

Chapter II

A Historical Background of Economic Reform

1. Introduction

Since the collapse of the centralized socialist system in the Soviet Union and Eastern Europe, as well as the collapse of the Council for Mutual Economic Assistance (CMEA), Cuba has faced its greatest socio-economic crisis since the revolution, and to overcome this crisis, has been implementing a series of extraordinary economic reforms over the past few years. Although certain notable results are evident in this regard, the external crises just mentioned have greatly affected Cuba's economic situation, and the country has yet to recover completely.

Not all of the problems which Cuba presently faces, however, can be attributed to the sudden changes in international relations experienced since 1989. The Cuban economy, which, particularly since the 1970s, has accomplished a certain degree of development following the 1959 revolution, fell into unmistakable stagnation in the second half of the 1980s. The post-revolution pattern of economic development, as well as its institutional framework, have begun to exhaust, and at least some parts of the present reforms are in reality an attempt to deal with these structural problems. In this sense, a simple review of the chronology of the past few years will not provide a true understanding of the range and significance of these reforms. Although at first glance a roundabout way, a review of the form taken by post-revolution economic development, of the internal and external institutional structures which regulated this development, and an understanding of the background leading to the structural crisis in the second half of the 1980s is necessary. Furthermore, consideration of the continuous economic reforms, their effects and relevant issues based on an adequate evaluation of the influence of the external shocks sustained by Cuba since 1989 is also necessary. The issues dealt with in Chapters 2 and 3 are just rooted in these elements¹.

The first section of Chapter 2 offers an overview of historical background up to the end of the 1980s. After presenting a series of post-revolution institutional changes and economic growth perfor-

mance, the growth mechanism at that time will be considered as representative of extensive import-substitution industrialization, and its institutional and social background will be discussed. The second section of this chapter considers the stagnation and disequilibrium experienced in the second half of the 1980s and the sources of this economic deterioration. A summary and conclusion are also presented at the end of this chapter.

2. Historical Background

(1) Post-Revolution Institutional Change

As is well known, prior to its revolution, Cuba was a capitalist developing country dependent on sugar exports. Following the revolution, however, the 1961 Socialist Revolution Proclamation threw the country's economic institutional structures into dramatic change (Table 2-1).

First, Cuba's international relations were affected by (1) economic sanctions implemented by the United States (measures prohibiting imports and exports), (2) the strengthening of ties with centralized socialist countries such as the Soviet Union and those in Eastern Europe, and (3) Cuban participation in the international economy taking the form of a state monopoly on trade. Sanctions by the United States represent retaliatory measures against the nationalization of means of production (assets of the United States companies were also frozen), which will be discussed later. Depending mainly on sugar exports to the United States prior to the revolution, these sanctions dealt Cuba a deadly blow. Strengthened ties with socialist countries, on the other hand, acted as a buffer against this loss; this issue will be dealt with in further detail later. The state monopoly on trade in Cuba is relevant to our next point. This monopoly represents an intrinsic part of the centrally planned economic system, putting foreign trade under central control. This monopoly was also intended to

Table 2-1 Changes of Institutional Structures in the Cuban Economy

	1960s to First Half of 1980s Extensive Import-Substitution Industrialization	Second Half of 1980s Structural Crisis	1990s Composite Crisis and Reform
International Relations and Forms of Participation in International Economy	Economic sanctions by the United States; relationship of division of labor with the Soviet Union and Eastern European countries (membership in CMEA); generous assistance from CMEA member countries; excessive protectionism under state monopoly on trade	Suspension of negotiations on external debts with Western countries and moratorium; gradual decline in available aid from CMEA countries	Collapse of centralized socialism in the Soviet Union and Eastern Europe and of CMEA structure of preferential trade and assistance; strengthening of economic sanctions by the United States; difficulties in external debt negotiations; gradual elimination of state monopoly on trade; conversion to promotion of foreign investment; legalized possession of dollars
Relationship Between State and Economy	Single-party control by the Communist party; nationalization of production means; formation of centrally planned economic system; very limited decentralization (SDPE) and liberalization (agricultural free market, etc.); soft restrictions on budget	Signs of the "failures of planning;" further easing of budget restrictions; ideological constriction ("rectification" movement)	Ad hoc reform forced by external crises; a certain degree of decentralization; recognition of various forms of possession and management (increase in stock companies, conversion to cooperatives of state-run farms, expanded approval of self-employment); introduction of free markets; inertia of centralized regulation; from maintenance of soft budget restrictions (1990-1993) to hard budget restrictions (from 1994)
Corporate Organization and Relations Between Companies	Dominance of vertically integrated large-scale state-run companies; weak competition and division of labor between enterprises; control of agriculture by state-run farms	Expansion of corporate deficits; pioneering attempts at reform in military enterprises	Expansion of corporate deficits; a certain extent of reform (downsizing, division and decentralization, financial independence); germination of competition between enterprises; underdeveloped division of labor between companies and industrial organization
Labor Relations	Full employment; tradition (pre-revolution) and resuscitation (from 1970s) of labor movement; limited introduction of quota system and scientific management; egalitarian wage structure and piecework wage system with little material incentive; minute job classification; substantial social welfare and "human development"	Average-wage growth rates surpass productivity growth rates; pioneering attempts at reform in military enterprises (strengthening labor discipline. introduction of flexibility in job and wage structures)	Separate wage scales (still egalitarian, but higher wage structure) and special material incentive system in strategic industries; continuing reform in military enterprises; massive dismissals accompanying corporate reform and introduction of flexibility (with fixed compensation); fundamental maintenance of social expenditure (slight retreat)
Financial System	Ultra-centralized system controlled in all respects by the sole bank (National Bank of Cuba); passive role of money	Permission of real-side economic imbalance and soft budget restrictions	From centralization inertia (until 1993) to functional division and decentralization (from 1994); preparation for establishment of autonomous central bank

Source: Materials compiled by author

protect domestic industry at the same time. An additional point relating to Cuban participation in the international economy was the possibility of foreign investment (1982 foreign investment legislation) in the context of limited decentralization which will also be discussed in more detail later. This treatment of foreign investment was also strongly regulatory in its nature and resulted in little practical effect.

