need to increase the economy's efficiency. The emphasis on efficiency was sought in increasing labor's productivity (reduction of work absenteeism and increasing skills), in more efficient use of resources (especially raw materials and fuel) and in intensifying mechanization in the productive sectors.

In his report to the Second Congress of the Party, Castro declared that despite some external and internal problems (the drop in the world sugar prices and the higher inflation rate of the capitalist world, causing a drop in the terms of trade by 53 percent; and the damage done to the agriculture sector by many plant and animal diseases, reducing the output in some cases by 90 percent), the economy was able to attain over the last five years (1975-80) an annual increase in the gross social product of 4 percent at constant prices. He then added:

Not only have we attained this rate of growth, but we have also improved our efficiency in various ways. Labor productivity has risen at an annual rate of 3.4 percent (....), input of materials, the chief component in productive consumption, also dropped in relative terms, as reflected in greater efficiency in use of raw materials, energy and fuel - although we are still far from achieving the efficiency we should and can obtain (Castro, 1980:9).

During the last five years of this period (1975-1980), the country's infrastructure was extended. Investment rose by more than 13 billion pesos (75 percent more than during the previous stage) and with 35 percent of this increase allocated to industry (which is three times higher than in the previous stage). The agriculture sector was allocated 19 percent of the total investment as opposed to 40 percent in the previous stage. Despite the reduction of the investment share in the agriculture sector and the plant and animal diseases that struck
this sector in this period, agricultural production grew at annual rate of 3.5 percent with sugar cane harvest reaching 8 million tons in 1979, the second largest in the country's history. This achievement in the agricultural sector reflected: continued increasing level of mechanization leading to a higher level of productivity (see below); increased irrigation and use of fertilizers; increased human expertise (more than 5,600 university agricultural specialist and 15,000 high school agricultural technicians were graduated in the period); the completion of more than a thousand agricultural-related projects (e.g., dairies, nurseries, poultry farms and feeding facilities).

The growth in other productive sectors continued. The food industry grew at 14 percent, the light industry at 23 percent, the fishing industry (supplying for both increased domestic consumption and exports), at 29 percent. The construction industry continued as one of the major industries of the economy supplying: industrial and hydraulic projects, roads and highways, transportation facilities, hotels and public services projects (e.g., schools, hospitals, day cares centers and houses). In the first five years (1970-75) the construction industry was involved more in the completion of previous projects than in new ones.

Basic industry grew at an annual rate of 5 percent extending electric power generation with a reduction in fuel consumption per kilowatt hour by more than 10 percent between 1975 and 1980. However, the generated electricity was still short of supplying all homes. This period also witnessed a continued increasing production of other basic materials e.g., chemical products, papers, glass, and rubber. The iron and steel and machine industries grew at annual rate of 6.7 percent,
increasing the production of steel smelting, buses, consumers' durable goods (refrigerators, radios and television sets), electric cables, batteries, and agricultural equipment (see Tables 8, 9, 10).

The development of the infrastructural and productive structure was accompanied by an increase in both the human and technical capacity. Besides the growing number of agricultural experts and technicians, there has been more advancement of the workers' skills through education and technical training in the other sectors of the economy. In the technical sphere, efforts continued in the development of sugar cane mechanical cutters. Previous efforts to mechanize sugar loading led to an 80 percent level of mechanization in the loading process by 1970. However, no similar mechanization capacity was achieved for the harvesting process, in which level of mechanization was only 1 percent (see Table 11). During the early 1970s, however, while still importing cane harvesters from Australia (the Massey Ferguson harvestors), Cuban technicians were able to improve the Libertadora harvester which was designed in the late 1960s. A Cuban designed Libertadora was manufactured in West Germany and used in Cuba.14

The Cuban contribution was of considerable importance in this division of labour, since they provided the basic concept. It is therefore an example of transfer of a technique from a developing socialist country to an industrialized capitalist country (Edquist, 1985:129).

In addition, in the same period the KTP-1 harvester was developed by joint effort of Cuban and Soviet technicians. After trials, the KTP-1 was initially manufactured in the Soviet Union and later with the technical assistance of the Soviet Union, a Cuban factory finally began operation in 1977. After some difficulties in the initial production
phase, production increased from 30 units in 1977 to 501 in 1980; meanwhile the production of KTP-1 harvesters for Cuba in the Soviet Union was reduced and then terminated by 1979 (Edquist, 1985:133). The utilization of both imported harvesters (in a gradually decreasing number) and the nationally produced ones has increased the percentage of sugar-cane harvesting mechanization from 1 percent in the beginning of this stage (1970) to a total of 45 percent in 1980, with the nationally produced harvesters accounting for an increasing percentage (see Table 12). By the end of this stage sugar loading mechanization was 98 percent. The gradual ability to produce the Cuban designed harvesters reflects the gradual broader development of the Cuban mechanical industry and accumulated knowledge and experience.

As a result of the increased level of mechanization in the agricultural sector, employment has decreased (by almost 10 percent) in relative and absolute terms in this sector at this stage. The released workers have been employed in newly created jobs in the industrial sector (mining, manufacturing and construction) and in services (Brundenius, 1983:66).

One of the significant features of this stage was export expansion of a wider range of new products, such as seafood and citrus. From 1967 to 1980 Cuba introduced 115 new export products (Brundenius, 1985:40), hence reducing the percentage of the sugar component of its exports.

Another important feature of this stage which facilitated Cuba's stable economic growth despite the deteriorating terms of trade with the capitalist world was Cuba's joining CMEA (The Council for Mutual Economic Assistance) in 1972 (this point will be further elaborated in the section on the "Soviet-dependency").
In brief, the major achievement of this stage was the reduction of previous economic imbalances and the establishment of a more balanced economy. In addition, despite the reduction in relative investment, sugar and agricultural production increased as a result of mechanization. The technological success, leading to a higher mechanization of the agricultural sector, reflects both the development of the mechanical industry and the increased linkage between the two sectors. Finally, in this stage the Cuban people's level of consumption of both consumer goods and public services increased significantly as a result of the increased production (see Tables 6, 13, and Figure 1). Cuba by this stage had established a structure that would lead to achieving the goals foreseen in the early stage, namely a higher level of industrialization, agricultural and export diversification, and a more egalitarian income distribution.

The Fourth Stage (1980-85):

In the Second Congress of the Communist Party of Cuba, held in 1980, the socioeconomic guidelines for the 1981-85 period were approved. The main goal of this stage, as reflected in these guidelines, was the continued emphasis on industry in various branches and parts of the country. In addition, the guideline emphasized the continued goal of developing and intensifying those industrial branches that would utilize domestic resources (e.g., the food and fishing industries) and those with the highest potential exports (e.g., sugar, nickel and citrus industries) with a view towards of increasing exports, replacing imports and raising the people's consumption levels (Socioeconomic Guidelines for the 1981-85 period, 1981:11-12).
As well as the continued general goals of industrialization, export diversification, import substitution and an increase in the standards of living, the guidelines focused on increasing productivity and efficiency of the economy in the spheres of labor productivity, raw materials and fuel consumption, technological development, and planning and managerial organization. This last goal has been pursued mainly by introducing greater flexibility and financial responsibility (through self-financing and self-management mechanism) in the production units.

The investment priority in this stage was set in accordance with the general goals with the main emphasis of the 1980-85 plan remaining on industrial investment. Of the total investment in this period, 17.88 billion pesos, 36 percent was allotted to industry, 23.3 percent to agriculture and 11.8 percent to transportation (Castro, 1986:2).

The second five year plan specifically pointed to the development and construction of different agricultural, mechanical, transport, electrical and non-electrical machinery and equipment, in addition to the construction of new sugar refineries. Further, the plan pointed out the importance of

the creation of a new base of development, planning and manufacture of new types and models of equipment for automobile transport (both freight and passenger) and for railways, including technical and feasibility studies, technical projects, a greater part of the equipment (60% or more) with construction, erection and commissioning of the said installations with the object of continuing to replace imports of those products which can be manufactured in the country and also to create new exportable items (quoted in Brundenius, 1987:103).

The actual overall growth of the Gross Social Product (GSP) during 1981-85 was 7.3 percent (above the planned growth rate of 5 percent) (UNIDO, 1986:1). Material production rose by 8 percent; the industrial
sector growth accounted for approximately 76 percent of the GSP in 1985 (Banco Nacional De Cuba, 1986:6). More than 90 percent of the increase in the industrial output was generated from the non-sugar industrial branches (UNIDO, 1986:6) reflecting a significant development of the non-sugar industrial structure of the economy, a major step towards economic diversification (see Figure 3).

The high growth of the non-electrical and machinery industry (see Tables 14 and 15) increased the domestic supply of needed spare parts. In 1984 430 million pesos worth of spare parts were made or repaired in Cuba, saving on foreign imports (UNIDO, 1986:6). In addition, the non-electrical industry has significantly increased the supply of agricultural machinery (e.g., harvesters and planting equipment), transportation machinery (e.g., buses, railway wagons) (see Table 16). The machinery industry has produced 600 KTP-1 mechanical harvesters annually since 1981 (about 65 percent of total world annual production) (EIU, 1986-87:13). As a result of the increased number of produced harvester machines, 62 percent of the 1985 sugar harvest was mechanized as opposed to 45 percent at the end of the previous stage. In addition, technical experiments continued in this stage leading to the development of a new, more powerful cane harvester the KTP-2 (Castro, 1986:3).

The electrical machinery industry high growth rate in this period of 15.1 percent increased the supply of different consumer appliances (e.g., radios, T.V. sets and refrigerators), in addition to other intermediate products (e.g., electric wires and cables). Further, the breakthrough development of this industry is the exportation, for the first time, of computer equipment to the Soviet Union (Montero, 121

The food and light industries continued to grow at an annual growth of 6.1 and 8.8 percent respectively. Important growth has also been registered in construction projects; in this period 45 percent were industrial projects (e.g., the construction of a new glass container factory, a textile complex, a nickel complex, seven sugar mills, a paper complex, and an oil refinery). In addition to the industrial projects, the construction sector provided building materials for different agricultural (e.g., dairy farms and cattle farms) and social projects (e.g., public health centers and housing).

As a result of the higher industrial productivity especially in the manufacture of cane-harvest machines and in grinding capacity, sugar production increased by 12.2 percent over the previous five year period, with a stable average annual production of 8 million tons. The integration of the machine and sugar industry reached a higher level in this stage. Seven new sugar mills, with Cuban technical design and a majority of Cuban-made equipment, were constructed. In addition, the vertical integration process was reflected in the formation of the agro-industrial complexes in 1980 freeing the Ministry of Agriculture from the sugar cane activities which were assigned to the Ministry of Sugar Industry (Feuer, 1987:70).

The actual high growth of the different branches of the industrial sector, though accompanied by an increasing level of domestic production of some capital goods and spare parts, increased the volume of imported intermediate and capital goods (see Table 17). However, between 1970 and 1983, the percentage of manufactured imports in total
imports dropped from 58.9 percent to 44.7 percent (see Figure 4). This reduction in the share of manufactured imports, given the expansion and high growth rate of the industrial sector, reflects the success of ISI in both intermediate and capital goods. Another indicator of the significant domestic replacement is reflected in the Domestic Procurement Ratio (DPR)\(^1\) for capital goods which has increased from 16.9 percent in 1970 to 31.8 in 1984 (Brundenius, 1987:109) (see Table 18). In addition, Table 17 shows the effective reduction of the imports of consumer goods which was achieved by increasing the domestic production of these goods. Consumer goods accounted for 63.1 percent of total material value added in 1982 (UNIDO, 1986:xii). In addition to reflecting the significant replacement of imports, the increase in consumer goods production also reflects the state's commitment to the satisfaction of basic needs and raising the people's consumption level.

Significant efforts at import substituting are also reflected in other fields like medicines, with domestic production satisfying 83 percent of the domestic needs (Zimbalist, 1987:18), and energy. In this stage the use of oil in raw sugar production was totally eliminated; the sugar industry instead used the sugar bagasse as a fuel, saving 1,709,000 tons of oil. This latter replacement reflects the technological development of adapting domestic resources to domestic production and of the total energy self-sufficiency of the sugar industry. Attempts are being made to increase the energy supply from bagasse beyond the sugar industry. Twenty million tons are produced each year (equivalent to 4.5 million tons of oil) which covers 30 percent of the national primary energy consumption with a potential increase to an equivalent of 7.5 million tons of oil (CubaBusiness, 1987:5). Partial replacement of imported oil has also been achieved

\(^1\) DPR: Domestic Procurement Ratio
through the reduction of its unit consumption in different sectors and by increasing the volume of national oil extracting (Crude oil production increased from 60,000 tons in 1959 to 938,000 tons in 1986). Experiments are also underway to adapt the use of Cuban oil, which has a high sulfur content, in power generation and industry to replace imported oil (CubaBusiness, 1987:4-5).

The more efficient use of resources has been an important factor in the actual growth rates in this period. The major factor, however, stems from the higher labor productivity and the positive ratio between the growth in productivity (4.3 percent) and the growth in mean wages (1.16 percent) (Banco Nacional De Cuba, 1986:16). A study of the impact of increasing productivity on the mercantile production showed that an increase in productivity of 5.1 percent in 1984 was responsible for a 72.6 percent increase in the mercantile production of the Cuban industry (UNIDO, 1986:19). Labor productivity in the industrial sector increased by 5 percent; however, between 1981 and 1984 labor productivity increased by 35 percent in the non-electrical machinery sector, by 24 percent in the electrical machinery sector, and by 11 percent in the metal products sector with an average increase in salaries of 9 percent (Brundenius, 1987:105). Higher productivity has also been registered in the sugar industry where a reduction of 48 percent of the manual cane-cutters since 1980 took place due to increased level of mechanization in this sector (Castro, 1986:3).

The fuller utilization of existing resources, by increasing labor and capital productivity and reducing waste, is a strategy that is continuously emphasized and pushed by the Cuban leadership. This means of surplus generation is socially and politically more palatable than
sacrificing current consumption (Zimbalist, 1987:8). This increase in the productivity of the working force has been achieved through the continuous massive effort to increase the level of education and health services, in addition to increasing the level of personal consumption which grew by 9 percent in 1984 (United Nations, 1986:212). Increased productivity has also been facilitated by organizational changes: a higher degree of decentralization is taking place allowing the production units more flexibility in decision-making and more responsibility in self-financing (see Table 19).

In addition to the significant accomplishment in import substituting, the Cuban economy witnessed some significant changes, though to a lesser degree, in its attempts at export diversification. The share of sugar in total exports dropped from 86.8 percent during the previous stage to 75.7 percent during 1983-84 (Zimbalist, 1987:18). Further, exports of non-traditional goods to the convertible currency markets increased by an average of 40 percent during the 1981-85 period (see Table 20). In addition to the 115 new non-sugar related export products introduced in the previous period (1976-80), Cuba introduced 11 more products. Exports of citrus products, sea products, steel, recycled raw materials, oil and its by-products, ferrous and non-ferrous metals, and other products increased (Banco Nacional De Cuba, 1986:8). As a result of the significant savings in oil consumption, Cuba has been able, based on an agreement with the Soviet Union, to re-export oil in the convertible currency market. Cuba earned about $540 million from selling imported oil (UNIDO, 1986:2). Exports of manufactured goods increased in this period, though registering a small share (1.3 percent) of total export (see Figure 5). This small share includes an increasing volume of different manufactured goods, e.g.,
different chemical products, wires and cables, appliance, spare parts and irrigation equipment (CEE, 1986:267). And as mentioned earlier Cuba exported some computer parts to the Soviet Union during this stage, though still on a small scale. Efforts are being made to increase the share of manufactured exports especially by exporting to other developing countries. The highest potential non-sugar hard currency earning industries at this stage and till the 1990s are the nickel industry, fishery industry, citrus industry and tourism.

As a result of the effective efforts at import substituting and export diversification the Cuban economy was able to register hard currency surpluses in 1981, 1982, and 1983 (see Table 21).

