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Economic Development and Housing Policy in Cuba

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Introduction

Since the triumph of the Cuban Revolution in 1959, Cuba’s economic development has been marked by efforts to achieve four basic objectives:

1) *agrarian reform*, including land redistribution, creation of state and cooperative farms, and agricultural crop diversification;

2) *economic growth and industrial development*, including the siting of new industries and employment opportunities in the countryside;

3) *wealth and income redistribution* from rich to poor citizens and from urban to rural areas;

4) *provision of social services* in all areas of the country, including nationwide literacy, access to medical care in the rural areas, and the creation of adequate and affordable housing nationwide.

It is important to note that all of these objectives contain an emphasis on *rural* development. This emphasis was the result of decisions by Cuban economic planners to correct what had been perceived as the most serious negative consequence of the Island’s economic past—the economic imbalance between town and country.¹ The dependence of the Cuban economy on sugar production, with its dramatic seasonal employment shifts, the control of the Island’s sugar industry by American companies and the siphoning of sugar profits out of Cuba, the concentration in Havana of the wealth created primarily in the countryside, and the lack of economic opportunities and social services in the rural areas, were the main features of an economic and social system that had impoverished the rural population, creating a movement for change.

While these development goals have remained relatively constant since 1959, the economic model adopted by the Cubans to achieve these objectives has been continuously reevaluated and modified, resulting in six distinct phases of the Revolution. In each phase, differences in the structural characteristics of the economic system were accompanied by shifts in economic development *policy* whereby priorities for attainment of the four development objectives were rearranged.

The organizational basis of these phases can be briefly described as follows:²

1) 1959-60, transition to a mixed economy through initial nationalizations of key economic sectors;
2) 1961-63, extension of nationalizations and adoption of a more centralized, state-controlled command economy;

3) 1964-66, debate over, and test of, alternative socialist economic models, one stressing centralized planning influenced by Chinese policies, the other emphasizing a mixture of central planning and decentralized initiatives advocated by reform economists in the USSR and practiced in Yugoslavia;

4) 1966-70, adoption of the centralized planning system and rejection of the Yugoslavian and reform model;

5) 1971-76, rejection of policies practiced during 1966-70; new emphasis on integration of central planning with market mechanisms and decentralized planning;

6) 1976-present, extension of previous phase with more systematic integration of market mechanisms, decentralized economic incentives, and centralized economic planning; passage of first five-year plan (1976-80) and second five-year plan (1981-85).

Though policies fluctuated dramatically from one phase to the next, a very sharp line of demarcation separates the 1960s from the periods after 1971. Therefore, each phase is connected to one of two broader stories: either the story of the 1960s with its tumultuous shifts of emphasis and erratic economic performance, or the period after 1970 which displayed greater balance and stability.

Yet, in spite of different phases in which the structure and policies of the economy changed, a line of continuity unifies the post-revolutionary period. After 1961, the economy, for the most part, was no longer market-driven but functioned on the basis of planning (though implemented in different forms and with varying results). Housing and construction, as one of the economy's primary activities, was therefore more directly integrated into the logic of planning decisions that determined the structure and policy goals of the economy.

In this essay, I will analyze how the changing patterns of Cuban economic development since 1959 have brought about accompanying changes in the trajectory of Cuban housing policy. The essay will more fully examine the organizational character, policies, and goal outcomes of economic development planning for each phase, and show how housing policy evolved from, and changed with, the patterns of economic development.

The Cuban Economy Before the Revolution

Historically, the Cuban economy has been dominated by the sugar industry. During the 1950s, cane fields represented from 60-70 percent of cultivated land. Refined sugar accounted for 84 percent of the Island's export earnings, which in turn represented roughly 28-30 percent of GNP. The structure of the Cuban labor
force also revealed the extent to which agriculture and sugar dominated the country's economic life.5

The most important characteristic of the sugar industry was the control exerted over it by the U.S. Virtually all of the refining was performed in sugar mills owned by American companies. In addition, the 28 largest sugar companies owned or controlled approximately 2.1 million hectares of farm land representing 20 percent of land under cultivation.6

The remaining 80 percent of the farm land was dominated by large Cuban growers. At the time of the Revolution, eight percent of Cuban farms constituted 70 percent of the farm land.7 The remaining 10 percent of the land was divided up between medium and small growers, who actually represented 92 percent of Cuba's farmers.