Second, the relationship between the Cuban state and the economy was modeled on the centrally planned economic system implemented by the Soviet Union and Eastern European countries, and a structure in which the state was committed to every aspect of the economy was instituted. A Communist Party-controlled political regime and nationalization of means of production formed the institutional base for this structure². Although even agriculture was not necessarily completely collectivized in some Eastern European countries such as Poland, the relative importance of the state-operated sector, incorporating agriculture as well, was extremely high in revolutionary Cuba (until 1977, the state operated approximately 80% of agriculture and 100% of other sectors³). Limited reform of the centralized system, such as expanded corporate autonomy, also began to be pursued in the 1960s in the Soviet Union and Eastern European countries, but Cuba remained committed to its out-dated ultra-centralized planned economic system. A "system of economic direction and planification" (*SDPE*), also modeled on Soviet and Eastern European reform and decentralization, was introduced in 1976, but as is well known, this system was also in reality strongly centralized in its nature⁴. Although a free agricultural market was established in this context, this was eliminated in 1986. In this respect, it should be noted that a system of bonuses for company managers, common to the systems of Cuba's allies, was never adopted in Cuba⁵, resulting in an exceedingly "Communist" relationship between the state and the economy.

Third, extremely large-scale and vertically integrated corporate organizations were formed. Although the majority of pre-revolution companies were privately operated, these were generally small enterprises, with the exception of certain foreign-capital firms and sugar industry companies. As already described, however, because complete nationalization, exceeding even that of other centralized socialist countries, was enforced after the revo-

lution, a conversion to large-scale management that included newly established companies was pursued. At the end of the 1980s, the average company in the industrial sector held 15 million pesos (official rate of one peso to the dollar) in fixed assets, employed approximately 1,300 people and maintained an annual production volume of 12 million pesos⁶. Controlled by *latifundio* prior to the revolution, the dominance of the agricultural sector by extremely large-scale farms was finally ensured with two sets of farmland reform (in 1959 and 1963). The average operating size of newly controlled state-operated farmland breaks down to 13,110 hectares for sugar cane, 10,822 hectares for citrus and other fruits, 32,760 hectares for rice, 2,778 hectares for tobacco, 24,865 hectares for cattle raising and 4,276 hectares for other crops from 1990 figures⁷. Another feature related to the post-revolution corporate organizational changes was the vertical integration instituted within enterprises and corporate trusts. These enterprises tended to be self-sufficient in terms of materials and other aspects of operations⁸.

Fourth, the following effects were evident in labor relations: (1) establishment of the principle of full employment, (2) traditional labor union activities and the revitalization of these activities from the beginning of the 1970s, (3) introduction of labor and production organizations based on a quota system and on a scientific management (Taylorism)⁹, (4) introduction of a piecework wage system with little material incentive in combination with an egalitarian base wage structure (Table 2-2) and (5)

Table 2-2 Wage Scale for Workers: 1962 and 1980

Major Job Divisions	1962		1980	
	Coefficient	Wage Rate	Coefficient	Wage Rate
I	1.00	0.43	1.00	0.49
II	1.15	0.50	1.14	0.56
III	1.35	0.58	1.31	0.64
IV	1.57	0.67	1.51	0.74
V	1.85	0.79	1.74	0.85
VI	2.17	0.93	2.01	0.98
VII	2.56	1.09	2.33	1.14
VIII	3.08	1.31	2.72	1.33

Note: Basic wages on hourly basis for manual laborers employed in non-agricultural sectors.

Sources: Figures for 1962 were compiled from González 1974, p. 79.

Figures for 1980 were compiled from *Gazeta Oficial*, 7 de Julio de 1980, p. 499.

improved living conditions for workers through the establishment of a welfare system in its broadest sense (health and sanitation, education, housing, and social security). The improved conditions for workers can be considered a prototype of what the United Nations Development Program calls "Human Development", and are in fact one achievement by the revolution of which Cuba is proud. It is certainly true that a comparison between Cuban and neighboring Latin American social indices, for example, confirms this accomplishment. When the comparison is expanded, however, to include other countries, it becomes obvious that Cuba does not necessarily have a monopoly on human development¹⁰. The interdependent relationship between the first four measures just listed and their macroeconomic implications will be discussed later.

Fifth, Cuba incorporated an ultra-centralized financial system controlled entirely by its national bank. Under the centrally planned economic system, in which prices and wages were uniformly fixed from above, the country's currency was deprived of an active function as a measure of value and played only a passive role in distribution and savings. The National Bank of Cuba monopolistically controlled the flow of this functionally limited currency corresponding to the demands of central planning. In the same respect, the functioning and authority of the central, ordinary commercial, investment and exchange banks were concentrated in the national bank, forming an "accounting center" on a national economy scale. This bank as well as public finances directed budget restrictions in the macroeconomy.

(2) Economic Growth Performance until the End of the 1980s

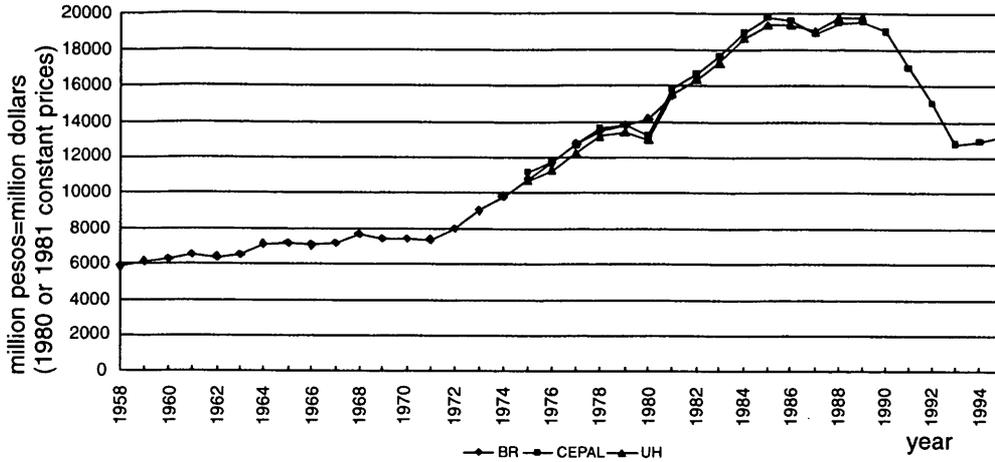
In the midst of these institutional changes accompanying Cuba's revolution, exactly what type of economic growth performance was evident up to the end of the 1980s? As has been indicated in another work¹¹, this point continues to be intensely debated. Even when calculations are limited to GDP estimates from official and from domestic and foreign academic sources, differing methodologies produce a number of varying figures. Differing time frames for each set of estimates also complicate attempts to understand growth results comprehensively (Figures 2-1, 2-2 and 2-3).