Not enough data is available at this point to assess the third five year plan (1985-90), and hence its assessment has to be postponed. However, some prior information about the direction of this plan indicates no major shift in the strategy adopted in the last two plan periods; Cuba will continue to give priority to the industrial sector with specific emphasis on import substituting and export-oriented industries. Out of the government total investment budget 23.14 billion pesos (29 percent more than the preceding plan) 45 percent is allotted to the industrial sector. Attention is given to expanding the sugar cane by-products and derivatives industries, agricultural industry, light industry, basic industry, the machine industry, the electronic industry, oil extraction, transportation and tourism (Castro, 1986:8-9). In addition, the plan highlights the need to improve efficiency in the use of raw materials, quality of products and services, and productivity through a better organization of work. A new emphasis is to be put on intensive rather than extensive measures.
Measures aimed at conservation and rational use of energy, other material resources, labor and productive facilities are to be given priority. Increases in production capacities should be achieved through modernization wherever possible rather than investment in new facilities (Castro, 1986:9).

While the final assessment of this last period (1985-90) has to wait, given the already established productive structure of the economy and the outcome of the previous five year plans, it is safe to assume that the outcome will be, to a large extent, in accordance with the planned objectives. In addition, and as predicted by a recent study: "Cuba can be expected to remain among the few of the underdeveloped world with a positive growth record over the remainder of the decade" (EIU, 1986-87:8).

Critical assessment of the Cuban development process:

Judging from the initial economic and social conditions of the Cuban economy before the revolution and the relatively short period of transition, Cuba has successfully altered its economic and social structure towards a higher level of national integration. Though facing many difficulties the economy was able, during its first and second stages (1960-70), to lay the economic and social foundation of a productive structure that allowed for future development. This foundation enabled the economy to sustain a relatively high growth rate — as compared to other Latin American countries (see Table 22) — and to pursue its initial goals especially those of industrialization and increasing the standards of living. After the initial extensive investment in the most productive sectors of the economy and utilization of the surplus in developing other sectors, the economy has
been able to develop a higher productive capacity and a more effective utilization of its human and natural resources.

The strong and planned commitment to industrializing the economy has increased the level of integration between the different sectors of the economy, the level of national technological capacity, the level of domestic economic surplus, and the standards of living (through increases in both private and public goods and employment). A recent UNIDO study of the industrial development in Cuba summarizes some of the indicators of these achievements:

Within the framework of new industrial policy followed by the new regime since 1960, new sugar factories were built designed by the Cuban themselves, using 60 percent of Cuban-made equipment. The level of development reached in this sector enabled Cuba to begin exporting sugar production technology. Modern production facilities were erected in chemical industry to produce sulphuric and citric acids, varnishes and dyes, fertilizers, insecticides, glass, paper, etc. Expansion, reconstruction and modernization of many enterprises permitted a significant increase in the production of steel, a greater volume of capital goods, and the setting up of new sectors like the production of buses, agricultural equipments, household appliances, TV and radio sets, computers, etc. (UNIDO, 1986:28).

The Cuban development process, judged in decades and not in years, reflects an increasingly stable and consistent orientation of the economy. Adjusting and postponing the ambitious initial goals, and through a process of learning, the Cuban leadership has been able to pursue the planned goal of constructing a higher level of national economic integration and hence a higher degree of economic independence.

The positive assessment of the Cuban development experience should not imply the ease of the transitional process or the absence of continued difficulties and problems. Perhaps the harshest and most
consistent criticism and articulation of these problems and difficulties comes from Castro. In his Third Congress report, after listing the major accomplishments of the Cuban economy during the 1980-85 period, he argued

(Nevertheless), we could have made better use of our resources and our efforts. Our work has been far from its best. Deficiencies and shortcoming still persist and we must call them by their names and fight against them with all our might (Castro, 1986:6).

He then preceded with a long list of specific problems. Though increasing the level of national production and technological capacity, the Cuban economy still depends on importing an important part of its intermediate and capital goods. Some of the productive sectors, at the enterprises level, reflect low levels of efficiency, quality of produced goods and productivity. Shortages and delays of supplies still exist in the economy affecting both domestic needs and export commitments. For example,

(Delays) in the development and introduction of new more productive disease resistant varieties, low quality seed; ill-timed planting weeding and cultivation delays, among other factors contributed to the low density of many cane fields which causes limited agricultural yield (Castro, 1986:6).

The low levels of efficiency, quality and productivity are attributed mainly to technological and organizational deficiencies.

One of our most serious problems has been the absence of comprehensive national planning for economic development (...) Our scientific and technological work has not been sufficiently linked to research topics that will provide concrete solutions to our main economic problems, nor has it been organized adequately to avoid duplication of efforts; and research is still scattered. As a result our modest achievements do not correspond to the resources allocated (Castro, 1986:6).
Through the years the Cuban society has been going through an intensive public debate on how to better orient the economy; how to improve its productivity; what priorities should be followed, and what means should be utilized. Debates continue on the degree of centralization vs. decentralization, on the extent of economic and financial flexibility at the enterprise level, on moral vs. material incentives as means of increasing productivity, and on different organizational and technological means to increase economic efficiency.

The most recent organizational attempt ongoing in the Cuban economy now is what is known as the 'rectification' process, a return to the earlier revolutionary spirit of higher productivity, a downplaying of material incentives, an acceleration of volunteer work, and an attack on bureaucratic practices that have evolved. The new process has managed to mobilize a large number of minibrigades workers who engage for a certain period in building houses, clinics, day care centers, etc., and who are paid by the enterprises they normally work for. The minibrigades workers usually work for 10-12 hours per day instead of 5-6 hours at a normal work place. (CubaBusiness, 1987:7). The enterprises, at the same time, utilize the remaining working force to accomplish their normal level of productivity. The new process has been a major factor in increasing productivity of the Cuban economy during the 1980s; it has also been an important factor in increasing the level of mass participation in organization and decision making.

A different type of criticism of the Cuban experience comes from outside observers. These critiques generally revolve around issues of continued "sugar dependency," "export dependency," debt burden and what is referred to as "Soviet dependency," These critiques will be addressed in the next section.
Cuba's Dependency:

Three types of dependency are usually attributed to the Cuban economy in the literature: "trade dependency", sugar dependency" and "Soviet dependency". In this section I will be addressing, in some detail, both "sugar dependency" and "Soviet dependency"; however, I will not address "trade dependency" for two main reasons:

First, on an empirical level, the claim of Cuba's increased trade dependency, as has been continuously stated in the literature e.g., by Mesa-Lago (1979, 1985), has already been countered on the basis of errors in measurement. Brundenius (1984:61-64) has pointed out two measurement errors which led to Mesa-Lago's biased calculations and wrong conclusion: (1) he compared prerevolutionary data series, which related exports to GNP, with post revolutionary data which relates exports to gross material product (GMP), which is smaller than GNP; and (2) he related exports in current prices (which are rising over time) to GMP, which is given in constant prices. Adjusting for these two errors, Brundenius' estimates show that Cuba's dependency on trade has decreased since 1970 (see Table 23). A similar conclusion was also reached in an earlier study by LeoGrande (1979).

Second, and more importantly, an economy's dependence on trade does not negate, in my opinion, this economy's independence. As was argued in the first chapter, such external factors by themselves are very misleading indicators of an economy's level of dependency. Those who attribute economic dependency to such external factors are confusing two different situations which are distinguished as "dependency" vs. "dependence" (see chapter I, section on dependency school). Rather, the economy's level of dependency or economic
Independence is a function of its level of productive and structural capacity and of its internal degree of integration. In many cases an increase in the export level is an indication of the economy's increased productive capacity (which is the case for most developed economies, e.g., Japan). Measures like export/GNP could be utilized as indicators of the degree of an economy's openness. Hence a high ratio of export/GNP, for example, indicates a high degree of openness which is a characteristic of many small developed and developing countries. Cuba has been and will continue to be a small open economy; the major issue, however, is the structure of the export sector and its degree of integration with the rest of the economy. Examination of the Cuban economic and social transformation process reveals a structural change of the different sectors of the economy including the export one. The export sector in Cuba has served as the leading sector through which the primitive capital accumulation has been generated; the latter then has been utilized to develop other sectors of the economy. In addition, one of the major problems usually associated with trade dependency is an economy's external vulnerability; in the Cuban case, the economy has been able to reduce its external vulnerability by increasing its productive capacity, by diversifying its exports, and by securing stable prices and volumes of its major exports through trading with the socialist bloc. Hence the Cuban export sector has not been an isolated pocket or an enclave sector, but rather it has been acting as an important generator of national surplus and has been closely linked to the development of the rest of the economy.
"Sugar Dependency":

Many critics of the Cuban development process argue that Cuba has failed to alter its sugar monoculture (e.g., Goure and Weinkle (1972), Mesa-Lago (1981)). However, as has been shown earlier, sugar production's share in both allotted investment and total exports has fallen. A close look at the sugar cultivation and production process in the Cuban economy reveals further major structural changes that have taken place in this sector. Such changes, as will be shown, have led to a growing level of independence of the sugar industry in terms of its inputs and to a higher level of integration with the rest of the economy.

First, sugar cultivation and production are no longer an isolated pocket in the economy with massive foreign ownership and external transfer of surplus. It is no longer merely an agricultural activity, but rather an agro-industrial one that has been highly integrated with the rest of the economy (see Figure 5). Some of the major mechanisms of such integration are reflected in the following:

a. The sugar industry's surplus, generated through the export sector, has been utilized to finance the development of other productive and nonproductive sectors. The generated surplus in the sugar industry has been the major source of national capital accumulation that has been utilized since the second development stage to finance the development of the whole economy.

b. The development of the sugar industry has stimulated a series of backward and forward linkages. Backward linkage industries include: the chemical industry (fertilizers and pesticides), the construction industry and the mechanical
industry (irrigation equipment, cane sugar harvesters). The development of the latter industry has, beside increasing the mechanization level of the sugar production process, increased the economy’s technical capacity and hence its productivity by freeing an increasing number of workers from sugar activities. In addition, the development of the national production of cane harvest equipment has increased the economy’s know-how technology in this field and allowed Cuba to export it to other countries. Forward linkages industries include different industries, that process sugar by-products. There are in Cuba now more than 10 plants that produce paper, newsprint, cardboard and particle board from bagasse; and 11 plants that produce torula yeast from sugar, molasses and animal feed. Now the newly developed sugar mills have a Cuban-developed system producing fertilizers from recycled factory waste (Feuer, 1987:80). Cuba now produces more than twenty sugar by-products; in addition to fuel and paper making some of these by-products have been used in medicine and construction (CubaBusiness, 1987:6). Further, the sugar industry has been a supplier of fuel to other economic activities. Energy from bagasse is a major national source of energy representing 30 percent of primary national consumption (CubaBusiness, 1987:7). The sugar industry, hence, has been a major contributor to the adopted strategies of import substitution and export diversification.

Second, the productivity of the sugar industry has significantly increased despite the gradual reduction of its investment share. This
increasing productivity has been achieved through major improvement in the land irrigation system, the cultivation process (improved use of fertilizers and pesticides), the level of education and training of the employed labor force, and the level of mechanization. As a result of this latter effort Cuba today has as many sugar combines as all other sugar producing countries together. Today 100 percent of sugar loading is mechanized, and more than two-thirds of the cutting activities are mechanized (with some places reaching more than 80 percent) (Juan Perez, 1986:3). Along side at this process of mechanization there has been a reduction of the employed manual cane cutters. In the 1960s, mechanical loaders freed about 50,000 workers from sugar activities, and the cutting machines freed between 120,000-16,000 workers in the 1970s (Edquist, 1985:167). The present mechanization level has reduced the number of workers from 350,000 in 1970 to 72,000 in 1985 (Castro, 1986:3).

Third, despite the gradual fall in its share of investment and its increased productivity, the sugar industry has witnessed a gradual significant reduction of its costs. In addition to decreasing the number of workers it needs, the sugar industry has totally eliminated its consumption of imported oil, replacing it with energy from bagasse. The sugar agro-industrial complexes now are totally energy self-sufficient. Further, national technological development has increased the share of equipment and machines produced nationally. The newly constructed sugar mill centers are Cuban designed with the majority of the equipment nationally produced. In 1985 Cuba was reported to produce 77 percent of the total value of its milling equipment, with the rest imported from CMEA (15 percent) and capitalist economies (7
percent), significantly reducing the cost of earlier hard currency imports (Pollitt, 1986:210).

Fourth, since 1979 (with the exception of the 1986 harvest, the year of hurricane Kate) sugar production has been stable, averaging 8 million tons, a level which is close to the 1970 sugar output, without however, the economic and social pressures and imbalances that accompanied that harvest. This stable production, together with the stable and guaranteed purchases by the Soviet Union and other socialist countries, has significantly reduced the economy's previous level of vulnerability to fluctuations of both production and world market prices. This increased stability has facilitated planning and the fulfillment of major social and economic projects.

Fifth, the social organization of sugar production has also structurally changed. With foreign ownership totally eliminated since the beginning of the revolution, state farms produced most sugar cane while independent farmers accounted for the rest. Through the mid 1970s, and as a result of conscious decisions, the cooperative form of production gradually increased. By 1985 there were about 430 cane cooperatives encompassing 31,000 farmers and producing two thirds of all cane produced in the private sector (Feuer, 1987:71). Labor employment in sugar production (which constitutes about one-sixth of the Cuban population) is no longer subject to seasonal fluctuations. In addition, the sugar cane labor force is no longer dominated by low paid and technically low equipped farmers. Sugar workers include those involved in sugar cultivation (weeding, fertilizing, irrigating, etc.), and a large number of qualified engineers, agronomists and technicians. Today, a single sugar agro-industry complex has more qualified engineers and technicians than an entire province had before the
revolution (Juan Perez, 1986:3). This increase in the level of skills and training has been accompanied by an increase in the standards of living of these workers. In addition to employment security, increased social services (housing, health, education), sugar workers receive higher wages (15 percent higher) than those with comparable work in other sectors. Further, work organization has changed, introducing a fourth shift in the factories, allowing the workers for the first time to take a weekly day off during the harvest (Feuer, 1987:78).

These significant social, economic and technical changes in sugar production structure indicate the development of this sector towards a higher level of productivity and integration with the rest of the economy. The development of this sector has been the major factor in the development of the whole economy. However, despite the attained stability in production and the increased level of productivity, the Cuban economy is still affected by the fluctuations of world sugar prices.

The bulk of the Cuban sugar output is sold to the socialist countries at high stable prices; however, because of its need for hard currency, Cuba attempts to sell some of its output to other countries. Due to the drastic fall in sugar prices (falling below the minimum price established in the international sugar agreement i.e., below $0.13 per pound) Cuba lost $500 million in the early 1980s (UNIDO, 1986:1). In addition, sugar cane harvests are affected by certain disease and weather conditions as are other agricultural activities. The 1986 harvest was affected by a severe drought and by Hurricane Kate, reducing planned output and forcing Cuba to purchase half a million tons of sugar in the world market to fulfill its export
commitment to the USSR (Feuer, 1987:74). However, while these problems of low international prices and fluctuations in weather conditions harshly affect all sugar exporting economies, the effect on the Cuban economy has been minimized by its stable selling to the CMEA, by its continuous effort at improving the use of fertilizers and pesticides and increasing the level of mechanization, and by its significant achievement at export diversification. Further, a comparative look at the effect of the severe drop of the international sugar prices on the Cuban economy before and after the revolution reveals significant change. While today Cuba's loss of foreign exchange forces it to adjust its plans postponing some of its development projects and cutting down some of its imports from the capitalist economies, the pre-revolution impact of such fall in prices (e.g., the 1920 fall in sugar prices) caused a further loss of national ownership of sugar and land property, collapse of the financial system and severe unemployment leading to different social problems.

Therefore, while sugar production continues to play a major role in the Cuban economy, it is very misleading to equate the pre-revolutionary social and economic structure of the sugar sector with the current one. The higher level of productive and technical capacity of the agro-industrial sugar complexes in Cuba today and their higher level of integration with the rest of the economy definitely indicate a higher level of independence. As Pollitt concludes in his important study:

The growing 'independence' of the sugar industry for its inputs of machinery and equipment in particular contrasted sharply with its pre-Revolutionary condition and should have modified its common depiction as the post-Revolutionary economy's most comprehensive symbol of 'dependence' (Pollitt, 1986:212).
"Soviet Dependency":

All through the previous presentation in this chapter I have examined the development of the Cuban economy by focusing mainly on changes in internal dynamics (e.g., decision-making, productive and technical capacity... etc.). This story remains partial without reflecting on the role of the Soviet assistance in the Cuban case. Such assistance, as has been continually expressed by the Cuban leadership, has been of extreme importance in facilitating the Cuban transition.