The dominance of sugar in the Cuban economy, and the continuation of sugar as the Island's primary economic activity, was institutionalized by the Reciprocal Trade Agreement of 1934 between the U.S. and Cuba, which established the legendary sugar quota. Every year after 1934, the U.S. Congress established a specific amount of sugar the U.S. was obliged to purchase from Cuba. As a result, Cuban agriculture was actually planned, through the efforts of the refining companies and the growers' associations, to fulfill the American quota. Investment in economic activities that diverted resources away from fulfillment of this quota was severely restricted by policies of the Cuban State. Therefore, the U.S. Congress, by imposing the sugar quota, literally directed the course of Cuban economic development and investment.

As a result of this policy Cuba was not able to diversify its agricultural base or industrialize. In addition, the large growers who had the most to gain from the sugar quota found it in their interest to maintain a sizeable portion of their land in reserve, so that they could easily respond to changes in quota demand. Consequently, large areas of cultivatable land lay idle, making Cuban agriculture extremely inefficient. Land taken out of cultivation only exacerbated the unemployment situation in the sugar-producing rural areas, where seasonal conditions had already made employment prospects for rural residents very unstable.8

The lack of steady employment opportunities in the countryside was the basis for an unfavorable social and economic climate in rural Cuba. The Census of 1953 revealed that such social indicators as housing conditions, literacy, and sanitary and health conditions in rural areas were much below the national averages. Indeed, 41.7 percent of the rural population was considered illiterate, compared to 11.6 percent in the urban areas. Out of 793,000 total urban housing units, 66,000 (8 percent) were considered uninhabitable, while in the rural area 118,000 housing units out of a rural total of 463,000 (25 percent) were unfit for
human habitation. Only one rural hospital existed in the entire country. The results of a government survey taken in 1956-57 also showed that caloric intake and diet of the rural population were below the standards for the rest of the Island, and that the conditions surveyed in the 1953 Census had not changed. The impoverished condition of the rural population can also be gauged by the increase in migration of rural inhabitants to the urban areas, visible in the expansion of Havana’s shantytowns during the 1950s with their dilapidated housing units.

**Housing Conditions in 1959**

The outstanding feature of the 1953 Census of Housing is the disparity of housing conditions in urban and rural areas. Of the housing in urban areas, roughly 53 percent was considered "good", while only 26 percent of rural housing was in the same classification. Noted above was the fact that in the urban areas, only eight percent of the housing units were considered uninhabitable; the figure for the rural areas was 25 percent. It should be emphasized that these figures are probably understated. Several thousand units considered "acceptable" in the Census for both rural and urban areas were no doubt uninhabitable. On the eve of the Revolution in 1959, the number of uninhabitable housing units was estimated by unofficial sources to be between 200,000 and 700,000—a figure that represented 47 percent of the housing stock occupied by 53 percent of the population.

![Table 1](image)

**Table 1**

<table>
<thead>
<tr>
<th>POPULATION IN MILLIONS, CUBA</th>
</tr>
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<tr>
<td>-----</td>
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<tr>
<td>5.83</td>
</tr>
</tbody>
</table>

Source: Census.

During this period, Cuba did not have a housing policy, defined as governmental actions taken to alleviate problems of housing affordability and availability. Very little housing was built or provided by the public sector. From 1946 to 1959, housing constructed in Cuba was built by private initiative. This privately constructed housing satisfied demand in a very restricted sector of the housing market, namely the urban and affluent consumer of housing. During this period, the demand for rural housing did not constitute a market for the supply offered by private contractors—high-grade construction with profit as the goal. The standard of living of the Cuban rural dweller was so low that the rural family could not be incorporated into the market either as a buyer or renter.
Estimates on the number of housing units actually constructed from 1946 to 1959 range from 5,000 to 26,000. There is also some disagreement on whether housing demand was met during this period. More important than these issues, however, is whether the social demand for housing as outlined in the 1953 Census was met by the supply offered by private initiative. The market demand for housing in Cuba was vastly different from the social demand prior to 1959. Clearly, the Census itself suggests that, while market demand may have been satisfied, social demand was left unmet, particularly in rural Cuba.

The Rural Strategy of the 1960s

As early as 1953, Fidel Castro, in his famous self-defense following the unsuccessful attack on the Cuban Army's Moncada Barracks, declared that the economic program of a revolutionary government would concentrate its efforts on benefits to the rural population. Not only was the decade marked by efforts to redistribute wealth to the countryside, but the spatial patterns of investment and economic activity also displayed a rural bias. Political considerations, in addition to spatial disparities, were also responsible for this pattern of development. The new government needed to display a certain resolve in attacking the problems of rural Cubans who had formed the social base of the revolutionary movement.