There are, however, significant points common to all data. First, long-term economic growth is evident in all estimates. This point is illustrated in the three figures just cited, but to provide further understanding, growth rate figures with relatively appropriate time frames will be discussed in more detail. Research by Figueras, who utilized GDP estimates from the Department of Economics at Havana University (complete data have not been published), estimated the average annual growth rate in real GDP at 4.2% between 1959 and 1990¹². The Pérez-López data¹³, which concerns a more limited time frame, estimated an average annual real GDP growth rate fall to 3.6% between 1965 and 1982. Conversely, however, Zimbalist and Brundenius calculated higher rates of real GDP average annual growth of 5.2% to 5.5% between 1962 and 1985¹⁴. Zimbalist and Brundenius also estimated the per capita real GDP average annual growth rate between 1960 and 1985 at 3.1%, and assuming these figures to be correct, Cuban growth over this period exceeded the average growth in major Latin American countries¹⁵. An immediate conclusion on which of these data are most accurate is not possible. In whichever case, however, the fact that the Cuban economy experienced long-term post-revolution positive growth until the 1980s is certain.

The second commonality lies in the fact that Cuba faced stagnation in the second half of the 1980s following cyclical fluctuation comprising stagnation in the 1960s, —relatively high growth in the 1970s, —relatively low growth in the second half of the 1970s, —and relatively high growth in the first half of the 1980s. This cycle is also broadly illustrated in Figures 2-1, 2-2 and 2-3. Referring to the Figueras estimates already described, a breakdown of average annual GDP growth rates by time reveals 2% between 1959 and 1970, 8% between 1971 and 1975, 5% between 1976 and 1980, 9% between 1981 and 1985, and 0% between 1986 and 1990¹⁶. Summarizing all the other data, each set reveals the cyclical activity just described and a tendency toward stagnation in the second half of the 1980s.

Two conclusions can be drawn with certainty at this point with regard to economic growth results in post-revolution Cuba. Long-term growth was evident until the 1980s, and following cyclical fluctuation, a tendency toward stagnation emerged in the second half of the 1980s.

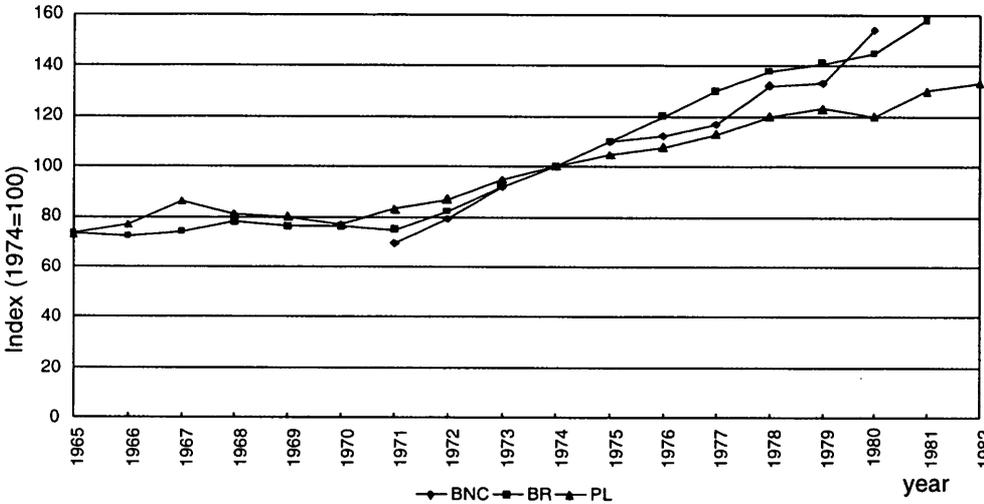
Figure 2-1 Real GDP: 1958-1995



Notes:
 Brundenius estimates (BR) in 1980 constant dollar prices; CEPAL estimates in 1981 constant dollar prices; University of Havana estimates (UH) in 1981 constant peso prices.

Sources:
 Figures compiled from Brundenius 1984; CEPAL 1995; and Hidalgo y Tabares 1992.

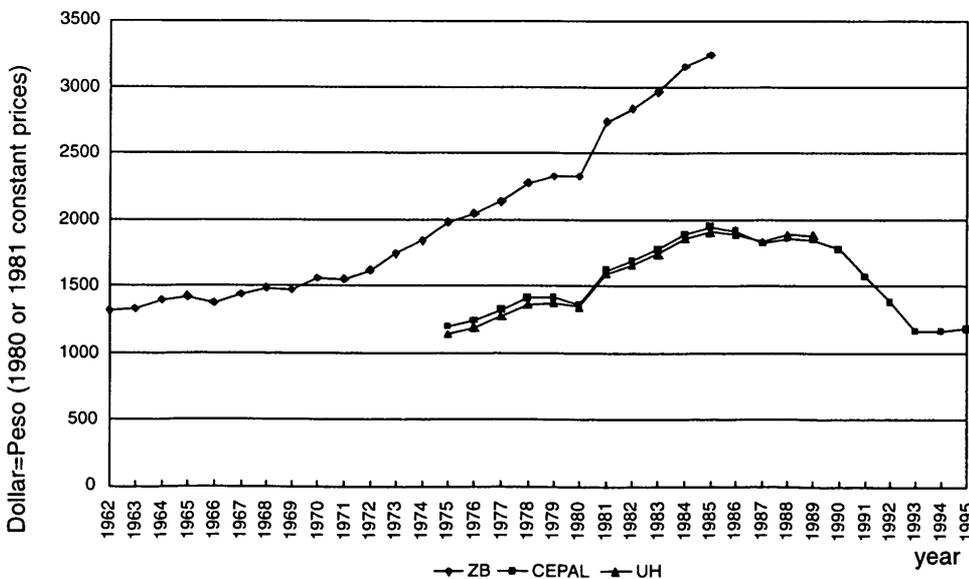
Figure 2-2 GDP Index: 1965-1982



Notes:
 BNC indicates National Bank of Cuba estimates; BR indicates Brundenius estimates; PL indicates Pérez-López estimates.