Without the decisive, steady, and generous aid of the Soviet people, our country could not have survived the confrontation with imperialism. They bought our sugar when our market was brutally suppressed by the United States; they supplied us with raw materials and fuel which we could not have acquired in any other part of the world; they caused to arrive free arms with which we opposed the mercenaries at the Bay of Pigs and equipped our forces in order to impose the high price on any direct aggression by the United States; they supported our economy in extraordinary fashion in the critical years of the blockade (Castro, quoted in Blasier, 1979:229).

It is the volume and consistency of this assistance that has led many critics (e.g., Goure and Weinkle (1972), and Mesa-Lago (1974, 1981)) to the claim that Cuba has simply replaced one dependency with another, Cuba’s previous relationship with the United States with its current one with the USSR. This claim is known in the literature as the "Sovietization of Cuba" thesis. Further, even some sympathetic writers (e.g., Fagen (1978), Edelstein (1981) and MacEwan (1981)), who recognize the positive social and economic effects of the Cuban-Soviet relationship, argue that such achievements have been at the expense of Cuba’s loss of its independence in political decision making especially in Cuba’s foreign policy in Africa.23
The claim of the 'new dependency' in the literature is usually substantiated with estimates of the volume of the Soviet subsidies and assistance to Cuba. One of the most quoted estimates is that provided by the Central Intelligence Agency (CIA). The CIA's estimate is given as $3.1 billion per year (or over $8 million a day). Different analysts, however, have pointed out many distorted factors that have been assumed in reaching this estimate (e.g., Zimbalist (1983), Radell (1983), and Turits (1987)). This estimate, and other Western calculations, reach over-valued figures by comparing the price Soviets paid for sugar with official world market prices, rather than with the subsidized prices at which actual exchange takes place (Radell, 1983). In addition, the CIA estimate was derived from a year when the Soviet price subsidy was unrepresentive (Zimbalist, 1983). Furthermore, the calculation underestimates the cost of the tied nature of the Soviet aid e.g., non convertible currency\(^2\) (Turits, 1987). Just by adjusting for one of the distorted factors, the CIA figure drops by more than half (Zimbalist, 1983:145). To reach an exact estimate of the Soviet subsidy is impossible given the absence of official data of the actual debt owed to the USSR and the different implicit forms of assistance. However, in my opinion, the nature and consequences of this assistance are what pose an important issue rather than its volume.

While the volume of the Soviet assistance to Cuba has been overestimated, the nature of this assistance has been also obscured in the literature. Many critics of the Cuban development process argue that Cuban-Soviet relationship has hindered the development of the economy towards an independent status. They view Cuba's change of its initial ambitious strategy (after 1963) of rapid industrialization and
economic diversification and its returned emphasis on sugar as an move imposed by the Soviets.

Faced with the realization that its Cuban rescue operation was developing into a costly long-term economic undertaking, Moscow apparently persuaded or forced Cuba to rethink its development policy and return to traditional concentration on sugar production (Goure and Weinkle, 1972:72) (emphasis is added).

As Fitzgerald correctly argues in a recent article, the Sovietization of Cuba thesis assumes rather than shows Soviet pressure (Fitzgerald, 1987-88:447). In addition, this claim lacks the understanding of the actual material conditions (e.g., the initial underdeveloped productive capacity, shortage of foreign exchange, lack of experience and the U.S. blockade) that had the major role in shaping the policies adopted. Furthermore, the advocates of this thesis try to undermine important favorable aspects of the Cuban-Soviet relationship that stand in contrast with the Cuban-U.S. relationship; hence an examination of these favorable aspects will show the fallacy of equating the two relations.

Some favorable aspects of the Cuban-Soviet relationship include: first, Cuba's relationship with the USSR and other socialist countries since the 1960s has meant a guaranteed market for Cuba's sugar exports, allowing it to sell higher volumes of sugar than its total export before the revolution. As pointed out by Castro in 1970, Cuba's sugar production is no longer limited by an externally determined quota or by available markets, but rather by Cuba's own production capacity:

The problem facing our country ever since it began large-scale trade relations with the socialist camp (...) has been one of production, not markets. Our economy has enough markets for any amount of sugar it can produce (Castro, 1970:264).
This guaranteed market has an important role in facilitating the development of the technical and productive capacity of the Cuban sugar industry. This role contrasts with the pre-revolutionary conditions in which the imposed quota by the United States hindered the economic justification for increasing production and technical innovations.

In addition to the guaranteed markets, the Cuban-Soviet trade relationship has provided Cuba with high and stable prices as compared to the highly fluctuating world market prices (see Table 24). Due to the decline in world prices Cuba redirected 1.7 million tons of sugar in 1983-84 to the socialist countries. This redirection earned Cuba 1656 million pesos as opposed to 219 million pesos had this amount been sold at the prevailing world prices (United Nations, 1986:226). The opposite trend has also taken place; when sugar prices in the world market increase, Cuba’s proportion of sugar exports to the socialist countries decreases. "Therefore, it seems that export of sugar to the Soviet block has followed a counter-cyclical policy which seeks to cushion the negative consequences of variations in the world market" (Carciofi, 1983:217). The predictable stable income from sugar exports has eased Cuba’s planning process especially after 1972 the year of Cuba’ joint membership in CMEA and of an increase the prices the Soviet paid for sugar.

After the congress, our country will have five-year plan for economic development for the first time. As the basis of this plan, we know exactly how much sugar we will be sending to the USSR in this five-year period, at what prices, and which consumer goods, raw materials and producer goods will be coming in from that country. In more or less similar terms we also know how much sugar will be exported to other socialist countries, the goods to be received in return and their prices. However, the prices of sugar exports and those of the goods that we must buy in the capitalist countries remain unknown (Castro, 1979:74).
In addition to the favorable prices paid for sugar exports, Cuba's terms of trade with the USSR in general are far superior (in magnitude and stability) to those of Cuba with the market economies (see Figure 6). Such favorable terms have been achieved by applying an index mechanism that relates the prices of Cuba's exports (sugar and non-sugar) to those of Cuba's imports from these countries.

Given the international conditions facing most developing countries, and especially the sugar exporting ones (e.g., deteriorating sugar prices and reduction in demand due to an increasing use of artificial sweeteners), Cuba's trade relation with the USSR and other socialist economies has strengthened the Cuban economy.

Second, Soviet economic assistance to Cuba has been utilized mostly in the development of the productive and technical capacity of the economy. Data for the period from 1960 to 1973 show that more than 90 percent of the Soviet economic assistance was directed to the productive sectors with the industrial sector accounting for more than three-fourths of total assistance (see Table 25). Since then, socialist economic and technical assistance has been coordinated through different technical and scientific commissions within the CMEA. The socialist countries and specifically the USSR have financed different productive projects in Cuba in different sectors of the economy. The socialist assistance has played a major role in the development of the sugar industry; it has been utilized to build and renovate more than 100 sugar mills. In addition, the socialist technical and scientific cooperation has been directed to increasing the agricultural productive capacity by improving the quality of fertilizers and pesticides and by helping to increase the level of
mechanization. First the Soviet Union provided some harvesters; and then it produced the Cuban designed harvesters; and finally, it helped finance the construction of a harvester factory that started operation in Cuba in 1978. In addition to facilitating increases in agricultural productivity, socialist and particularly Soviet assistance has enhanced Cuba's industrial productivity. The assistance has been directed towards the development of the nickel, citrus, fishery, transportation, electrical, and non-electrical industries. In all these industries, and others, socialist assistance has been provided in the form of finance, equipment, raw materials and technical specialists.

Therefore, contrary to the claim made by some writers (Eckstein, 1982:112) that Cuba's integration into the socialist block has restricted its capacity to produce marketable exports, socialist assistance has been a major support to those sectors that led to the increase in export diversification (e.g., nickel, sea products, citrus, sugar by-products). In addition, Cuba's increased efficiency and technical capacity, especially in the sugar industry have reduced its consumption of Soviet oil and allowed it to reexport the surplus earning a major source of hard currency. As noted in a recent study on import substituting efforts in Cuba:

The drive to substitute domestic sources for imports - strongly encouraged by the Soviet Union which is cutting back petroleum deliveries to all its CMEA members - is gathering pace (Cuba Business, 1987:6).

Such recent developments counter the claim of Cuba's increased dependency on Soviet deliveries (Gouré and Weinkel, 1972:73).

Hence Soviet and socialist assistance has been directed to the development of those sectors that contribute most to the economy's
strategic goal of industrialization with emphasis on ISI and export diversification.

Third, the Cuban-Soviet relationship involves neither an outflow of surplus from the Cuban economy nor any control over decision making. Though Cuba's new law of investment allows joint ventures with foreign capital, it does not allow any form of direct foreign investment, one of the major mechanisms of the previous U.S. control.

As the second chapter suggests, direct foreign investment involves mechanisms of control over the productive sectors of the economy and grants foreign investors both control over decision making and surplus appropriation. Hence the elimination of any form of foreign control in Cuba is a reflection of Cuba's increased control over its economic and social decision making. Unlike the United States in pre-revolutionary times, the USSR does not control or own any property or productive resources in Cuba. In addition, Cuba's relationship with the socialist countries has not prevented its economic relations with other countries. In fact, Cuba's position within CMEA, especially with Soviet backing, has facilitated its acquisition of hard currency loans from different capitalist financial institutions and governments.

The increasing level of integration with the Soviet Union and the socialist countries is not a result of an imposed relation or dependency but rather of the better terms offered by the socialist countries and of a rejection of Cuban trade by many capitalist countries. The Cuban leadership has continually expressed the desire to establish economic relations equally with the socialist countries, the capitalist countries and the developing ones. However, Cuba's initial desire of to diversify trade partners has been curtailed by the U.S. economic blockade which has imposed severe restrictions not only
on U.S.-Cuban economic relations but also on Cuba's relations with other capitalist economies. However, with the easing of the economic blockade by some of these countries, Cuba has increased its trade and economic relations with the West especially when it offers better terms (trade with Western countries - excluding the United States - accounted for more than 40 percent of total trade in 1975 as a result of increases in sugar prices). In an effort to expand trade relations with the West, Cuba signed in 1985 a series of bilateral trade agreements (UNIDO, 1986:xii).

These favorable aspects of the Cuban-Soviet relationship - and of Cuba's relationship to the socialist countries in general - show that the simple comparison of volumes or percentages of trade as indicators of continued dependency is very misleading. This type of comparison is continually reported by advocates of the "Sovietization of Cuba" thesis. For example, Mesa-Lago (1974) argued that Cuba is still dependent by showing that Cuba has always relied on one country for 70 percent of its trade - the United States before the revolution and the USSR since then. As has been argued in the first chapter, attempts by some writers to analyze dependency situations in quantitative terms, focusing mainly on external factors (e.g., imports, exports) has led to a misleading confusion of equalizing "dependency" with "dependence."

While Cuba continues to depend on Soviet assistance in its development process towards structuring an integrated productive economy, this dependence takes a fundamentally different form from the previous Cuba-U.S. relationship within which the Cuban economy was subjected to a process of denationalization, external decision making and transfer of surplus. Hence, while Cuba's previous relationship with the United
States can be characterized as one of dependency (as the term has been utilized by the dependency school), Cuba's current relationship with the USSR can be characterized as one of dependence (in the sense of external reliance). Such dependence used to accelerate the development of the economy's productive capacity and its internal integration, can be viewed as a "short-run" or "tactical" dependence (see Chapter I).

In addition, Cuba's utilization of the socialist assistance to facilitate the economy's productivity and growth has not been achieved at the expense of any sacrifices of the people's standards of living. To the contrary, the Soviet and socialist assistance has eased the Cuban government's social commitments.

Finally, the importance of the socialist - and particularly Soviet - assistance in the Cuban development process should not deny the Cubans' own efforts in this process. The major dynamics of Cuban development have been determined by Cuba's internal elements e.g., the choice of strategy and decision making of the revolutionary government, the committed efforts at increasing the standards of living which in turn facilitated both the development of human resources and the social stability of the country, the increasingly efficient utilization of resources and the encouragement of scientific and technological innovations. Further, the role of socialist assistance in the Cuban development process should be assessed within the context of the exceptional economic and political pressure of the continued U.S. blockade. As MacEwan and Zimbalist have observed:

If we are to deny the Cubans and their social system credit for the economic accomplishments because of this (Soviet) aid, then we must also give them tremendous credit for those same accomplishments in light of the U.S. blockade. It is probably impossible to quantify accurately either the benefits of the aid or the costs of the
blockade. Crude estimates, however, suggest that both figures are in same order of magnitude; the roughly $10 billion plus that the Cubans are said to owe the Soviets is approximately balanced by the burdens of the blockade over the years (MacEwan and Zimbalist, 1984:5).

**Cuba's Debt:**

Despite the high sustained growth of the economy and the increased productivity, Cuba's foreign debt has been increasing. High international liquidity and the increased level of sugar prices have resulted in increases in funds made available to Cuba by Western private banks and governments, especially after the mid 1970s. However, in the early 1980s and as a result of a discriminatory international financial policy towards Cuba, many of the Western banks tightened their lending to Cuba. As Turits (1987) showed in a recent study, the Cuban liquidity crisis in 1982 (the Cuban National Bank announced its inability to meet the payment and requested a rescheduling) was largely an outcome of restrictive financial treatment by Western banks despite Cuba's strong position relative to most other Latin American countries. This observation has been shared by UNCTAD:

The percentage reduction in current Cuban debt was particularly large, and amounted to 25 percent, or three times the median reduction on the group of 28 countries whose debt fell in the last years. This seems almost paradoxical in light of the fact that ten of the other 27 countries were already behind on their payments at the end of 1981, while Cuba experienced no such problem until the withdrawals of short-term credit in 1982 (quoted in Turits, 1987:172).

Cuba managed to reschedule its debt in 1982, and again in 1986. In 1986, for the first time, Cuba fell behind in payments on its short term commercial debt. As a result of further negotiation, Western government creditors of the Paris Club agreed to reschedule Cuba's debt
of $75 million falling due in 1986 over ten years with six years grace; and they offered additional credit (CubaBusiness, 1987:1). Cuba currently owes $3.4 billion to Western banks and governments. As a result of the changes in international financial policies, Cuba's short term loans and trade credit now constitute a higher portion of its overall debt (see Table 26) because these are costly and in flexible sources of funds, they have led to a higher transfer of resources especially in the last few years.

Despite the increase in the debt burden (total debt service/exports averaged about 42 percent in 1980-84 (see Table 27)), Cuba's GSP has sustained a high growth rate (more than 7 percent) during the 1980s with industrial growth scoring even higher. In addition, during this same period Cuba's management of the debt rescheduling negotiations did not lead to an adoption of the traditional austerity measures taken in other countries. As has been shown earlier, Cuba's strong commitment to increasing standards of living has continued all through its different stages of development, with a higher emphasis in the recent years on increasing the availability of private and public goods; in addition, wages have increased. The austerity measures, hence, have not been taken in spheres affecting social consumption and standards of living, but rather in organization and production. Cuban leadership has strongly emphasized efforts to accelerate the economy's productivity and efficiency. In addition, investment priority has been directed towards those sectors with the highest export potentials (sugar, nickel, fishery, and citrus industries), to import substituting (light and heavy industries), and other foreign exchange earning sectors.
(tourism). Both personal savings (a new people's Saving Bank was established offering 2 percent interest) and joint ventures have been encouraged. Finally, Cuba's austerity measures have affected the volume of its imports of capital and intermediate goods (e.g., machinery, transport equipment, and chemical products) from the capitalist countries, which despite their small share in Cuba's total imports, still play an essential part in the economy's productive capacity.

Cuba's debt with the USSR and other socialist economies is unknown. However, though larger than Cuba's other debt, its burden is significantly smaller. In addition to trade credits from the USSR - which require no cash payments - the financial credits are offered at long repayment period (over 25 years) and low interest rate (2 percent per annum).

Perhaps the most important issue in assessing the national debt for any economy is the way this debt is utilized internally. Cuba's leadership has long recognized foreign capital as an important means to accelerate the economy's productive capacity and hence its long-run goal of increased independence.

As an underdeveloped country embarked on an accelerated program of socioeconomic development, Cuba needs foreign funding to increase production of those branches that will - in the long run - guarantee a self-sustained economic development. It is therefore essential to concentrate investments and products imported with foreign credit in those lines of production and services that will help integrate and develop our economy, raise our peoples' standards of living, increase the amount and value of exports and reduce imports (Socioeconomic Guidelines for the 1981-85 Period, 1986:21).