1959-60: In the period immediately following the triumph of the Revolution, the new Cuban Government lacked a clearly articulated strategy for economic development. Part of the reason for this lies in the fact that the July 26th Movement, which had led the victorious struggle against the Batista regime, did not as yet have a clearly defined ideological orientation. The new Government did, however, have a loosely defined set of goals regarding social reform, and put into effect a number of programs designed to achieve those reform objectives.

The initial emphasis of the development strategy pursued by the Castro leadership was on redistributive measures, for redistribution of the Island's wealth. Priority was to be given to elevating the rural standard of living, and to alleviating the poverty conditions in shantytowns surrounding Havana and the slums within the capital city.

Accomplishment of these redistributive measures, however, implied that certain institutional changes in the old economic system would have to be pushed forward. Elevation of the rural standard of living, along with the elimination of urban shantytowns (themselves the creation of conditions in the countryside), required, at the very least, a program of full employment. Yet the unemployment rates in the Cuban countryside could not be treated as an isolated phenomenon. This problem stemmed from
the broader institutional structure of the Cuban sugar industry, at the center of which loomed the American sugar quota. Consequently, for the Cuban leadership, the key to wealth redistribution lay in transforming the institutional basis of the sugar industry.

A major land reform program known as the Agrarian Reform Law was one of the early vehicles designed to accomplish initial revolutionary objectives. Under this legislation, all farms exceeding 400 hectares were nationalized and put under control of a new Ministry, the National Institute of Agrarian Reform (INRA). By 1961, 37 percent of all agricultural land had been nationalized. Large estates, however, were for the most part maintained as single production units and transformed into cooperatives. Tenant farmers and sharecroppers cultivating subdivided plots of large estates were given ownership of the land they farmed, up to a maximum of 67 hectares. By 1960, all U.S.-owned sugar mills were also nationalized, as were all other American properties. Thus, as a result of the provisions stipulated in the Agrarian Reform Law and the nationalization of U.S. factories, two of the principal bulwarks of the Cuban sugar industry--the system of land tenure and ownership, and the U.S. dominance of the sugar-refining process--were systematically transformed.

Further measures, aimed at recasting the institutional base of the sugar industry, were taken through the complete nationalization in 1960 of all foreign trade, hitherto dominated by the conditions of the quota system. Other significant nationalizations undertaken by the new Government included banking and all foreign-owned oil refineries.

In addition to these steps, the Castro leadership implemented a number of measures designed to reduce dependency on sugar itself. These measures were motivated primarily by the identification of sugar with the Island’s past social and economic problems. It is, therefore, not surprising that a program of agricultural diversification was launched in 1960 as a means of creating a more prosperous rural economy. Large estates formerly producing sugarcane were cleared and replanted with other crops. In addition, lands that were allowed to lie idle during the years of the sugar quota were frequently cultivated with new crops. By 1961, the policy of diversification had resulted in the removal of 200,000 hectares--15 percent of the area cultivated with cane--out of sugar production.15

In keeping with the spirit of redistributing wealth, Castro and Cuban planners launched an ambitious program to expand distribution of social services such as education and health care. In the field of education, the new Government viewed literacy as a means for the rural population to expand their economic opportunities. While 12 percent of the urban population could not read or write, 42 percent of rural adults were illiterate. A massive literacy campaign conducted primarily in rural areas was thus
launched in 1960. By the end of 1961, illiteracy nationwide had been reduced to six percent.\textsuperscript{16} In the field of health care, the Government again embarked upon a program of service redistribution. The number of rural hospitals thus increased substantially from one in 1959 to 38 by 1962.\textsuperscript{17}

\begin{table}
\centering
\caption{HOUSING CONSTRUCTION IN CUBA 1959-84}
\begin{tabular}{llll}
\hline
Year & Number of Units & Year & Units \\
\hline
1959-63: & 17,089 & 74: & 18,552 \\
64: & 14,200 & 75: & 18,602 \\
65: & 5,040 & 76: & 15,342 \\
66: & 6,271 & 77: & 20,024 \\
67: & 10,257 & 78: & 17,072 \\
68: & 6,458 & 79: & 14,523 \\
69: & 4,817 & 80: & 15,462 \\
70: & 4,004 & 81: & 16,794 \\
71: & 5,014 & 82: & 22,282 \\
72: & 16,807 & 83: & 26,320 \\
73: & 20,710 & & \\
\hline
\end{tabular}
\end{table}

\textsuperscript{16} Republica de Cuba, \textit{Anuario Estadistico} (various years); \textit{Boletin Estadistico} (various years); \textit{Cuba en Cifras 1983}; Carmelo Mesa Lago, \textit{The Economy of Socialist Cuba}, p. 173.