Source:
 Figures compiled from Pérez-López 1987.

Figure 2-3 Real GDP Per Capita: 1962-1995



Notes:
 Zimbalist=Brundenius estimates (ZB) in 1980 constant dollar prices; CEPAL estimates in 1981 constant dollar prices; University of Havana estimates (UH) in 1981 constant peso prices.

Sources:
 Figures compiled from Zimbalist and Brundenius 1989; CEPAL 1995; and Hidalgo y Tabares 1992.

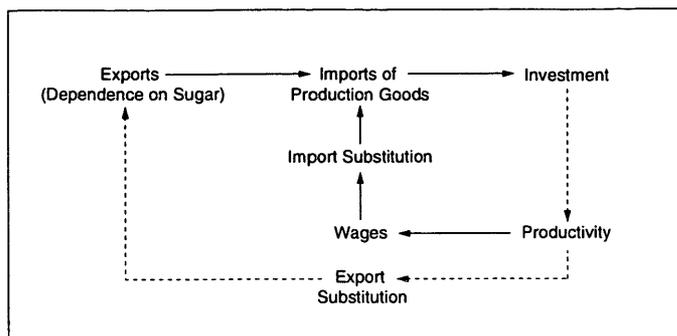
(3) Extensive Import-Substitution Industrialization Mechanism

Import-substitution industrialization, which was extensive in nature and resulted from inefficient but massive use of production factors, led the economic growth until the middle of the 1980s. The institutional changes previously described provided the foundation for this type of industrialization. Let us consider the first point in this regard.

According to Brundenius' estimates, the industrialization rate (the ratio of manufacturing production to GDP) stood at 24.4% in 1961 and rose to 30.7% in 1981¹⁷. Although notable growth in the capital goods sector was evident during this period (the ratio of GDP rose from 1.6% to 6.6%), the consumer goods sector remained unchallenged. Traditional items, including sugar, tobacco and nickel, maintained their majority share in the post-revolution export structure¹⁸, and export coefficient in the newly established manufacturing industry remained negligible, with certain exceptions. In other words, although there was a degree of contribution to GDP growth by the manufacturing industry, this increase was not based on foreign demand, but on demand from domestic import-substitution consumption.

The economic growth led by import-substitution industrialization was only extensive in nature. This phenomenon is primarily illustrated by the fact that, although investment rates in Taiwan and Cuba between 1960 and 1987 did not differ greatly, Cuba's per capita economic growth rate was only slightly less than half the Taiwanese rate. In other words, inefficient investments were implemented in Cuba¹⁹. The investment time frames, which averaged 1.43 years in 1975 and rose to 7.81 years in 1985, offer further verification of the investment inefficiency²⁰. Although significant variation was evident in labor productivity growth in the industrial sector over the years, long-term average growth in this sector appears to have remained at mediocre levels. Although fragmentary, some research places average annual growth rates at -2.8% from 1961 to 1965, 7.5% from 1971 to 1975, and -2.9% from 1976 to 1980²¹, while official statistics place these figures at 3.15% from 1976 to 1980, 1.80% from 1981 to 1985, 2.46% from 1975 to 1985, and 1.69% from 1975 to 1988²². Finally, although making somewhat arbitrary assumption, annual average growth rates of total factor productivity can

Figure 2-4 Extensive Import-Substitution Industrialization: 1960s-1980s



Note: Dotted lines represent relative weakness of circuits in question.

Source: Compiled by author

be calculated at 0.4% from 1963 to 1964, 2.2% from 1965 to 1969, 7.8% from 1970 to 1975, 1.5% from 1976 to 1978, and 11.4% in 1981²³.

As can be seen from the analysis just presented, post-revolution economic growth can be characterized by extensive import-substitution industrialization. Figure 2-4 illustrates its mechanism in diagram form. From the upper left side of the figure, it is evident that exports continued to depend on traditional items such as sugar. The growth rates for these items were not dynamic (an average annual growth rate of 0.8% from 1958 to 1989²⁴) and were insufficient to support imports of production goods (capital and intermediate goods, raw materials and fuel) or of certain consumer goods (food). The rates of growth for imports (an average annual increase of 2.8% from 1958 to 1989²⁵), consistently exceeded export growth rates with a continuous registration of trade deficits. Despite this, however, international relations, which will be described in more detail later, were able to cover trade deficits, and eased external restrictions.

Imported production goods were utilized in investments, advancing industrialization, but resulting in an import-substitution structure tending toward domestic demand. Although respectively rising above and falling below productivity growth rates, the absolute growth rates experienced in average wages and increased social wages account for the establishment of this structure. As already mentioned, however, productivity did not experience either continuous or average high rates of growth, and this translated to internationally un-

competitive domestic industrial (as well as traditional export) goods, an additional cause for the tendency toward import-substitution. In the final analysis, exports retained their traditional structure, and Cuba was unable to accomplish a conversion to export-substitution industrialization, which brings us back to the upper left side of Figure 2-4, the starting point for this discussion.

(4) Institutional Structures of Extensive Import-Substitution Industrialization

At this point, it is necessary to comment on intervention in the mechanism for the extensive import-substitution industrialization by the post-revolution institutional structures described previously (Table 2-1).

First, measures designed to constrict the trade deficit to below its potential level through favored trading and to cover the trade deficit were adopted under the CMEA structure. This offset (at least partially) the negative effects of economic sanctions imposed by the United States and eased external restrictions. Cuba became an official member of CMEA in 1972, and prior to and following its membership was provided with favored trading privileges (stable and relatively expensive exports of sugar and relatively cheap imports of Soviet crude oil at agreed-upon prices) and assistance (trade deficit subsidies, etc.) from Soviet-bloc countries. It is estimated that the total value of such subsidies, including relatively expensive imports of Cuban sugar by the Soviet Union, as well as trade deficit subsidies, amounted to 10%-15% of Gross Social Product in Cuba from 1978 to 1986²⁶. Albeit of limited quality, Cuba would also have acquired "late-comer advantage" in terms of technology through this international system ("advanced" technology incorporated in capital goods imported from the Soviet Union and Eastern European countries and techniques for macroeconomic planning and enterprise management). External restrictions were also partially postponed due to the acceptance of external debt to Western countries with the exception of the United States; conversely, however, this created problems from the middle of the 1980s, which will be discussed later.