Unlike many other countries where foreign funding is sometimes channeled outward through imports of luxury goods, or deposits in
foreign banks, or spent on unproductive investment, Cuba has utilized its foreign funding in accordance with its strategic goals. Such planned and controlled utilization of foreign finance in increasing the productive capacity of the economy reflects a "short-run" form of dependence as opposed to a "long-run" one.

Conclusion and further remarks:

If economic independence is viewed as a function of the internal level of productive and technical capacity and of the degree of internal integration, then the Cuban economy undoubtedly has become more independent since the revolution and especially since the 1970s.

Other studies reached a similar conclusion about Cuba's reduced level of dependency e.g., LeoGrande (1979), and Brundenius (1984:62-68); however, these studies adopted a different conception of independence. They focus mainly on some external factors e.g., volumes, percentages and direction of trade. While such indicators are important they remain partial; and any short run quantitative change of the variables may misleadingly indicate the reversal of the process.

One of the definitions of economic independence adopted by the different essays in a volume edited by Ghai is the ability of a country to effectively formulate and execute its own economic and social policies without coercive external pressures (Ghai, 1973:xi). Cuba's previous relationship with the United States reflected the lack of such independence, with U.S. investors dominating the Cuban economy and hence controlling its economic decision making, and the U.S. Congress dictating Cuba's political terms. Cuba's current relationship with the USSR, on the other hand, reflects no such control; to the contrary this
relationship has facilitated the development of the Cuban economy towards a higher level of economic independence. Though Cuba still depends on the USSR, this dependence structurally differs in its form and consequences from Cuba’s previous dependency on the United States. Cuba’s dependence on Soviet assistance and on some capital and intermediate goods, imports, and financial loans from capitalist economies can be characterized as a short-run dependence which is essential for building up the economy’s productive capacity and to further its level of independence.

Cuba’s increased level of productive and technical capacity and of national integration has been achieved mainly through a planned effort of industrialization. The revolutionary leadership recognized long before the revolution the immense need for industrialization. Castro expressed the importance of industrialization when outlining the program of the 26 of July Movement in his defense trial in 1953:

> Except for a few food, lumber and textile industries, Cuba continues to be primarily a producer of raw materials. We export sugar to import candy, we export hides to import shoes, we export iron to import plows... Every one agrees with the urgent need to industrialize the nation, that we need steel industries, paper and chemical industries, that we must improve our cattle and grain production, the techniques and the processing in our food industry in order to protect ourselves (Castro, 1984:25).

Since the revolution, Cuba has been able to develop an industrial structure that has allowed it to substitute for previously imported consumer, intermediate and capital goods. A non selective program of ISI was adopted in the beginning of the revolution, which did not recognize the underdevelopment of the productive structure and the available domestic resources. As a result the program increased the imports of raw materials, intermediate and capital goods. Recognizing
these emerging problems, the leadership soon adjusted its ambitious programs, concentrating on those industries that utilized domestic resources and those with the highest potential output to generate needed surplus. In addition, the emphasis on the sugar industry was accompanied by the development of other industries with backward and forward linkages. Meanwhile special attention was given to developing a basic industrial and technological capacity. ISI took place also in the food and light industries. Within a transitional period of less than thirty years, Cuba has been able to expand its basic and heavy industries. The adopted industrial strategy, hence, took the forms of both ISI and basic industrialization. In addition, Cuban planners put strong emphasis on export diversification (with the goal of increasing export of manufactures), which increased the economy’s sources of foreign exchange and reduced its external vulnerability. Emphasis on industrialization, which gained momentum in the 1970s, continues as the main goal for the future. In reflecting on the development strategy up to the year 2000, Castro emphasized industrialization and other major objectives.

The strategy's main economic objective is to speed up the country's industrialization process. The determining factors of future economic development and industrialization process demand increasing and diversifying exports; substituting imports (particularly from the capitalist area); further integrating the national economy; using natural resources rationally; increasing efficiency in social production while economizing on resources (especially imports) (Castro, 1986:9).

In another sphere, Cuba has adopted the long run goal of enhancing economic cooperation efforts with other Third World countries and especially with those in the Latin American and Caribbean region. Despite the successful internal efforts at developing the Cuban
economy, Cuban leadership recognized that future development cannot be achieved in isolation. As Castro said in 1974: "A small, isolated Latin American country can do absolutely nothing... In the future only large communities will be in a position to face the great problems of humanity" (quote in F. Fitzgerald, 1987-88:443). Economic cooperation among developing countries is viewed as a very important strategy toward increasing their level of independence:

There are several reasons why cooperation among Third World countries is necessary. The first and more general reason is the fact that it is a fighting instrument against neo-colonial dependence stemming from old historical links with former metropolis, embodied in relations of deep subordination in production, trade, finance, technology, and intellectual and cultural fields. If anything shows with absolute clarity the historical path our countries have followed, it is the noxious effect of dependence on market-economy developed countries (Castro, 1983:158).

Cuba gave very special attention to improve bilateral and multilateral agreements with other Latin American and Caribbean countries. Cuba now has diplomatic and trade relations with many Latin American and Caribbean countries, while in 1960 such relations were limited only to Mexico (as a result of isolating and boycotting measures by the rest of the regional countries). In addition, Cuba became an active member in different Latin American and Caribbean cooperative organizations that have adopted the goal of economic development and independence. Cuba's affiliations can be categorized into two types: broad regional cooperative organizations and specific purpose centered groups (Reed, 1979:229). The first type includes the Latin American Economic System (SELA), and the Caribbean Committee of Development and Cooperation (CCDC) which was formed by ECLA. Both organizations seek to promote regional integration through different
common production and marketing activities. The second type includes the Latin American Energy Organization (OLADE), the Latin American and Caribbean Sugar Exporting Group (GEPLACEA), and the Caribbean Multinational Shipping Company (NAMACUR) (Reed, 1979:300). Cuba has taken an active role in all these organizations in addition to engaging in other bilateral economic and technical agreements with some of the Latin American countries. As recognized by Reed (1979), though Cuba has long-run economic interests in these organizational efforts, Cuba's immediate benefits, are mostly symbolic. The form of cooperation which the Cuban leadership considers appropriate corresponds to the dirigiste form of cooperation, the hardest to achieve (see Chapter II, section on regional cooperation):

Cooperation among underdeveloped countries must be based on the coordination of internal efforts and include, as an important component, actual and effective forms of control over transnational activities, coupled with full sovereignty over our natural resources and economic activities, to prevent the so-called South-South cooperation from becoming another mechanism aimed at increasing the profits of such conglomerates (Castro, 1983:160).

Cuba has pursued a similar active role in the developing countries' demands contained in the New International Economic Order (NIEO). It has been taken this role within different United Nation organizations and through the Non-Aligned Movement. Castro continuously stresses this demand as an important means to facilitate Third World development.

Now for us to develop, canceling the debt would not be enough. It would also be necessary to implement the new international economic order approved by UN ten years ago and which was promoted and defended by Mexico, Algeria, and several other countries, Cuba among them. All this was agreed upon at the UN ten years ago by
the immense majority of member countries, yet it has not been implemented (Castro, 1985:6).

As in the case of regional cooperation, Cuba's active role in promoting the NIEO does not stem from immediate economic need especially with the more equal terms of trade Cuba has with the socialist countries.

None of what we are doing is being done in the interest of our country, because we are the least affected by the dramatic crisis and have no economic stagnation, no downturn. We are in fact advancing at a fine pace, our hard currency debt is small, our economic relations with socialist countries are excellent, the prices for our goods are satisfactory, and non of what we are doing is out of national economic interest or of political interest of overcoming isolation. We are fighting for more far-reaching objectives (....) for the interest of Latin America and the Third World (Castro, 1985:17).

Therefore, while Cuba has embarked on the national strategy of ISI, basic industrialization and export diversification with successful outcomes, the long run results of its efforts in regional cooperation and NIEO are, to a large extent, dependent also on other countries' committed efforts and their long run collective struggle for economic independence. Hence the latter two strategies are currently restricted by external obstacles related to differences in political and economic interests of the different involved countries.

Cuba's successful national efforts at increasing the productive and technical capacity have enabled it to expand and improve the standards of living of the Cuban population with an impressive provision of basic needs, significant reduction of income and regional inequality and an elimination of unemployment. The outgrowth of the Cuban development has also been extended beyond the national boundaries. Cuba has provided financial, technological, educational
and military assistance to other developing countries. Hundreds of Cuban teachers, doctors and technicians have provided different social services in other countries (e.g., Nicaragua, Jamaica, Angola). Further, Cuba has provided technical and educational assistance by accepting thousands of students from other developing countries in its schools and educational and technical institutions. This assistance reflects both Cuba's strong solidarity with other developing countries and its increased level of productivity and development.

Cuba's higher level of economic independence can also be judged by applying its own definition of economic independence. As was stated in the 26 of July movement program (Nuestra Razon) in 1956:

The principle of economic independence requires that the greatest possible percentage of the profits of national production remain within the country. When for whatever reason the bulk of these profits flows abroad, the balance of payments is disturbed and the country consequently becomes increasingly subservient and impoverished; the means of production and development in the interests of the country but for the benefit of the private interest that control them. Once that pattern is established, the country loses its economic sovereignty and becomes for all practical purposes a commercial colony (Nuestra Razon, in Llerena, 1978:293).

Cuba's increased level of productive and technical capacity and national integration, its ability to formulate and execute economic and social policies without external pressures, and its control over the national surplus demonstrate that Cuba has undoubtedly succeeded in increasing its level of economic independence. Cuba has laid a solid foundation for the dynamic mechanism that can bring about higher future productivity, economic diversification and national integration, and hence a higher future level of economic independence. This trend, based mainly on changes of internal dynamics, will gain momentum with
the gradual easing of the economic blockade and Cuba's further cooperation with other developing countries.
Table 1

U.S. Direct Investments in Cuba, 1929-1958 (Million Dollars)

<table>
<thead>
<tr>
<th></th>
<th>1929</th>
<th>1936</th>
<th>1940</th>
<th>1946</th>
<th>1950</th>
<th>1953</th>
<th>1958</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture*</td>
<td>575</td>
<td>265</td>
<td>241</td>
<td>227</td>
<td>263</td>
<td>265</td>
<td>265</td>
</tr>
<tr>
<td>Petroleum</td>
<td>9</td>
<td>6</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>24</td>
<td>90</td>
</tr>
<tr>
<td>Mining **</td>
<td>**</td>
<td>**</td>
<td>15</td>
<td>15</td>
<td>70</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>45</td>
<td>27</td>
<td>40</td>
<td>54</td>
<td>58</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Public utilities</td>
<td>215</td>
<td>315</td>
<td>233</td>
<td>251</td>
<td>271</td>
<td>297</td>
<td>344</td>
</tr>
<tr>
<td>Commerce</td>
<td>15</td>
<td>15</td>
<td>12</td>
<td>21</td>
<td>24</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>60</td>
<td>38</td>
<td>76</td>
<td>8</td>
<td>13</td>
<td>18</td>
<td>7</td>
</tr>
<tr>
<td>**Total</td>
<td>919</td>
<td>666</td>
<td>560</td>
<td>568</td>
<td>657</td>
<td>756</td>
<td>1,001</td>
</tr>
</tbody>
</table>

* - includes sugar mills; ** - included in "Other" category

Source: Brundenius, 1984:17

Table 2

Nationalization of Means of Production
(in % Production)

<table>
<thead>
<tr>
<th>Sector</th>
<th>1961</th>
<th>1963</th>
<th>1968</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>37</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Industry</td>
<td>85</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>Construction</td>
<td>80</td>
<td>98</td>
<td>100</td>
</tr>
<tr>
<td>Transportation</td>
<td>92</td>
<td>95</td>
<td>100</td>
</tr>
<tr>
<td>Retail trade</td>
<td>52</td>
<td>75</td>
<td>100</td>
</tr>
<tr>
<td>Wholesale and export trade</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Banking</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Education</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Brunner, 1977:30
Table 3

Estimated Income Distribution in Cuba 1953, 1962 and 1973
(IS, Income Shares; CS, Cumulative Shares)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>0.6</td>
<td>0.6</td>
<td>2.5</td>
<td>2.5</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>10-20</td>
<td>1.5</td>
<td>2.1</td>
<td>3.7</td>
<td>6.2</td>
<td>4.9</td>
<td>7.8</td>
</tr>
<tr>
<td>20-30</td>
<td>1.9</td>
<td>4.0</td>
<td>4.8</td>
<td>11.0</td>
<td>5.4</td>
<td>13.2</td>
</tr>
<tr>
<td>30-40</td>
<td>2.2</td>
<td>6.2</td>
<td>6.2</td>
<td>17.2</td>
<td>7.1</td>
<td>20.3</td>
</tr>
<tr>
<td>40-50</td>
<td>4.6</td>
<td>10.8</td>
<td>6.8</td>
<td>24.0</td>
<td>8.7</td>
<td>29.0</td>
</tr>
<tr>
<td>50-60</td>
<td>6.4</td>
<td>17.2</td>
<td>9.5</td>
<td>33.5</td>
<td>10.5</td>
<td>39.5</td>
</tr>
<tr>
<td>60-70</td>
<td>10.8</td>
<td>28.0</td>
<td>12.0</td>
<td>45.5</td>
<td>12.5</td>
<td>51.5</td>
</tr>
<tr>
<td>70-80</td>
<td>12.0</td>
<td>40.0</td>
<td>13.1</td>
<td>58.6</td>
<td>13.5</td>
<td>65.0</td>
</tr>
<tr>
<td>80-90</td>
<td>21.5</td>
<td>61.5</td>
<td>18.4</td>
<td>77.0</td>
<td>15.1</td>
<td>80.1</td>
</tr>
<tr>
<td>90-100</td>
<td>38.5</td>
<td>100.0</td>
<td>23.0</td>
<td>100.0</td>
<td>19.9</td>
<td>100.0</td>
</tr>
<tr>
<td>(Top 5%)</td>
<td>(28.0)</td>
<td>(12.7)</td>
<td>(9.5)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Gini coefficients: 1953 = 0.56, 1962 = 0.35, 1973 = 0.28

Source: Brundenius, 1981: 1089
Table 4  
Acquisition of Farm Machinery, 1966-70

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulldozers</td>
<td>128</td>
<td>678</td>
<td>(230)&lt;sup&gt;a&lt;/sup&gt;</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Tractors (tracked)</td>
<td>930</td>
<td>1,428</td>
<td>1,098</td>
<td>1,208</td>
<td>(325)</td>
</tr>
<tr>
<td>Tractors (rubber tires)</td>
<td>2,861</td>
<td>4,268</td>
<td>5,608</td>
<td>7,774</td>
<td>(8,370)</td>
</tr>
<tr>
<td>Lifters</td>
<td>1,123</td>
<td>1,001</td>
<td>1,500</td>
<td>1,500</td>
<td>(1,500)</td>
</tr>
<tr>
<td>Tractocargadores</td>
<td>67</td>
<td>232</td>
<td>(102)</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Graders</td>
<td>145</td>
<td>115</td>
<td>(105)</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Ploughs</td>
<td>3,259</td>
<td>29</td>
<td>11,468</td>
<td>7,567</td>
<td>(11,300)</td>
</tr>
<tr>
<td>Cultivators</td>
<td>52</td>
<td>1,115</td>
<td>-&lt;sup&gt;b&lt;/sup&gt;</td>
<td>8,200&lt;sup&gt;d&lt;/sup&gt;</td>
<td>(6,400)</td>
</tr>
<tr>
<td>Planters, sowers</td>
<td>31</td>
<td>3</td>
<td>(150)</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Fumigators</td>
<td>16</td>
<td>271</td>
<td>7,191</td>
<td>(24,445)</td>
<td></td>
</tr>
<tr>
<td>Reapers, harvesters</td>
<td>1,321</td>
<td>1,303</td>
<td>(485)</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Combines</td>
<td>n.a</td>
<td>n.a</td>
<td>325</td>
<td>423</td>
<td>(705)</td>
</tr>
<tr>
<td>Chapeadores</td>
<td>--</td>
<td>1,000</td>
<td>293&lt;sup&gt;c&lt;/sup&gt;</td>
<td>257&lt;sup&gt;c&lt;/sup&gt;</td>
<td>--</td>
</tr>
<tr>
<td>Harrows</td>
<td>10</td>
<td>2,120</td>
<td>1,629&lt;sup&gt;c&lt;/sup&gt;</td>
<td>1,439&lt;sup&gt;c&lt;/sup&gt;</td>
<td>(2,360)</td>
</tr>
<tr>
<td>Motors of all kinds</td>
<td>--</td>
<td>5,367</td>
<td>(1,050)</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Airplanes</td>
<td>15</td>
<td>5</td>
<td>--</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Wagens, carts, wheelbarrows</td>
<td>2,791</td>
<td>2,273</td>
<td>4,550</td>
<td>13,184</td>
<td>(5,866)</td>
</tr>
<tr>
<td>Excavators</td>
<td>6</td>
<td>43</td>
<td>(115)</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Mechanical workshops</td>
<td>--</td>
<td>20</td>
<td>9</td>
<td>45</td>
<td>(841)</td>
</tr>
<tr>
<td>Electrical plants</td>
<td>--</td>
<td>414</td>
<td>(339)</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Silocechadores</td>
<td>457</td>
<td>382</td>
<td>522</td>
<td>600</td>
<td>--</td>
</tr>
</tbody>
</table>

na = not available

<sup>a</sup>Figures in parentheses indicate planned, not realized, acquisitions.