Second, the mobilization of resources towards industrialization was accomplished relatively easily under the centrally planned economic system and

corresponding centralized financial system. Simple lack of investment coordination described before, distorted "achievement" in success indicators, a point also made with respect to the Soviet Union²⁷, and various inefficiencies due to "planning failures," including an irregular supply of materials, were also evident, however. In addition, while the state trade monopoly protected domestic industry and promoted industrialization, it also perpetuated the problems inherent in the country's corporate organization and labor relations which will be discussed next, due to isolation of the domestic economy from international competition.

Third, the establishment of new corporate organizations, although extremely large-scale and vertically integrated, certainly increased production capacity and contributed to industrialization. The establishment of excessively large-scale companies²⁸, however, indicates misinterpretation of the concept of "economy of scale," and the lack of organic industrial organization increased duplicated production between companies and within corporate trusts. All this strengthened the extensive nature of economic growth. The ratio of capacity utilization in the industrial sector in 1988, for example, was only 70%²⁹.

Fourth, various aspects of labor relations had ambivalent effects. Such aspects as full employment, the egalitarian base wage structure and a welfare system in its broadest sense provided more equal income distribution than the country had experienced prior to the revolution. The Gini coefficient, which had stood at 0.55 in 1953, dropped continuously, falling to 0.35 in 1962, 0.25 in 1978 and 0.22 in 1986³⁰. The resulting homogeneous, stable domestic consumption demand is itself the most significant direct basis for import-substitution industrialization.

On the other hand, a number of aspects related to labor relations prevented continuous productivity growth and brought about the extensive nature of Cuban economic growth. First, the labor market came to favor workers due to the adoption of full employment measures in the midst of lower population increases than most developing countries (exile and declining birth rate accompanying a substantial welfare system). Due to this conversion, loosened labor discipline, including absence and lateness, became chronic and caused labor disputes³¹. Second, a quota system was introduced from the 1960s and a scientific management

method (Taylorism) from the 1970s, but the previous system itself and the scope of application of the piecework wage system, which would indicate the degree of dissemination of both systems, appeared to be insufficiently common by the middle of the 1980s³². Circumstantial evidence suggests a lack of social consensus on a standard intensity of labor to be one basis for this situation³³. Third, the piecework wage system combined with an egalitarian wage structure (Table 2-2) and little material incentive, provided little motivation to work³⁴. Fourth, with the introduction of the quota system and scientific management, a minute division of job ladders itself became established; for example, the uniform national wage scale for manual laborers as of 1970 breaks eight major work divisions down into 209 minor classifications³⁵. This excessively limited workers' skill formation and burdened the efficiency of human resource training.

The results of an anonymous questionnaire survey (1985; ten companies in the Havana suburbs) regarding reasons for absence from work offer insight into the four issues just presented. According to this survey, "low wages" accounted for 17% of the main work environment-related reasons given for the 961 cases of absence researched, with "no appropriate labor organization" accounting for 13% and "lack of motivating conditions" for 9%³⁶. Although "culturally skilled workers" were generally cultivated through educational investment, particularly in terms of "human development," under post-revolution labor relations, this did not necessarily produce "professionally skilled workers."

3. *Structural Crisis in the Second Half of the 1980s*

Although including cyclical fluctuation, the extensive import-substitution industrialization formed against this institutional and social background achieved a type of economic growth up to the middle of the 1980s. As previously ascertained, however, the Cuban economy already faced stagnation, including negative growth rates, at the point of the 1989 Eastern European revolution and the collapse of the Soviet Union in 1991 (Figures 2-1 and 2-3).

One explanation for this stagnation lies in the deteriorating relations with Western countries. External debt expanded due to such developments as

the strengthening of economic sanctions by the United States, relatively low level of international sugar prices (Figure 2-5), declining petroleum prices on the international market (decreased resale revenue from Soviet crude oil) and contagion effect by the international debt crisis plaguing the country's Latin American neighbors, leading to a moratorium on Cuba in 1986. International financial relations between Cuba and the West were accordingly suspended, and a further decrease of hard currency-based imports, which had been conducted at any rate since Cuba's membership in CMEA, was necessary (a 30% decline from 1985 to 1987³⁷). Opportunities to receive high-quality "late-comer advantage" from advanced Western countries became increasingly rare. In relation to Figure 2-4, movement through the circuit "exports → imports of production goods → investment → productivity" stalled. However, in addition to the buffer provided to a certain degree by relations with CMEA member countries, imports from the West were restored in 1989, with imports during this year registering the highest total recorded³⁸. In consideration of these developments, the majority of causes of Cuban economic stagnation must be sought within Cuba itself; these are represented in diagram form in Figure 2-6. The following comments offer an explanation which incorporates the country's institutional and social background.

The first consideration is the gap between productivity and wages illustrated at the upper left side of Figure 2-6. This gap indicates that average wage growth rates exceeded rates of growth for productivity, which naturally aggravated corporate profitability and, if neglected, would have restrained investment. This tendency toward supply restriction had already begun to emerge in the industrial sector in the first half of the 1980s. Between 1976 and 1980, labor productivity and average wages in this sector experienced average annual growth rates of 3.15% and 1.30%, respectively, but from 1981 to 1985, these figures shifted to 1.80% and 4.30%, with the growth of average wages exceeding that of labor productivity³⁹. This tendency spread to more or less all sectors in the second half of the 1980s. Between 1986 and 1990, the average annual growth rate for labor productivity fell to -2.4%, and average wage growth is estimated at 0.8%⁴⁰. In this context, a large-scale decline in investment efficiency from the first half to the second half of the 1980s is worth noting⁴¹.

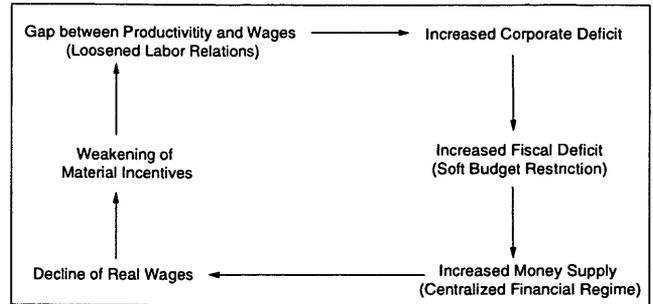
The declining productivity mentioned above can only result from extensive import-substitution industrialization and factors producing inefficiency that were inherent in the post-revolution institutional structure already described, including “failure of planning”, problems within corporate organization, and labour relations. Throughout the 1980s, however, relations contributing to imbalance expanded beyond those previously discussed. Conditions which created loosened labor relations⁴² appear to have been one core element of these relations.

A case study of an iron casting plant⁴³ serves as a typical example of this problem. Although this plant’s productivity stood at 88.0% (1984) and 63.0% (1985) of planned targets, actual payments of average wages comprised 89.9% (1984) and 101.8% (1985) of the planned figures, producing a gap between productivity and wages. This gap can be contributed to the following effects:

First, excessive wage payments resulted from fictitious quota over-fulfillment. As both supervisors and plant workers benefited from exceeding production quotas⁴⁴, they acted in collusion to report fictitious quota over-fulfillment and to receive premiums which had no material backing.

Second, wage payments were made despite the production of defective products. In an attempt to raise efficiency, machine operators worked plant

Figure 2-6 Internal Structural Crisis: Second Half of 1980s



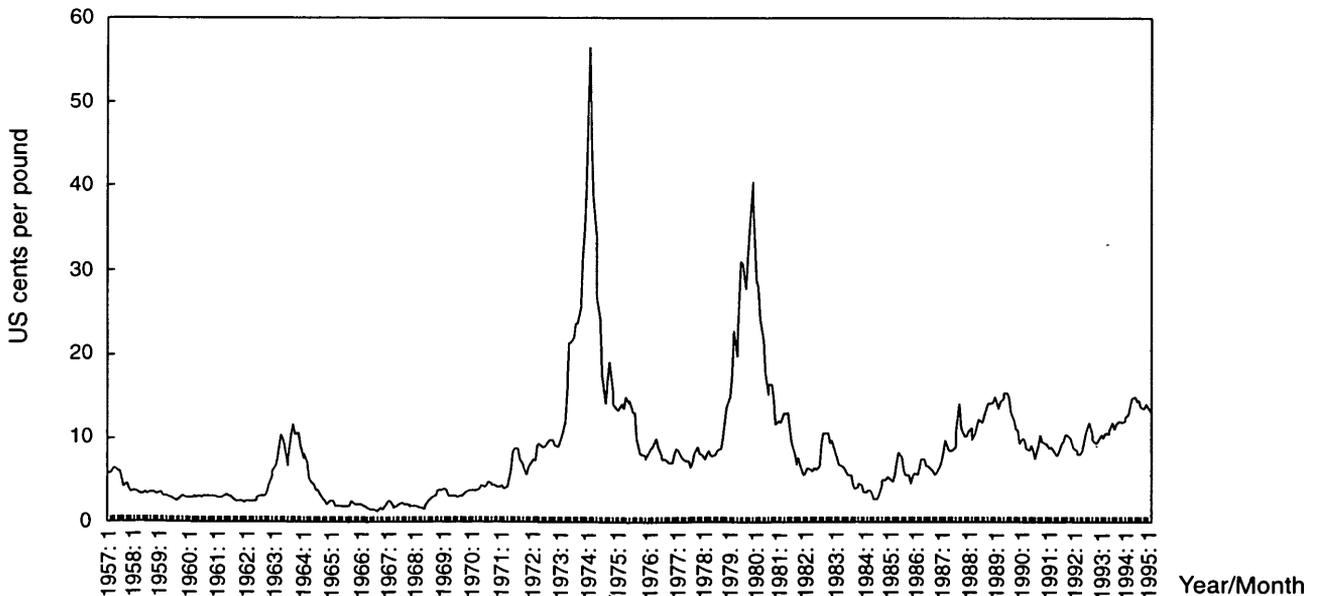
Note: The above figure does not include connections with other institutions.

Source: Compiled by author

machinery at a faster rate than that allowed by regulations, resulting in the production of defective products. Insufficient control by upper management led to payment of wages unbacked by production. This plant operates on a continuous production basis, and the lack of an appropriate quality control system means that the final product automatically incorporates the defect of defective part, resulting in loss. Despite this, however, wages were paid due to the difficulty of assigning responsibility.

The third factor was the bargaining procedures between labor and management in the deter-

Figure 2-5 World Market Price for Sugar (Sugar Caribbean)



Source: Compiled from Data Service & Information GMBH 1996

mination of production quotas. Those with a voice in determining production quotas were the workers who faced the realities of plant operations, which include the implementation of new production processes. These workers proposed quotas they felt could be easily attained. Although management attempted to statistically determine quotas by retaining expert technical consultants, this process was inefficient due to the significant amount of time required. These conditions created an interdependence between low productivity and increased payment of premiums.

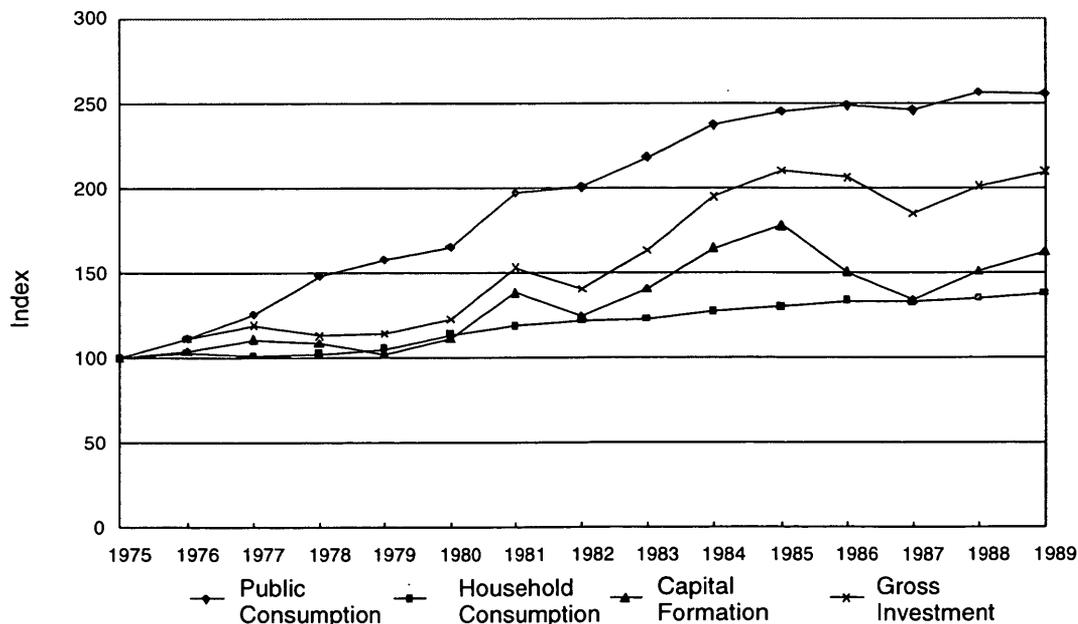
Fourth, an insufficient structure was instituted for compiling fundamental statistical data, and self-evaluations submitted by operators were often accepted without review. Production delays caused by operators were also frequently reported as unavoidable and proper; 50%-70% of wages were, however, guaranteed even with delayed production.