<sup>b</sup>--indicates a probably figure of zero

<sup>c</sup>Domestic production or assembly

Source: Ritter, 1974:176
Table 5

Fabrication of Sugar Milling Equipment, 1965-69
(Units)

<table>
<thead>
<tr>
<th>Equipment Type</th>
<th>1965</th>
<th>1966</th>
<th>1967</th>
<th>1968</th>
<th>1969</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calentadores</td>
<td>42</td>
<td>39</td>
<td>100</td>
<td>82</td>
<td>37</td>
<td>500</td>
</tr>
<tr>
<td>Cristalizadores</td>
<td>2</td>
<td>12</td>
<td>17</td>
<td>22</td>
<td>58</td>
<td>111</td>
</tr>
<tr>
<td>Condensadores</td>
<td>23</td>
<td>60</td>
<td>88</td>
<td>64</td>
<td>44</td>
<td>279</td>
</tr>
<tr>
<td>Evaporadores</td>
<td>3</td>
<td>5</td>
<td>19</td>
<td>14</td>
<td>7</td>
<td>48</td>
</tr>
<tr>
<td>Tachos</td>
<td>17</td>
<td>29</td>
<td>47</td>
<td>36</td>
<td>26</td>
<td>155</td>
</tr>
<tr>
<td>Vapor-Cellis</td>
<td>5</td>
<td>5</td>
<td>8</td>
<td>12</td>
<td>11</td>
<td>41</td>
</tr>
<tr>
<td>Clarificadores</td>
<td>5</td>
<td>11</td>
<td>35</td>
<td>20</td>
<td>17</td>
<td>88</td>
</tr>
<tr>
<td>Vasos</td>
<td>10</td>
<td>4</td>
<td>2</td>
<td>12</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>Tanque Aqua Returno</td>
<td>2</td>
<td>13</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>45</td>
</tr>
<tr>
<td>Tanque Miel Final</td>
<td>1</td>
<td>1</td>
<td>10</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuchellas Picar Cana</td>
<td>38</td>
<td>21</td>
<td>23</td>
<td>34</td>
<td>116</td>
<td></td>
</tr>
<tr>
<td>Enfriamiento Blanchard</td>
<td>45</td>
<td>124</td>
<td>144</td>
<td>102</td>
<td>12</td>
<td>427</td>
</tr>
<tr>
<td>Calendrias</td>
<td>8</td>
<td>12</td>
<td>10</td>
<td>2</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Eyectores</td>
<td>44</td>
<td>57</td>
<td>69</td>
<td>170</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Romanas</td>
<td>4</td>
<td>19</td>
<td>26</td>
<td>6</td>
<td>22</td>
<td>77</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>156</td>
<td>421</td>
<td>586</td>
<td>465</td>
<td>301</td>
<td>1,929</td>
</tr>
</tbody>
</table>

Source: Ritter, 1974:180
<table>
<thead>
<tr>
<th>Year</th>
<th>Refrigerators (units)</th>
<th>Gas Stoves (units)</th>
<th>Kerosene Stoves (units)</th>
<th>Radio Rec. (units)</th>
<th>TV Sets (units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>1,093</td>
<td>8,727</td>
<td></td>
<td>38,569</td>
<td></td>
</tr>
<tr>
<td>1964</td>
<td>11,871</td>
<td>29,645</td>
<td></td>
<td>41,642</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>1,711</td>
<td>10,228</td>
<td></td>
<td>81,861</td>
<td></td>
</tr>
<tr>
<td>1966</td>
<td>19</td>
<td>46,024</td>
<td></td>
<td>43,068</td>
<td></td>
</tr>
<tr>
<td>1967</td>
<td>19</td>
<td>29,645</td>
<td></td>
<td>7,312</td>
<td></td>
</tr>
<tr>
<td>1968</td>
<td>19</td>
<td>10,228</td>
<td></td>
<td>20,853</td>
<td></td>
</tr>
<tr>
<td>1969</td>
<td>19</td>
<td>4,155</td>
<td>500</td>
<td>43,068</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>8,727</td>
<td>6,440</td>
<td></td>
<td>2,150</td>
<td></td>
</tr>
<tr>
<td>1971</td>
<td>2,080</td>
<td>34,878</td>
<td></td>
<td>43,068</td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>19</td>
<td>50,800</td>
<td></td>
<td>7,312</td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>19</td>
<td>6,440</td>
<td></td>
<td>20,853</td>
<td></td>
</tr>
<tr>
<td>1974</td>
<td>19</td>
<td>34,878</td>
<td></td>
<td>19,135</td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td>19</td>
<td>50,800</td>
<td></td>
<td>12,706</td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td>19</td>
<td>6,440</td>
<td></td>
<td>31,283</td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>19</td>
<td>34,878</td>
<td></td>
<td>23,928</td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>19</td>
<td>50,800</td>
<td></td>
<td>42,223</td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td>19</td>
<td>6,440</td>
<td></td>
<td>25,600</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>19</td>
<td>34,878</td>
<td></td>
<td>33,000</td>
<td></td>
</tr>
</tbody>
</table>

Source: Brundenius, 1984:158.
Table 7


<table>
<thead>
<tr>
<th>Year</th>
<th>Unemployment Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>11.8</td>
</tr>
<tr>
<td>1970</td>
<td>1.3</td>
</tr>
<tr>
<td>1972</td>
<td>2.8</td>
</tr>
<tr>
<td>1974</td>
<td>3.9</td>
</tr>
<tr>
<td>1976</td>
<td>4.8</td>
</tr>
<tr>
<td>1978</td>
<td>5.3</td>
</tr>
<tr>
<td>1980</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Source: Brundenius, 1984:73.
<table>
<thead>
<tr>
<th>Year</th>
<th>Buses (units)</th>
<th>Fishing Boats (units)</th>
<th>Wagons for Sugarcane (units)</th>
<th>Trailers (units)</th>
<th>Combines (units)</th>
<th>Water Pumps (units)</th>
<th>Inputs for Sugar Industry (m. pesos)</th>
<th>Inputs for Acopios* (m. pesos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>300</td>
<td>36</td>
<td>24</td>
<td>52</td>
<td>1,497</td>
<td>28.2</td>
<td>102.2</td>
<td></td>
</tr>
<tr>
<td>1971</td>
<td>800</td>
<td>53</td>
<td>1,606</td>
<td>105</td>
<td>4,256</td>
<td>59.8</td>
<td>225.9</td>
<td></td>
</tr>
<tr>
<td>1972</td>
<td>575</td>
<td>87</td>
<td>1,650</td>
<td>105</td>
<td>5,742</td>
<td>28.7</td>
<td>40.5</td>
<td></td>
</tr>
<tr>
<td>1973</td>
<td>1,137</td>
<td>105</td>
<td>3,906</td>
<td>50</td>
<td>8,812</td>
<td>40.4</td>
<td>25.1</td>
<td></td>
</tr>
<tr>
<td>1974</td>
<td>1,255</td>
<td>131</td>
<td>3,000</td>
<td>50</td>
<td>14,130</td>
<td>73.5</td>
<td>10.0</td>
<td></td>
</tr>
<tr>
<td>1975</td>
<td>1,718</td>
<td>137</td>
<td>3,600</td>
<td>90</td>
<td>14,851</td>
<td>97.0</td>
<td>9.8</td>
<td></td>
</tr>
<tr>
<td>1976</td>
<td>1,266</td>
<td>156</td>
<td>3,600</td>
<td>283</td>
<td>3,672</td>
<td>81.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1977</td>
<td>1,970</td>
<td>152</td>
<td>3,000</td>
<td>30</td>
<td>1,201</td>
<td>94.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1978</td>
<td>1,805</td>
<td>139</td>
<td>3,000</td>
<td>100</td>
<td>165</td>
<td>511</td>
<td>860.9</td>
<td></td>
</tr>
<tr>
<td>1979</td>
<td>2,440</td>
<td>93</td>
<td>3,900</td>
<td>140</td>
<td>360</td>
<td>585</td>
<td>608.0</td>
<td></td>
</tr>
<tr>
<td>1980</td>
<td>1,846</td>
<td>120</td>
<td>3,410</td>
<td>n.a</td>
<td>501</td>
<td>3,415</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*agricultural distribution centers run by the state; na = not available

Source: Brundenius, 1984:154
Table 9

Output of Electrical Equipment, Electric Power, and Mining Industry

<table>
<thead>
<tr>
<th>Year</th>
<th>Electrical Cables (km)</th>
<th>Telephone Cables (km)</th>
<th>Batteries (units)</th>
<th>Electrical Wires (mt)</th>
<th>Electric Power (million kWh)</th>
<th>Copper Concentrates (000mt)*</th>
<th>Nickel (000mt)*</th>
<th>Refractory Chrome (000mt)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>13,122</td>
<td>4,631</td>
<td>95.2</td>
<td>825</td>
<td>4,888</td>
<td>0.4</td>
<td>36.8</td>
<td>22.8</td>
</tr>
<tr>
<td>1971</td>
<td>19,894</td>
<td>7,923</td>
<td>90.4</td>
<td>1,144</td>
<td>5,021</td>
<td>--</td>
<td>36.5</td>
<td>13.9</td>
</tr>
<tr>
<td>1972</td>
<td>19,174</td>
<td>5,192</td>
<td>108.3</td>
<td>1,330</td>
<td>5,265</td>
<td>1.8</td>
<td>36.8</td>
<td>37.1</td>
</tr>
<tr>
<td>1973</td>
<td>32,869</td>
<td>4,060</td>
<td>111.6</td>
<td>1,002</td>
<td>5,703</td>
<td>2.1</td>
<td>35.2</td>
<td>37.2</td>
</tr>
<tr>
<td>1974</td>
<td>28,951</td>
<td>4,767</td>
<td>126.4</td>
<td>1,164</td>
<td>6,018</td>
<td>2.9</td>
<td>33.9</td>
<td>37.7</td>
</tr>
<tr>
<td>1975</td>
<td>27,287</td>
<td>4,635</td>
<td>139.4</td>
<td>1,332</td>
<td>6,583</td>
<td>2.8</td>
<td>37.3</td>
<td>36.1</td>
</tr>
<tr>
<td>1976</td>
<td>30,273</td>
<td>2,780</td>
<td>98.8</td>
<td>975</td>
<td>7,191</td>
<td>2.9</td>
<td>37.0</td>
<td>19.1</td>
</tr>
<tr>
<td>1977</td>
<td>21,356</td>
<td>3,658</td>
<td>97.4</td>
<td>657</td>
<td>7,707</td>
<td>2.6</td>
<td>36.8</td>
<td>20.4</td>
</tr>
<tr>
<td>1978</td>
<td>26,313</td>
<td>3,108</td>
<td>136.6</td>
<td>1,388</td>
<td>8,481</td>
<td>2.8</td>
<td>34.8</td>
<td>28.8</td>
</tr>
<tr>
<td>1979</td>
<td>42,046</td>
<td>3,753</td>
<td>177.9</td>
<td>2,362</td>
<td>9,401</td>
<td>2.8</td>
<td>32.3</td>
<td>28.2</td>
</tr>
<tr>
<td>1980</td>
<td>38,000</td>
<td>6,667</td>
<td>301.9</td>
<td>2,547</td>
<td>9,896</td>
<td>3.3</td>
<td>38.2</td>
<td>28.5</td>
</tr>
</tbody>
</table>

na = not available; * = metal content; ** = excluding autogeneration in sugar industry

Source: Brundenius, 1984:155
<table>
<thead>
<tr>
<th>Year</th>
<th>Sulphuric Acid (mt)</th>
<th>Rayon Tire Cords (mt)</th>
<th>Fertilizers (000mt)</th>
<th>Insecticides (mt)</th>
<th>Herbicides (mt)</th>
<th>Paper Pulp (000mt)</th>
<th>Newsprint (000mt)</th>
<th>Tires (000 units)</th>
<th>Matches (m. boxes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>322</td>
<td>1,131</td>
<td>577</td>
<td>1,414</td>
<td>2,203</td>
<td>33.7</td>
<td>18.9</td>
<td>301.9</td>
<td>370.7</td>
</tr>
<tr>
<td>1971</td>
<td>368</td>
<td>1,425</td>
<td>565</td>
<td>2,988</td>
<td>2,594</td>
<td>36.0</td>
<td>22.0</td>
<td>751.2</td>
<td>428.2</td>
</tr>
<tr>
<td>1972</td>
<td>400</td>
<td>1,521</td>
<td>620</td>
<td>3,416</td>
<td>2,738</td>
<td>35.0</td>
<td>24.7</td>
<td>381.1</td>
<td>457.2</td>
</tr>
<tr>
<td>1973</td>
<td>385</td>
<td>1,268</td>
<td>663</td>
<td>4,424</td>
<td>2,715</td>
<td>43.0</td>
<td>26.9</td>
<td>371.5</td>
<td>439.6</td>
</tr>
<tr>
<td>1974</td>
<td>384</td>
<td>1,674</td>
<td>728</td>
<td>5,200</td>
<td>2,766</td>
<td>42.6</td>
<td>28.5</td>
<td>390.8</td>
<td>414.3</td>
</tr>
<tr>
<td>1975</td>
<td>418</td>
<td>2,154</td>
<td>749</td>
<td>5,426</td>
<td>3,102</td>
<td>36.3</td>
<td>32.0</td>
<td>367.8</td>
<td>424.4</td>
</tr>
<tr>
<td>1976</td>
<td>392</td>
<td>1,637</td>
<td>798</td>
<td>3,591</td>
<td>3,118</td>
<td>40.9</td>
<td>32.3</td>
<td>266.4</td>
<td>425.1</td>
</tr>
<tr>
<td>1977</td>
<td>375</td>
<td>440</td>
<td>863</td>
<td>2,660</td>
<td>na</td>
<td>37.5</td>
<td>31.1</td>
<td>171.9</td>
<td>430.8</td>
</tr>
<tr>
<td>1978</td>
<td>367</td>
<td>1,415</td>
<td>945</td>
<td>3,013</td>
<td>na</td>
<td>33.9</td>
<td>35.6</td>
<td>294.5</td>
<td>414.1</td>
</tr>
<tr>
<td>1979</td>
<td>297</td>
<td>1,586</td>
<td>873</td>
<td>4,414</td>
<td>na</td>
<td>29.5</td>
<td>34.9</td>
<td>302.0</td>
<td>370.5</td>
</tr>
<tr>
<td>1980</td>
<td>401</td>
<td>1,648</td>
<td>1,059</td>
<td>na</td>
<td>na</td>
<td>29.9</td>
<td>36.7</td>
<td>386.6</td>
<td>383.4</td>
</tr>
</tbody>
</table>

* = 1975; na = not available

Source: Brundenius, 1984:157
### Table 11

Mechanization of Cane-Cutting and Loading in Cuba, 1963-81

<table>
<thead>
<tr>
<th>Year</th>
<th>% of cane harvested by combine harvester</th>
<th>% of manually cut care loaded mechanically</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>1964</td>
<td>-</td>
<td>20</td>
</tr>
<tr>
<td>1965</td>
<td>1-2</td>
<td>26-32</td>
</tr>
<tr>
<td>1966</td>
<td>2-3</td>
<td>44-6</td>
</tr>
<tr>
<td>1967</td>
<td>2-3</td>
<td>53-7</td>
</tr>
<tr>
<td>1968</td>
<td>3</td>
<td>61-8</td>
</tr>
<tr>
<td>1969</td>
<td>2</td>
<td>65-74</td>
</tr>
<tr>
<td>1970</td>
<td>1</td>
<td>82-5</td>
</tr>
<tr>
<td>1971</td>
<td>3</td>
<td>87</td>
</tr>
<tr>
<td>1972</td>
<td>7</td>
<td>89-96</td>
</tr>
<tr>
<td>1973</td>
<td>11</td>
<td>93-4</td>
</tr>
<tr>
<td>1974</td>
<td>18</td>
<td>96</td>
</tr>
<tr>
<td>1975</td>
<td>25</td>
<td>96</td>
</tr>
<tr>
<td>1976</td>
<td>32</td>
<td>97</td>
</tr>
<tr>
<td>1977</td>
<td>36</td>
<td>97</td>
</tr>
<tr>
<td>1978</td>
<td>38</td>
<td>98</td>
</tr>
<tr>
<td>1979</td>
<td>42</td>
<td>98</td>
</tr>
<tr>
<td>1980</td>
<td>45</td>
<td>98</td>
</tr>
<tr>
<td>1981</td>
<td>50</td>
<td>98</td>
</tr>
</tbody>
</table>

Source: Edquist, 1985:38
Table 12

Percentage of Cane Mechanically Cut by Various Harvesters in Cuba, 1971-80

<table>
<thead>
<tr>
<th></th>
<th>Libertadora 1400</th>
<th>Massey-Ferguson</th>
<th>KTP-1</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1972</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>1973</td>
<td>3</td>
<td>7</td>
<td>1</td>
<td>-</td>
<td>11</td>
</tr>
<tr>
<td>1974</td>
<td>4</td>
<td>10</td>
<td>4</td>
<td>-</td>
<td>18</td>
</tr>
<tr>
<td>1975</td>
<td>4</td>
<td>12</td>
<td>9</td>
<td>-</td>
<td>25</td>
</tr>
<tr>
<td>1976</td>
<td>5</td>
<td>13</td>
<td>14</td>
<td>-</td>
<td>32</td>
</tr>
<tr>
<td>1977</td>
<td>4</td>
<td>13</td>
<td>19</td>
<td>-</td>
<td>36</td>
</tr>
<tr>
<td>1978</td>
<td>4</td>
<td>10</td>
<td>24</td>
<td>-</td>
<td>38</td>
</tr>
<tr>
<td>1979</td>
<td>4</td>
<td>10</td>
<td>28</td>
<td>-</td>
<td>42</td>
</tr>
<tr>
<td>1980</td>
<td>4</td>
<td>9</td>
<td>32</td>
<td>-</td>
<td>45</td>
</tr>
</tbody>
</table>

Source: Edquist, 1985:51
<table>
<thead>
<tr>
<th>Year</th>
<th>Leather Shoes (000 units)</th>
<th>Cotton Cloth (million m)</th>
<th>Rayon Cloth (million m)</th>
<th>Rice (000mt)</th>
<th>Wheat Flour (000mt)</th>
<th>Beef (000mt)</th>
<th>Pork (000mt)</th>
<th>Condensed and Evaporated Milk (000mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>13,261</td>
<td>91.3</td>
<td>4.4</td>
<td>87.9</td>
<td>147.9</td>
<td>104.5</td>
<td>2.6</td>
<td>69.2</td>
</tr>
<tr>
<td>1970</td>
<td>12,052</td>
<td>75.7</td>
<td>2.2</td>
<td>182.8</td>
<td>159.7</td>
<td>104.9</td>
<td>7.6</td>
<td>68.1</td>
</tr>
<tr>
<td>1971</td>
<td>14,217</td>
<td>87.1</td>
<td>8.1</td>
<td>134.4</td>
<td>175.3</td>
<td>100.8</td>
<td>10.0</td>
<td>77.9</td>
</tr>
<tr>
<td>1972</td>
<td>14,390</td>
<td>98.0</td>
<td>7.4</td>
<td>184.7</td>
<td>177.6</td>
<td>99.0</td>
<td>11.4</td>
<td>49.4</td>
</tr>
<tr>
<td>1973</td>
<td>14,760</td>
<td>117.1</td>
<td>6.8</td>
<td>139.5</td>
<td>178.4</td>
<td>84.6</td>
<td>12.9</td>
<td>58.6</td>
</tr>
<tr>
<td>1974</td>
<td>13,512</td>
<td>127.9</td>
<td>3.8</td>
<td>206.5</td>
<td>184.3</td>
<td>69.8</td>
<td>19.0</td>
<td>57.3</td>
</tr>
<tr>
<td>1975</td>
<td>15,513</td>
<td>137.6</td>
<td>6.3</td>
<td>222.8</td>
<td>176.1</td>
<td>67.7</td>
<td>24.2</td>
<td>62.1</td>
</tr>
<tr>
<td>1976</td>
<td>14,979</td>
<td>134.1</td>
<td>5.1</td>
<td>210.9</td>
<td>165.4</td>
<td>80.5</td>
<td>29.1</td>
<td>62.1</td>
</tr>
<tr>
<td>1977</td>
<td>13,449</td>
<td>148.9</td>
<td>2.7</td>
<td>241.4</td>
<td>176.4</td>
<td>87.5</td>
<td>33.7</td>
<td>63.2</td>
</tr>
<tr>
<td>1978</td>
<td>14,685</td>
<td>154.4</td>
<td>1.5</td>
<td>238.4</td>
<td>174.9</td>
<td>83.4</td>
<td>34.9</td>
<td>63.0</td>
</tr>
<tr>
<td>1979</td>
<td>13,759</td>
<td>148.4</td>
<td>1.5</td>
<td>202.6</td>
<td>160.5</td>
<td>78.8</td>
<td>34.0</td>
<td>65.2</td>
</tr>
<tr>
<td>1980</td>
<td>12,927</td>
<td>157.4</td>
<td>na</td>
<td>225.2</td>
<td>271.0</td>
<td>80.3</td>
<td>34.2</td>
<td>66.3</td>
</tr>
</tbody>
</table>

Source: Brundenius, 1984:159.
Table 14

Gross Value of Production of Engineering Goods Industries, 1975-85
(Million Pesos, 1981 Prices)

<table>
<thead>
<tr>
<th></th>
<th>Non-electrical machinery* (ISIC 382 &amp; 384)</th>
<th>Electrical machinery (ISIC 383)</th>
<th>Metal products (ISIC 381)</th>
<th>Total (ISIC 38)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Value</td>
<td>Index</td>
<td>Value</td>
<td>Index</td>
</tr>
<tr>
<td>1975</td>
<td>253.7</td>
<td>100.0</td>
<td>50.7</td>
<td>100.0</td>
</tr>
<tr>
<td>1976</td>
<td>275.0</td>
<td>108.4</td>
<td>52.4</td>
<td>103.4</td>
</tr>
<tr>
<td>1977</td>
<td>292.4</td>
<td>115.3</td>
<td>55.9</td>
<td>110.3</td>
</tr>
<tr>
<td>1978</td>
<td>359.2</td>
<td>141.6</td>
<td>64.0</td>
<td>126.2</td>
</tr>
<tr>
<td>1979</td>
<td>420.1</td>
<td>165.6</td>
<td>78.3</td>
<td>154.4</td>
</tr>
<tr>
<td>1980</td>
<td>434.4</td>
<td>171.2</td>
<td>75.4</td>
<td>148.7</td>
</tr>
<tr>
<td>1981</td>
<td>553.4</td>
<td>218.1</td>
<td>100.6</td>
<td>198.4</td>
</tr>
<tr>
<td>1982</td>
<td>642.7</td>
<td>253.3</td>
<td>88.5</td>
<td>174.6</td>
</tr>
<tr>
<td>1983</td>
<td>746.0</td>
<td>294.0</td>
<td>119.4</td>
<td>235.5</td>
</tr>
<tr>
<td>1984</td>
<td>876.2</td>
<td>345.4</td>
<td>144.5</td>
<td>285.0</td>
</tr>
<tr>
<td>1985+</td>
<td>866.4</td>
<td>380.9</td>
<td>152.0</td>
<td>299.8</td>
</tr>
</tbody>
</table>

*Including transport equipment

+Estimate based on first 11 months of 1985

Source: Brundenius, 1987:104
Table 15

Growth Rates of Various Cuban Industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Growth, compared to previous year (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metal products</td>
<td>15</td>
</tr>
<tr>
<td>Mining and ferrous metallurgy</td>
<td>15</td>
</tr>
<tr>
<td>Non-electric machinery building industry</td>
<td>10</td>
</tr>
<tr>
<td>Electrotechnical and electronics</td>
<td>12</td>
</tr>
<tr>
<td>Chemical industry</td>
<td>13</td>
</tr>
<tr>
<td>Paper and cellulose industry</td>
<td>22</td>
</tr>
<tr>
<td>Textile industry</td>
<td>24</td>
</tr>
<tr>
<td>Alcoholic beverage and tobacco industry</td>
<td>17</td>
</tr>
<tr>
<td>Graphics industry</td>
<td>13</td>
</tr>
</tbody>
</table>

Source: Banco Nacional De Cuba, 1986:17
Table 16

Industrial Output, Selected Products, 1965-1984 (Selected Years)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Profilled steel</td>
<td>thousands tones</td>
<td>36.0</td>
<td>140.0</td>
<td>303.8</td>
<td>338.2</td>
</tr>
<tr>
<td>Corrugated steel bars</td>
<td>thousand tons</td>
<td>26.3</td>
<td>85.0</td>
<td>260.2</td>
<td>270.5</td>
</tr>
<tr>
<td>Sugar cane harvesters</td>
<td>units</td>
<td>-</td>
<td>-</td>
<td>501</td>
<td>631</td>
</tr>
<tr>
<td>Vessels</td>
<td>units</td>
<td>-</td>
<td>36</td>
<td>120</td>
<td>...</td>
</tr>
<tr>
<td>Buses</td>
<td>units</td>
<td>-</td>
<td>300</td>
<td>1,846</td>
<td>2,219</td>
</tr>
<tr>
<td>Lorries</td>
<td>thousands</td>
<td>...</td>
<td>...</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>Tires</td>
<td>thousands</td>
<td>...</td>
<td>202</td>
<td>387</td>
<td>450</td>
</tr>
<tr>
<td>Mineral fertilizers</td>
<td>thousand tons</td>
<td>...</td>
<td>591</td>
<td>1,405</td>
<td>1,446</td>
</tr>
<tr>
<td>Man-made fibres</td>
<td>thousand tons</td>
<td>...</td>
<td>2.4</td>
<td>4.9</td>
<td>3.8</td>
</tr>
<tr>
<td>Textiles</td>
<td>million sq. m.</td>
<td>...</td>
<td>78</td>
<td>159</td>
<td>172</td>
</tr>
<tr>
<td>Wearing apparel</td>
<td>millions</td>
<td>...</td>
<td>22.2</td>
<td>25.5</td>
<td>31.7</td>
</tr>
<tr>
<td>Cement</td>
<td>thousand tons</td>
<td>...</td>
<td>742</td>
<td>2,831</td>
<td>3,347</td>
</tr>
<tr>
<td>Carts for sugar</td>
<td>transportation</td>
<td>thousands</td>
<td>2.0</td>
<td>.</td>
<td>3.4</td>
</tr>
<tr>
<td>Household refrigerators</td>
<td>thousands</td>
<td>11.9</td>
<td>5.8</td>
<td>25.0</td>
<td>22.4</td>
</tr>
<tr>
<td>Radio sets</td>
<td>thousands</td>
<td>81.9</td>
<td>19.1</td>
<td>200.0</td>
<td>253.4</td>
</tr>
<tr>
<td>TV sets</td>
<td>thousands</td>
<td>-</td>
<td>-</td>
<td>40.3</td>
<td>91.6</td>
</tr>
<tr>
<td>Household gas stoves</td>
<td>thousands</td>
<td>10.2</td>
<td>6.0</td>
<td>6.9</td>
<td>...</td>
</tr>
<tr>
<td>Storage batteries</td>
<td>thousands</td>
<td>102.1</td>
<td>95.2</td>
<td>301.9</td>
<td>335.1</td>
</tr>
<tr>
<td>Electric wires and cable</td>
<td>(up to 1 KV)</td>
<td>kilometres</td>
<td>23.6</td>
<td>13.1</td>
<td>38.0</td>
</tr>
<tr>
<td>Wire</td>
<td>thousand tons</td>
<td>7.3</td>
<td>0.5</td>
<td>8.2</td>
<td>...</td>
</tr>
<tr>
<td>Computers</td>
<td>thousands</td>
<td>-</td>
<td>-</td>
<td>13.8</td>
<td>...</td>
</tr>
<tr>
<td>Mini computers</td>
<td>units</td>
<td>-</td>
<td>-</td>
<td>38</td>
<td>...</td>
</tr>
</tbody>
</table>

Source: UNIDO, 1986:17
### Table 17

Cuba: Imports of Goods, CIF

<table>
<thead>
<tr>
<th></th>
<th>Millions of pesos</th>
<th>Percentage breakdown</th>
<th>Growth rates</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>4,617 5,531 6,218 7,207</td>
<td>100.0 100.0 100.0</td>
<td>10.5 8.3 12.4 15.9</td>
</tr>
<tr>
<td><strong>According to use and economic purpose</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consumer goods</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1980 1982 1983 1984*</td>
<td>535 763 757 787</td>
<td>13.3 12.2 10.9</td>
<td>25.6 13.5 -0.8 4.0</td>
</tr>
<tr>
<td>Petroleum and petroleum products</td>
<td>2,823 3,501 4,082 4,833</td>
<td>63.1 65.6 67.1</td>
<td>13.5 9.3 16.6 18.4</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>81 112 121</td>
<td>2.9 1.9</td>
<td>25.4 9.7 8.1</td>
</tr>
<tr>
<td>Herbicides and pesticides</td>
<td>60 76 110</td>
<td>1.7 1.8</td>
<td>19.8 5.0 45.2</td>
</tr>
<tr>
<td>Rolled steel</td>
<td>114 139 178</td>
<td>3.9 2.9</td>
<td>24.1 -1.7 27.8</td>
</tr>
<tr>
<td>Accessories and spare parts</td>
<td>86 105 129</td>
<td>3.0 2.1</td>
<td>17.4 4.0 22.9</td>
</tr>
<tr>
<td><strong>Capital goods</strong></td>
<td>1,584 1,588 1,713</td>
<td>41.8 27.5</td>
<td>3.5 -3.1 7.9</td>
</tr>
<tr>
<td>Complete plants</td>
<td>1,269 1,266 1,379 1,587</td>
<td>23.6 22.2 22.0</td>
<td>-2.3 2.2 8.9 15.1</td>
</tr>
<tr>
<td>Tractors</td>
<td>535 535 589</td>
<td>6.1 9.5</td>
<td>11.3 -10.3 10.2</td>
</tr>
<tr>
<td>Buses and lorries</td>
<td>37 73 61</td>
<td>0.4 1.0</td>
<td>33.5 49.6 -17.3</td>
</tr>
<tr>
<td>Remainder</td>
<td>582 497 566</td>
<td>14.7 9.1</td>
<td>-20.1 6.9 13.9</td>
</tr>
<tr>
<td><strong>On the basic of ISIC categories</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food and live animals</td>
<td>746 811 788</td>
<td>19.1 12.7</td>
<td>2.8 5.7 -2.7</td>
</tr>
<tr>
<td>Beverages and tobacco</td>
<td>16 10 9</td>
<td>- 0.1</td>
<td>-29.7 -11.5 -5.3</td>
</tr>
<tr>
<td>Inedible raw materials, except fuels</td>
<td>188 185 2022</td>
<td>5.9 3.2</td>
<td>14.3 -15.9 9.2</td>
</tr>
<tr>
<td>Fuels and lubricants, minerals and related products</td>
<td>912 1,498 1,845</td>
<td>10.3 29.7</td>
<td>27.9 28.4 23.2</td>
</tr>
<tr>
<td>Animal and vegetable oils and fats</td>
<td>57 48 65</td>
<td>1.3 1.0</td>
<td>-0.7 -16.6 36.2</td>
</tr>
<tr>
<td>Chemical products</td>
<td>291 358 421</td>
<td>7.9 6.8</td>
<td>7.8 14.0 17.7</td>
</tr>
<tr>
<td>Manufactured goods, classified chiefly by material</td>
<td>679 717 763</td>
<td>18.4 12.3</td>
<td>11.1 -4.9 6.4</td>
</tr>
<tr>
<td>Machinery and transport equipment</td>
<td>1,639 1,712 1,895</td>
<td>31.2 30.5</td>
<td>4.9 -0.4 10.6</td>
</tr>
<tr>
<td>Miscellaneous manufactured articles</td>
<td>99 193 229</td>
<td>5.8 3.7</td>
<td>11.1 74.5 19.0</td>
</tr>
</tbody>
</table>