Although this case represents only a single example, it seems to illustrate a micro-economic foundation of the macro-economic imbalance caused by loosened labor relations.

Returning to Figure 2-6, the gap between productivity and wages provides at least one factor in the deficit which plagued companies. Investment

was restricted (Figures 2-7 and 2-8) and economic growth plunged. The Party and the state, however, could not completely ignore this, and enterprise deficit was accordingly subsidized. As the number of companies embracing supply restrictions increased, however, profit taxes paid to the national treasury decreased. As profit taxes accounted for an important part of fiscal income, this decreased revenue combined with increased subsidy expenditure expanded the fiscal deficit⁴⁵. The National Bank of Cuba issued increased amounts of currency in order to subsidize this fiscal deficit. Although this type of "soft budget restriction" somewhat eased the aggravated supply restrictions based on real-side economic imbalance, the increased currency produced excess demand due to the stagnated supply caused by continuous productivity declines. Monetary flow originating in the welfare system, including social security, reinforced this trend. Due to the regulation of prices, this imbalance created black market inflation. Real wages fell⁴⁶, and the incentive to work weakened. Accordingly, difficulties in productivity growth were experienced anew, and in addition to the institutional conditions already discussed, supply restrictions continued.

Figure 2-7 Consumption and Investment: 1975-1989



In sum, the pattern of economic development rooted in extensive import-substitution industrialization based on post-revolution institutional structures became exhausted by the middle of the 1980s. This was compounded by loosened labor relations, and resulted in the macroeconomic disequilibrium that has been described. Despite a "rectification" campaign instituted from 1986, "errors" actually increased, and a structural crisis emerged.

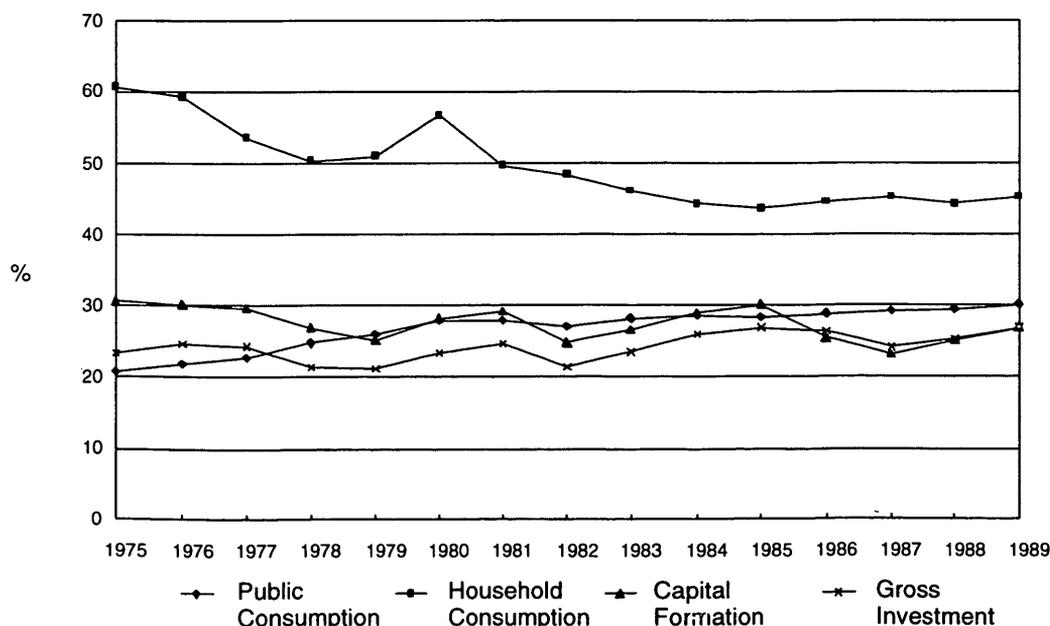
4. Conclusion

A summary of this chapter will serve as its conclusion. Following the success of the revolutionary movement led by Castro and Che Guevara in 1959, the Cuban economy was subjected to new institutional structures by the declaration of socialist revolution in 1961. Externally, economic sanctions were implemented by the United States, and Cuba entered a privileged trade and assistance network (CMEA) with the Soviet Union and Eastern European countries; domestically, a centrally planned economic system based on Communist-party control and the nationalization of means of production was introduced, with vertically integrated, extremely large-scale corporate organization, egalitarian labor relations and a centralized

financial system. This series of institutional changes achieved certain economic growth based on import-substitution industrialization, and simultaneously served as a prototype for "human development" emphasizing social welfare.

Import-substitution industrialization, however, which should have supported human development, was dependent on massive and inefficient input of production factors (extensive growth), and weak export substitution caused external restriction of the Cuban economy in the form of continuous trade deficits. On the other hand, a domestic imbalance appeared in the form of supply restriction such as the gap between productivity and wages and postponed revision of this restriction through fiscal and financial subsidies, particularly since the middle of the 1980s. Finally, intensified external restriction, including the debt problem with the West, was renewed. Growth accordingly suffered in the second half of the 1980s, and the economy was characterized by stagnation. Continued development of the Cuban economy had already become difficult under the country's existing institutional structures, and the country was already approaching a structural crisis prior to the external shocks caused by the collapse of centralized socialism in the Soviet Union and other countries and of CMEA.