Source: UN, 1986:229
Table 18

Production, Imports and Apparent Consumption of Machinery and Equipment* 1963-84 (Million Pesos)

<table>
<thead>
<tr>
<th></th>
<th>Production+ (1)</th>
<th>Imports (2)</th>
<th>Apparent consumption (3)</th>
<th>Domestic procurement ratio (4) = (1)(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>48.2</td>
<td>110.0</td>
<td>158.2</td>
<td>30.5</td>
</tr>
<tr>
<td>1964</td>
<td>49.4</td>
<td>127.7</td>
<td>177.1</td>
<td>27.9</td>
</tr>
<tr>
<td>1965</td>
<td>44.0</td>
<td>123.4</td>
<td>167.4</td>
<td>26.3</td>
</tr>
<tr>
<td>1966</td>
<td>46.5</td>
<td>123.6</td>
<td>170.1</td>
<td>27.3</td>
</tr>
<tr>
<td>1967</td>
<td>49.4</td>
<td>238.7</td>
<td>288.1</td>
<td>17.1</td>
</tr>
<tr>
<td>1968</td>
<td>60.8</td>
<td>282.4</td>
<td>343.2</td>
<td>17.7</td>
</tr>
<tr>
<td>1969</td>
<td>56.4</td>
<td>360.3</td>
<td>416.6</td>
<td>13.5</td>
</tr>
<tr>
<td>1970</td>
<td>84.9</td>
<td>419.0</td>
<td>502.9</td>
<td>16.9</td>
</tr>
<tr>
<td>1971</td>
<td>103.2</td>
<td>378.5</td>
<td>481.7</td>
<td>21.4</td>
</tr>
<tr>
<td>1972</td>
<td>119.6</td>
<td>216.9</td>
<td>336.5</td>
<td>35.5</td>
</tr>
<tr>
<td>1973</td>
<td>161.0</td>
<td>291.8</td>
<td>452.8</td>
<td>35.6</td>
</tr>
<tr>
<td>1974</td>
<td>200.1</td>
<td>436.7</td>
<td>636.8</td>
<td>31.4</td>
</tr>
<tr>
<td>1975</td>
<td>253.7</td>
<td>852.4</td>
<td>1,106.1</td>
<td>22.9</td>
</tr>
<tr>
<td>1976</td>
<td>275.0</td>
<td>964.3</td>
<td>1,239.3</td>
<td>22.0</td>
</tr>
<tr>
<td>1977</td>
<td>292.4</td>
<td>1,324.3</td>
<td>1,616.7</td>
<td>18.1</td>
</tr>
<tr>
<td>1978</td>
<td>359.2</td>
<td>1,151.7</td>
<td>1,510.9</td>
<td>23.8</td>
</tr>
<tr>
<td>1979</td>
<td>420.1</td>
<td>1,133.7</td>
<td>1,553.8</td>
<td>27.0</td>
</tr>
<tr>
<td>1980</td>
<td>434.4</td>
<td>1,427.6</td>
<td>1,826.0</td>
<td>23.3</td>
</tr>
<tr>
<td>1981</td>
<td>553.4</td>
<td>1,502.0</td>
<td>2,055.4</td>
<td>26.9</td>
</tr>
<tr>
<td>1982</td>
<td>642.7</td>
<td>1,447.7</td>
<td>2,090.4</td>
<td>30.7</td>
</tr>
<tr>
<td>1983</td>
<td>746.0</td>
<td>1,610.7</td>
<td>2,356.7</td>
<td>31.7</td>
</tr>
<tr>
<td>1984</td>
<td>876.2</td>
<td>1,878.1</td>
<td>2,754.3</td>
<td>31.8</td>
</tr>
</tbody>
</table>

*Non-electrical machinery only (including transport equipment)
+Constant prices

Source: Brundenius, 1987:109
### Table 19

**Origin of the Resources for Financing for the Investment Program (in Percent)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Budget</td>
<td>99</td>
<td>87</td>
<td>84</td>
<td>72</td>
<td>70</td>
</tr>
<tr>
<td>Enterprises' own sources: profits, depreciation funds and fixed assets</td>
<td>1</td>
<td>13</td>
<td>16</td>
<td>28</td>
<td>30</td>
</tr>
</tbody>
</table>

Source: Banco Nacional de Cuba, 1986:6

### Table 20

**Growth Rate of Non-Traditional Exports, 1981-85**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-traditional exports</td>
<td>47.0</td>
<td>93.2</td>
<td>123.1</td>
<td>144.7</td>
<td>177.2</td>
<td>40.0%</td>
</tr>
</tbody>
</table>

Source: Banco Nacional de Cuba, 1986:10
**Table 21**

Cuba's Balance of Payment in Freely Convertible Currency

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance on current account</td>
<td>-523</td>
<td>-139</td>
<td>-45</td>
<td>51</td>
<td>297</td>
<td>263</td>
<td>-207</td>
</tr>
<tr>
<td>Merchandise balance</td>
<td>-136</td>
<td>99</td>
<td>367</td>
<td>285</td>
<td>606</td>
<td>441</td>
<td>73</td>
</tr>
<tr>
<td>Exports FOB</td>
<td>595</td>
<td>680</td>
<td>1,248</td>
<td>1,406</td>
<td>1,356</td>
<td>1,234</td>
<td>1,136</td>
</tr>
<tr>
<td>Imports FOB</td>
<td>-731</td>
<td>-581</td>
<td>-881</td>
<td>-1,121</td>
<td>-750</td>
<td>-793</td>
<td>1,063</td>
</tr>
</tbody>
</table>

Source: UN, 1986:231

**Table 22**

Latin America: Evolution of Total Gross Domestic Product (Annual Growth Rates)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cuba</td>
<td>8.7</td>
<td>6.0</td>
<td>3.2</td>
<td>15.1</td>
<td>3.1</td>
<td>3.8</td>
<td>7.4</td>
</tr>
<tr>
<td>Latin America</td>
<td>7.0</td>
<td>4.8</td>
<td>6.1</td>
<td>1.7</td>
<td>-1.0</td>
<td>-3.1</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Source: UN, 1986:15 (See Footnote 21)
## Table 23
Cuba's Trade Dependency, 1946-1980

<table>
<thead>
<tr>
<th>Year</th>
<th>Exports as % of GMP (constant prices)</th>
<th>Exports as % of GDP (constant prices)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>16.7</td>
<td>13.5</td>
</tr>
<tr>
<td>1970</td>
<td>19.4</td>
<td>15.5</td>
</tr>
<tr>
<td>1974</td>
<td>12.7</td>
<td>9.8</td>
</tr>
<tr>
<td>1978</td>
<td>12.4</td>
<td>9.0</td>
</tr>
<tr>
<td>1980</td>
<td>11.1</td>
<td>8.1</td>
</tr>
</tbody>
</table>

Source: Brundenius, 1984:75
Table 24

Sugar: Production, Exports and Export Prices

<table>
<thead>
<tr>
<th>Year</th>
<th>Sugar production</th>
<th>Sugar exports</th>
<th>Prices paid by the USSR</th>
<th>Prices paid by the world market</th>
</tr>
</thead>
<tbody>
<tr>
<td>1961</td>
<td>6,876</td>
<td>6,413</td>
<td>4.09</td>
<td>2.75</td>
</tr>
<tr>
<td>1962</td>
<td>4,882</td>
<td>5,132</td>
<td>4.09</td>
<td>2.83</td>
</tr>
<tr>
<td>1963</td>
<td>3,883</td>
<td>3,520</td>
<td>6.11</td>
<td>8.34</td>
</tr>
<tr>
<td>1964</td>
<td>4,475</td>
<td>4,176</td>
<td>6.11</td>
<td>5.77</td>
</tr>
<tr>
<td>1965</td>
<td>6,156</td>
<td>5,316</td>
<td>6.11</td>
<td>2.08</td>
</tr>
<tr>
<td>1966</td>
<td>4,537</td>
<td>4,435</td>
<td>6.11</td>
<td>1.81</td>
</tr>
<tr>
<td>1967</td>
<td>6,236</td>
<td>5,683</td>
<td>6.11</td>
<td>1.92</td>
</tr>
<tr>
<td>1968</td>
<td>5,165</td>
<td>4,612</td>
<td>6.11</td>
<td>1.90</td>
</tr>
<tr>
<td>1969</td>
<td>4,459</td>
<td>4,299</td>
<td>6.11</td>
<td>3.20</td>
</tr>
<tr>
<td>1970</td>
<td>8,538</td>
<td>6,906</td>
<td>6.11</td>
<td>3.68</td>
</tr>
<tr>
<td>1971</td>
<td>5,925</td>
<td>5,511</td>
<td>6.11</td>
<td>4.50</td>
</tr>
<tr>
<td>1972</td>
<td>4,325</td>
<td>4,140</td>
<td>6.11</td>
<td>7.27</td>
</tr>
<tr>
<td>1973</td>
<td>5,383</td>
<td>4,797</td>
<td>11.82</td>
<td>9.45</td>
</tr>
<tr>
<td>1974</td>
<td>5,926</td>
<td>5,491</td>
<td>19.30</td>
<td>29.66</td>
</tr>
<tr>
<td>1975</td>
<td>6,427</td>
<td>5,744</td>
<td>26.36</td>
<td>20.37</td>
</tr>
<tr>
<td>1976</td>
<td>6,151</td>
<td>5,764</td>
<td>27.43</td>
<td>11.51</td>
</tr>
<tr>
<td>1977</td>
<td>6,953</td>
<td>6,238</td>
<td>26.94</td>
<td>8.10</td>
</tr>
<tr>
<td>1978</td>
<td>7,662</td>
<td>7,197</td>
<td>36.71</td>
<td>7.82</td>
</tr>
<tr>
<td>1979</td>
<td>7,800</td>
<td>7,199</td>
<td>37.17</td>
<td>9.65</td>
</tr>
<tr>
<td>1980</td>
<td>6,805</td>
<td>6,170</td>
<td>47.39</td>
<td>28.15</td>
</tr>
<tr>
<td>1981</td>
<td>7,926</td>
<td>7,055</td>
<td>35.10</td>
<td>16.88</td>
</tr>
<tr>
<td>1982</td>
<td>8,039</td>
<td>7,727</td>
<td>39.00</td>
<td>8.38</td>
</tr>
<tr>
<td>1983</td>
<td>7,460</td>
<td>7,011</td>
<td>46.00</td>
<td>8.56</td>
</tr>
<tr>
<td>1984</td>
<td>7,783</td>
<td>7,017</td>
<td>44.00</td>
<td>5.18</td>
</tr>
</tbody>
</table>

Source: Carciofi, 1983:207 and UN, 1986:226
Table 25

Percentage Allocation of Soviet Assistance to Various Sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>76.1%</td>
</tr>
<tr>
<td>Agriculture (irrigation and drainage)</td>
<td>5.2</td>
</tr>
<tr>
<td>Geological surveys</td>
<td>8.3</td>
</tr>
<tr>
<td>Transportation and communication</td>
<td>8.2</td>
</tr>
<tr>
<td>Education and health</td>
<td>1.9</td>
</tr>
<tr>
<td>Other sectors</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Source: Cole Blasier, 1979:230

Table 26

Structure and Evolution of the External Debt (in Millions of Pesos)

<table>
<thead>
<tr>
<th></th>
<th>1984</th>
<th>1985</th>
<th>Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2,988.8</td>
<td>3,258.9</td>
<td>270.1</td>
</tr>
<tr>
<td>Official debt</td>
<td>1,595.9</td>
<td>1,691.2</td>
<td>95.3</td>
</tr>
<tr>
<td>Private debt</td>
<td>1,392.9</td>
<td>1,567.7</td>
<td>174.8</td>
</tr>
<tr>
<td>Medium term</td>
<td>460.1</td>
<td>502.7</td>
<td>42.6</td>
</tr>
<tr>
<td>Short term</td>
<td>932.8</td>
<td>1,065.0</td>
<td>132.2</td>
</tr>
</tbody>
</table>

Source: Banco Nacional de Cuba, 1986:38
### Table 27

Cuba's Indicators of External Indebtedness in Freely Convertible Currency

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total disbursed debt</td>
<td>3,227</td>
<td>3,170</td>
<td>2,669</td>
<td>2,790</td>
<td>3,032</td>
</tr>
<tr>
<td>Bilateral official debt</td>
<td>1,354</td>
<td>1,294</td>
<td>1,276</td>
<td>1,333</td>
<td>1,527</td>
</tr>
<tr>
<td>Multilateral official debt</td>
<td>8</td>
<td>15</td>
<td>18</td>
<td>25</td>
<td>20</td>
</tr>
<tr>
<td>Suppliers</td>
<td>27</td>
<td>33</td>
<td>47</td>
<td>97</td>
<td>221</td>
</tr>
<tr>
<td>Financial institutions</td>
<td>1,837</td>
<td>1,826</td>
<td>1,327</td>
<td>1,335</td>
<td>1,264</td>
</tr>
<tr>
<td>Medium-term bilateral loans and loans from consortia</td>
<td>563</td>
<td>505</td>
<td>417</td>
<td>495</td>
<td>480</td>
</tr>
<tr>
<td>Short-term deposits</td>
<td>1,238</td>
<td>1,282</td>
<td>860</td>
<td>789</td>
<td>699</td>
</tr>
<tr>
<td>Credits for current imports</td>
<td>36</td>
<td>39</td>
<td>50</td>
<td>50</td>
<td>86</td>
</tr>
<tr>
<td>Other credits</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Disbursements&lt;sup&gt;c&lt;/sup&gt;</td>
<td>214</td>
<td>229</td>
<td>148</td>
<td>351</td>
<td>522</td>
</tr>
<tr>
<td>Service&lt;sup&gt;d&lt;/sup&gt;</td>
<td>417</td>
<td>619</td>
<td>1,029</td>
<td>673</td>
<td>661</td>
</tr>
<tr>
<td>Interest paid</td>
<td>263</td>
<td>338</td>
<td>341</td>
<td>248</td>
<td>241</td>
</tr>
<tr>
<td>Amortization payment on long-term debts</td>
<td>96</td>
<td>142</td>
<td>166</td>
<td>160</td>
<td>156</td>
</tr>
<tr>
<td>Amortization payments on short-term debts</td>
<td>58</td>
<td>139</td>
<td>522</td>
<td>265</td>
<td>264</td>
</tr>
</tbody>
</table>

**PERCENTAGES**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total disbursed debt/global social product</td>
<td>18.5</td>
<td>14.3</td>
<td>11.6</td>
<td>11.5</td>
<td>11.7</td>
</tr>
<tr>
<td>Total debt service/exports of goods and services</td>
<td>20.1</td>
<td>35.4</td>
<td>63.4</td>
<td>42.7</td>
<td>46.8</td>
</tr>
<tr>
<td>Total debt service/disbursements</td>
<td>194.9</td>
<td>270.3</td>
<td>693.3</td>
<td>191.7</td>
<td>126.6</td>
</tr>
<tr>
<td>Total debt service/global social product</td>
<td>2.4</td>
<td>2.8</td>
<td>4.5</td>
<td>2.8</td>
<td>2.5</td>
</tr>
</tbody>
</table>

<sup>a</sup>Includes commitments falling due one year or less after date of issue.  
<sup>b</sup>Preliminary figures.  
<sup>c</sup>Includes long- and short-term loans received, according to the balance of payments.  
<sup>d</sup>Relates to service payments which appear in the balance of payment (see Table 18).  