Figure 2-8 Consumption and Investment (as percentage of GDP): 1975-1989



Source: Compiled from Hidalgo y Tabares 1992

Notes:

- 1 My viewpoint in consideration of these issues should be noted. This paper draws attention to the institutions (as well as their complementary structures) and underlying interests which have directed the Cuban economy. The word institution is used here in its broadest sense, indicating international relations and forms of participation in international economy, as well as domestic elements such as the relationship between the state and the economy, corporate organization, labor relations and financial systems. According to virtually uniform arguments recently offered by the most advanced schools of economics, this series of institutional structures and the interests which direct them vary infinitely by country and era, and the diversity of economic evolution is dependent on these differences. Considered in this light, economic reform is in reality nothing other than the reform of institutional structures and of underlying interests coordination. This chapter and the next also apply this viewpoint to its study of Cuba.
- 2 Chavance 1993, p. 22
- 3 Mesa-Lago 1981, p. 15
- 4 Roca 1989, pp. 300-303
- 5 *Ibid.*, p. 306
- 6 Torras y Marcelo 1995, p. 1
- 7 *Ibid.*, p. 2. The average scale of cooperative farmland was 600 hectares (*ibid.*).
- 8 Figueras 1994, p. 115
- 9 González 1974; Jiménez 1987
- 10 For comparisons with neighboring Latin American countries and Taiwan, see Sano 1992. The United Nations Development Program annual report also verifies that Cuba is not the only country which has positive value, deducting human development index ranking from real per capita GDP ranking, or in which human development is being conducted despite low income levels. Refer to each annual issue of UNDP, *Human Development Report*.
- 11 Sano 1992, p. 412
- 12 Figueras 1994, p. 37. The author calculated 4.5% for the average annual economic growth rate over this period using the published part of the same data for 1975 to 1989 (Hidalgo y Tabares 1992). The per capita GDP average annual growth rate was similarly calculated at 3.6%.
- 13 Pérez-López 1987, p. 111
- 14 Zimbalist and Brundenius 1989, p. 44
- 15 *Ibid.*, pp. 164-165
- 16 Figueras 1994, p. 37
- 17 Brundenius 1984, p. 77
- 18 At current prices, relative shares for sugar, tobacco and nickel in total export as of 1989 still stood at 80%, 1% and 7% respectively. At constant 1958 prices, these figures stood at 76%, 15% and 5% respectively (Figueras 1994, p. 152).
- 19 Brundenius 1990, p. 151
- 20 Figueras 1994, p. 113
- 21 Brundenius 1984, p. 71
- 22 Comité Estatal de Estadísticas 1989, p. 194. 1975 to 1985 and 1975 to 1988 figures were compiled by author from the same official data.
- 23 Brundenius and Zimbalist 1988, p. 62. Provisional calculations assuming the weights of capital stock and labor stand at 0.25 and 0.75 respectively.
- 24 Figueras 1994, p. 151
- 25 *Ibid.*
- 26 Cardozo and Helwege 1992, p. 32. Imai 1996 characterizes this relationship as the subordination of Cuba to the Soviet Union.
- 27 Refer to Nove 1971, pp. 219-. With respect to the issue of success indicators in Cuba, interesting evidence from refugees is presented by Roca 1989, pp. 304-305.
- 28 For specific cases, refer to Figueras 1994, pp. 113-114.
- 29 *Ibid.*, p. 114
- 30 Zimbalist and Brundenius 1989, p. 167, Table 10.8
- 31 Fuller 1987. According to Comité Estatal de Estadísticas 1989, p. 110, the ratios for absence from work stood at 11.1% in 1986 and 10.9% in 1987. In addition, 6.2% of "unusable labor time" comprised "absence without proper reason" in both years. "Illness" also appears to have been often used as an excuse for absence from work, as much as 23.9% in 1986 and 24.5% in 1987.
- 32 In 1986, 66.8% of the entire work force was employed in sectors in which the quota system had been introduced, with this figure standing at 64.5% in 1987 (*ibid.*, p. 115). The piecework wage system was adopted in 34.1% of the production sector operations in 1986 and 32.4% in 1987 (*ibid.*, pp. 112-113). Increased wages and bonuses for overfulfilling quota represented 3.4% and 1.2% of total wage payments in 1986 and 2.6% and 0.7% in 1987, respectively (*ibid.*).
- 33 As circumstantial evidence, resistance to the quota system in the 1960s by workers on sites where it was introduced (Mesa-Lago y Hernández, 1972, pp. 44-45) and the postponement of the official decision by the Cuba Workers Center (CTC) on whether to support the quota system and piecework wage system until 1973 can be cited.
- 34 For specifics, refer to Roca 1989, pp. 307-308 and Forster 1989, p. 250.
- 35 Ministerio del Trabajo 1970
- 36 Soto 1988, p. 16, Cuadro 13
- 37 Carranza 1992, p. 133
- 38 *Ibid.*, p. 138
- 39 Comité Estatal de Estadísticas 1989, pp. 194, 198.

Due to resource limitations, these and the following figures represent nominal values.

- 40 Ferriol 1996, p. 8
- 41 Marginal output for a marginal investment of 1 peso stood at 53 centavos in the first half of the 1980s, but fell to only 2 centavos in the second half of the same decade (Carranza 1992, p. 138). This signifies an increase in the marginal capital-output ratio, as well as a growth in labor productivity inferior to that in capital equipment rate.
- 42 URGENSE 1993, which discusses centralized socialist countries such as the Soviet Union and Eastern European ones at this time, proposes the concept of "loosened wage-labor relations." Although the expression is used here in a slightly different sense, this present report generally follows its use in URGENSE 1993.
- 43 This case study is taken from Quintana, Castellano y Henry 1986. The iron casting plant cited is Empresa Vanguardia Socialista de Fundición y Producción Ferrosas, el Taller 04 de Rodajes.
- 44 In addition to piecework wages and premiums for over-fulfilling quota paid to individual workers, bonuses (primas) corresponding to business results were also paid to entire companies and/or operator groups.
- 45 Figueras 1994, pp. 44-45. Specifically, refer to p. 45 Gráfico 10.
- 46 Real wages declined 4% from 1985 to 1989. Carranza 1992, p. 139