Source: UN, 1986:233
Figure 1


Source: Brundenius, 1984:104.
Figure 2

Estimated Income Distribution in Cuba in 1953, 1962, and 1978 (Lorenz Curves)

Index of Sugar and Non-Sugar Production, 1982, 1983 and 1984
(Preceding Year Industrial Production Index = 100)

Source: UNIDO, 1986:10
Figure 4

Share of Manufactured Imports in Total Imports, 1970 and 1983
(SITC 5-8 Less 67 and 68)

1970
Manufactures 58.9 per cent
Other 41.1 per cent

1983
Manufactures 44.7 per cent
Other 55.3 per cent

Source: UNIDO, 1986:12
Figure 5

Productive and non-productive sectors

Chemical industry (fertilizers, pesticides)

Construction and machinery industry (irrigation equipment, cane harvesters)

Sugar Industry

Sugar by product industry

Animal feed industry

Some economic activities

Finance (foreign exchange)

Backward linkages

Forward linkages

186
Figure 6

Cuban Terms of Trade with the USSR and the West,

Source: Brundenius, 1984:
Notes

1. The attempt here is a brief one; a comprehensive presentation of Cuban history is impossible here. For detailed historical presentation of the period between 1895-1902 see Foner (1972); for an account of the period between 1902-1933 see Luis Aguilar (1972); for an extensive detailed presentation for the period between 1762-1959 see Hugh Thomas. Also see the collection of different important documents covering the period from 1783-1962 in Smith (1963). Finally, for a critical historical assessment of the period 1510-1959 (in Spanish language) see Segrera (1981). The historical background in this chapter is based on these sources and others which will be mentioned.

2. Though titled "Cuba under Spanish domination", this section will reveal that while being a Spanish colony, Cuba came under the U.S. nomination.

3. Different external factors, together with the suitable land and climate, influenced Cuba's transition to large scale sugar production: (1) the short duration of the British occupation of Havana (1762-1763) which brought a large number of slaves and a large amount of equipment (especially the recently developed steam engine) and opened up the markets of 13 American colonies; (2) the destruction of the sugar industry in St. Dominique (Haiti) in the 1790s as a consequence of the successful slave revolt; and (3) the Spanish trade liberation decree of 1818.
4. Different factors had constrained the success of the struggle: the lack of organization among the rebel forces; the shortage of supplies and ammunition; the failure to confront the problem of slavery and the role of the blacks; the opposition of the wealthy planters who supported Spain; and the refusal of the U.S. to sell arms to the rebels (while supplying them to Spain hoping to be able to buy the island). (Foner, 1972(v-1):xviii).

5. In 1895, the American Magazine of Civics featured a symposium on the topic "Ought We Annex Cuba?" A leading Wall Street figure wrote: "It makes the water come to my mouth when I think of the State of Cuba as one in our family". Another spokesman of Wall Street wrote: "Canada will come in time; Mexico will follow Texas and California, and drop into her niche under the Stars and Stripes, when we are ready. But we want Cuba now". (In Foner, 1972(v.I):xxxii).

6. For the complete presentation of all the articles see Smith (1963:125).

7. As an implementation of article VII Cuba leased Guantánomo to the United States at $2,000 per year.

8. U.S. investment had also penetrated other fields, a U.S.-Cuban family of New York owned four major Havana dailies: El Mundo, La Prensa, the Havana Post and the evening Telegram (Benjamin, 1977:19).

9. The following points are my translation of the original text in Spanish.

10. One example of the extent of the impact of the U.S. embargo on Cuba is its oil imports. Prior to the revolution Cuba produced only 10 percent of its oil consumption, the other 90 percent came
from the United States, a percentage that was totally cut after the embargo (Gultelman, in Bonachea and Valdes, 1972: 232).

11. The imported Soviet harvesters KCT-1 and KT-1 had limitations. They could only cut erect cane or cane with maximum inclination of 30°; in addition, they required fields with a maximum inclination of 5°. It was estimated that they could be used only in 30 percent of the Cuban cane fields in 1966 (Edquist, 1985:41).

12. The term was used by Castro in his report to the First Party Congress.

13. The information of this part is derived from Castro's report (1980) unless otherwise specified.

14. Some small-scale production of libratadora was produced in Cuba and used in the 1969 sugar harvest (Edquist, 1985:48). However, lacking the technical capacity for large-scale production, Cuba gave a West German company the patent right for libratadora production in exchange for a low price for certain quantity of the machine. Since 1972 the West German company has exported the libratadora to 44 countries including Argentina, United States, Mexico and Venezuela (Edquist, 1985:129).

15. These data and the following are derived from Castro's report to the 3rd congress (1986) unless otherwise mentioned.

16. All the mentioned industrial projects have been located in different provinces of Cuba and mostly outside the Capital City, in an effort to distribute the industrial centers in the country. This effort increases both the economic integration of the different parts of the country and the level of regional equality; in addition, it reduces the chances of certain social and economic
problems of rural migration to the cities as witnessed in most developing societies.

17. One of the major efforts to counter the shortage of social construction projects has been through the volunteer work of different workers and associates of a wide range of organizations. More construction projects have been recently accomplished through the efforts of the minibrigades.

18. During my first trip to Cuba in April 1986, we visited one of the newly constructed sugar mills located in Camaguey, built in 1981. About 70 percent of the equipment was Cuban made; the machines allowed for more than 60 percent of the harvest to be mechanized with potential increases up to 80 percent. The mill utilized 20 percent fewer workers as compared to other, older mills. In addition, the mill's use of oil was limited only to the first year of production; thereafter, all energy came from bagasse. In addition to crude sugar and bagasse, the mill produced molasses, sugar derivates used for animal feeding and fertilizers.

19. DPR is the ratio of apparent consumption of capital goods produced by domestic industry.

20. Mercantile production is the sum of all goods and services of the productive sectors (excluding trade) destined for sale.

21. In 1985 Cuba concluded bilateral trade agreements with many Third World and socialist countries. In one of these agreement (with Ecuador) Cuba would export spare parts for the sugar industry and animal feeding technology (UNIDO, 1986:24).

22. The difference in growth rates reflected in Table 19 is even higher since the average growth rates of Latin American countries are for total gross domestic product while for Cuba the average
growth rate is the total gross social product which excludes public services.

23. While in the rest of this section I will argue against the first group's claim in some detail, I will not pursue a counter argument of the second claim. It is sufficient to say, however, that the claim that the USSR has dictated the terms of Cuba's involvement in Africa, beside denying the possibility of political and ideological non coercive convergence of two countries, neglects some historical aspects. The claim reflects a neglect of the historical ties that existed between Cuba and Africa long before the Cuban-Soviet relationship (e.g., Cuba's solidarity support of the Algerian revolution), and of the differences between the Soviet and Cuban policies in Africa. On more than one occasion, Cuba supported different revolutionary groups than those supported by the USSR e.g., in Angola and Ethiopia (for a detailed account see F. Fitzgerald 1987:451-53. And for an interesting account of the Cuban involvement in Africa see García Marquiz 1981).

24. Turits notes that according to the CIA's calculations Cuba's received aid would compete even with Israel; however, a closer look would reveal a major difference. Assuming that Cuba does receive an estimated $2 billion, it is a tied aid per year through implicit subsidies. Israel's received aid of $2 billion, however, is outright hard currency cash transfer from the United States. Further, on per capital basis Israel receives 2.5 times the estimated average yearly trade subsidies received by Cuba (Turits, 1987:177).

25. Reference is to the first Congress of the Cuban Communist Party.
26. In a comparison exercise of the different impact of foreign assistance utilization, Turits shows that while Puerto Rico receives from the United States about six times the per capital aid than Cuba receives from the USSR, yet

Puerto Rico is hardly an analogous paradigm of growth with equity, and still depends on a conclusive dynamic of incessant circular migration (...). Since the 1950s, almost a third of the population has migrated to the United States, while a quarter of those seeking work in Puerto Rico remain unemployed and half the people live on food stamps and public assistance (Turits, 1987:178).

27. In addition to the general reduction in international liquidity, the change in these banks' financial policy towards Cuba has been the result of worsening Cuban-U.S. relations especially after Reagan's Presidency.

28. For an excellent account of these aspects see Brundenius (1981, 1984); and different studies in Griffiths and Griffiths (1979).
CONCLUSIONS

It is difficult to find any country, regardless of its level of development or its social and political orientation, that does not consider economic independence as one of its major goals. Despite this common goal, however, there exists no commonly accepted definition of economic independence and, as a consequence, no general agreement on the conditions and strategies necessary for achieving it.

An examination of five theoretical perspectives on the issue of economic independence reveals, either explicitly or implicitly, two definitions of such independence: (1) delinking from the world capitalist system and pursuing an anti-capitalist path i.e., socialist development; (2) transforming the economic structure into one with a higher productive and technical capacity as well as a higher level of national integration. This dissertation adopts the second definition of economic independence. This definition as opposed to the first one has two main implications:

1. It implies the theoretical possibility of achieving a higher level of economic independence in capitalist-oriented economies as well as in socialist-oriented ones. In a capitalist-oriented economy, the ability to pursue successfully the strategies of economic independence, depends largely on the relative strength of the national industrial bourgeoisie over that of the commercial and landed oligarchy. Generally, the former's best interests involve expanding the domestic productive sectors and regulating and limiting foreign investment.
The definition also implies that the internal dynamics within an economy (e.g., the role played by the state and its adopted strategies, class structure, surplus use) override, in most cases, the external dynamics (e.g., the role played by friendly or hostile countries and financial organizations). This emphasis on internal dynamics, however, does not mean that economic independence is equated with autarky; on the contrary, it implies economic interdependence with other countries, only however, on more equal terms.

Examination of the five different schools of thought in this dissertation, has revealed a set of different strategy proposals and policy recommendations. Further investigation of these strategies points out the importance of an industrial strategy, one that pays special attention to the development of the capital-goods sector and to those industries with the highest linkage effect. Such special attention would contribute greatly to the development of an economy's technical and productive capacity and increase the level of national integration.

Both ISI (Import Substituting Industrialization) and BI (Basic Industrialization) are important industrialization strategies. Although the theoretical examination pointed out the superiority of the BI strategy, an empirical examination of the Cuban experience showed that ISI contributed greatly to increasing the Cuban economy's independence. This was especially true when the strategy was pursued within a process of economic planning and applied in the intermediate and capital goods sector, not only in the consumer-goods sector. Furthermore, the negative impacts associated with ISI, cited repeatedly
in the literature, can be minimized when ISI is pursued in those industries with the highest linkage effects among themselves, and between them and domestic resources and output. When all these factors are considered, ISI stand close to BI in enhancing the productive and technical capacity of an economy. Also, regional cooperation and demands for the NIEO (new international economic order) can be considered important long-run strategies, as they face external factors beyond the control of the national economy and require the committed collective effort of other countries.

The theoretical investigation also reveals a set of necessary policies which pursued simultaneously with the above strategies, would warrant achieving a higher level of economic independence. These policies are as follows:

1. Regulating foreign investment (especially its direct form) will reduce both the outflow of surplus and foreign control over decision making.

2. Regulating the transfer of technology will enhance an economy's technical capacity, if it involves the adaptation and innovation of technology suited for domestic resources and output.

3. Undertaking a deliberate policy of income redistribution will contribute to increasing both the level of productivity and mass support.

4. Transforming most (if not all) foreign ownership of the productive assets into national ownership (public and private) will increase the country's control over the national surplus and decision making.
(5) Undertaking a marked policy of economic planning will enhance the implementation of the adopted strategies and reduce some of the ill effects that develop due to conflicting interests.

(6) Finally, the above policies call for the state to actively participate and intervene in the economy. This can be considered the "sufficient condition" for the successful implementation of the strategies and policies outlined above.

Though not addressed in this dissertation, there are other important social and political policies that would help a nation to develop a higher level of productivity and economic independence. Examples of such policies include the advancement of human power in terms of skills and education; the expansion of scientific and technical research; and the enhancement of mass participation in decision making, a policy which would strengthen a country's social and political stability.

All of the above socio-economic policies have been confirmed as essential in the empirical case of Cuba. Judged by the definition adopted earlier in this dissertation, and by its own definition of economic independence, Cuba has successfully managed to achieve a higher level of economic independence since the revolution. This fact is demonstrated by Cuba's increased level of productive capacity, technical capacity, national integration and control over its own national surplus. Such achievement refutes the claim that Cuba continues to be dependent on the Soviet Union, as it was on the United States before the Cuban revolution. This claim mistakenly equates "dependency" with "dependence" and focuses only on external quantitative factors (e.g., volumes of trade).
Cuba's higher level of productivity and national integration (especially industrial-agricultural integration) has been achieved mainly through determined efforts at industrialization (both ISI and BI), export diversification, technical research and innovation, and provision of basic needs. Cuba's successful experience in the provision of basic needs, and its political and social democracy (evident in increasing mass participation in the decision-making process (Harnecker, 1979)) have further contributed to its internal social stability. Furthermore, by participating in the socialist international division of labor, through an active membership in the CMEA (Council for Mutual Economic Assistance), Cuba has facilitated its transition process and minimized the negative impact of the world's economic fluctuations.

The particular definition of economic independence utilized in this dissertation retains its validity when applied to other economies (socialist, capitalist and mixed) in different levels of development. Such a definition, when utilized within an historical perspective, can demonstrate the relative change in the level of economic independence. Other studies have applied different conceptions of dependency and independence in assessing the experiences of other developing countries especially of those categorized as the newly industrialized countries (NICs). There is an ongoing debate in the development literature on the issue of economic independence specifically as it applies to certain countries (e.g., South Korea and Brazil). Some writers (e.g., Luedde-Neurath (1980), Hamilton (1983), Barone (1983) and Foster-Carter (1985)) have argued that the economy of South Korea, for example, represents a successful model of an independent capitalist development. Other writers (e.g., Payer (1975), Sunno (1978) and Landsberg (1979)),

198
however, emphasize the dependent nature of this development, and argue that it is foreign capital (mainly Japanese) that dominates the productive sector of the Korean economy. In their analysis of technology and the nature of NICs development, Baumgartner and Burns (1981) argue that "isolated structural changes in specific industrial sectors have not affected the socio-economic and political metalevel structures which are all too characteristic of dependency" (Baumgartner and Burns, 1981:321).

No attempt is made here to settle this debate over the assessment of the actual experience of these other economies, which requires in-depth case studies. It is important to mention, however, that the distributional results of the process of independence would differ in the capitalist-oriented from the socialist-oriented ones. In this sense the answer to the important question: economic independence for whom will differ, with the gains from higher productivity reaped by different social groups in each case. While reaching conflicting conclusions regarding the status of dependency or independence of specific capitalist-oriented economies (e.g., Brazil and South Korea), most writers on the subject agree that the dependent or independent development of these economies has been accompanied by repressive social and political measures, which raise doubts about their long-run internal social stability. Furthermore, many writers point out the increasing external obstacles (e.g., changing world demand, increased protectionist measures taken by the advanced countries (Bienfeld (1982), Helleiner (1979)) which threaten these developing countries' long-run economic stability.

199
In summary, economic independence is perceived not as an absolute condition, but as a gradual process towards a relatively higher degree of national integration. In this sense one cannot speak of countries that are independent and countries that are not, but rather of degrees of dependence and independence. Judged within an historical perspective, Cuba since the revolution has been able to attain a higher level of economic independence. Though still dependent on the Soviet assistance, this dependence can be considered a short duration or 'tactical'; it has been used to develop the economy's productive capacity and to ensure a stronger structure for future independence.

Without implying universal applicability and taking into consideration the specificity of the different political, economic and social factors facing each country, it can be said that lessons can be learned from other countries' experiences. In this instance, the Cuban experience (especially the efforts at increasing the technical and productive capacity, national integration and provision of basic needs) does provide useful insights for other small developing countries in their attempts at achieving a higher level of economic independence.
Bibliography


Brutents, K. (1983), The Newly Free Countries in the Seventies, Progress Publisher, Moscow.


EIU (The Economist Intelligence Unit) (1986-87), Country Profile: Cuba, London.


Nukhovich, E. (1980), *International Monopolies And Developing Countries*, Progress Publisher, Moscow.


212


Schmitter, P. (1972), *Autonomy or Dependence as Regional Integration outcomes: Central America*, Research Series no.17, Institute Of International Studies, University of California, Berkely.


Stains, V. (ed.) (1976), *The Role of the State in Socio-Economic Reforms in Developing Countries*, Progress Publisher, Moscow.


214