During the first two years of the Revolution, housing was viewed by the Cuban leadership as a component of a comprehensive strategy to redistribute social services and transform the spatial pattern of development. The new Government adopted a decidedly different view of its role in the provision of housing for the Island's rural and poor population, viewing housing as a public service rather than as a commodity responding to the market as it was defined in 1959. Initially, Cuban housing planners argued that each family should not only have a decent place to live, but also the right to own their own home or apartment—a sentiment articulated by Castro in his 1953 speech before a State Tribunal in defense of his attack on the Moncada Barracks.

In the spirit of Moncada, and in keeping with the initial objectives of the new Government for wealth redistribution, housing planners enacted an active housing policy designed to increase housing affordability and availability, especially in the countryside. A series of measures were implemented to achieve this objective.

In March of 1959, all rents were reduced 30 to 50 percent, with special provisions to protect the income flow of small property owners. At the same time, the Government passed a law creating the National Institute for Savings and Housing (INA V), to finance the construction of individually-owned homes. A self-help mutual
aid program was also established to provide assistance to individuals for self-constructed housing. Both institutions marked the beginning of government involvement in actual construction of dwellings that complemented measures to reduce the percentage of Cuban incomes devoted to rent payments.

In October of 1960, with passage of the Urban Reform Law, the Cuban Government took further steps to decrease the burden of rent and to allow for the expansion of home ownership. The Law permitted tenants to acquire the housing they inhabited, through monthly payments to the State for a period ranging from five to 20 years (depending on the age and condition of the building). The Law also stipulated that no family after 1961 would have to pay more than 10 percent of family income on rent or mortgage payments in state-controlled housing.

During the initial years of the Revolution, the Government invested heavily in housing construction; this investment paralleled a more general construction boom in social service infrastructure such as educational facilities and medical facilities. Accurate figures for the period of 1959-60 are lacking, but from 1959-63 an annual average of 17,089 new housing units were constructed in Cuba. Roughly 35-40 percent of this housing was constructed by the government in rural areas—a high figure relative to the situation prior to 1959. In addition, slums and shanty-towns in and around Havana were practically eliminated in the first years of the Revolution, due to the Government's new public housing program.

In spite of these accomplishments, however, the housing deficit was still enormous, owing to the situation inherited from the pre-revolutionary period. What the new Government managed to accomplish in the first two or three years of the Revolution was to put into place certain mechanisms for the provision of housing as a government-sponsored social service. The intention of Cuban housing policymakers was to make this service more accessible, especially to the rural population, through a combination of new construction and reduction in rents. Housing policy during this period thus reflected the more general economic development strategy of the new regime to redistribute wealth and to alter the spatial pattern of development policy.

1961-63: By 1961, a basic contradiction became apparent in the organization of the Cuban economy. On the one hand, the revolutionary regime was committed to a set of reforms that attempted to redistribute wealth and income—reforms that had required a certain reorganization of the country's economic institutions. On the other hand, the Government did not really have a comprehensive program for organizing and coordinating the economic apparatus and corresponding institutions now under its control. The leadership either had to back off from its attempts at reform, or take on the task of reorganizing nationalized sectors and
institutions through an integrated system of planning. Reluctant to halt the rationale for the Revolution, the Cuban Government in 1961 found itself in the position of having to implement a new set of structural changes in the economic system. On May 1, 1961, following the victory over the U.S.-sponsored invasion of Cuba, Fidel Castro proclaimed that the system required to organize the economy for reform would be a socialist system. The socialist model adopted by the leadership at this time was taken from the Soviet Union, and utilized highly centralized economic planning.

Under the new system, the state central planning agency (Junta Central de Planificacion or JUCEPLAN), originally established in 1960 to guide the private sector through indicative planning, was responsible for drawing up annual and three-year macro-development plans for approval by the political leadership. A network of central ministries was created to take charge of the various economic sectors and to transform them into State monopolies. Enterprises producing the same type of goods were merged into State Trusts under the control of the appropriate Ministry. Output targets were established through the coordination of Ministries with JUCEPLAN.

With institutions for central economic planning now more firmly in place, nationalizations begun in 1959 in industry, construction, and local commerce were extended. The largest increase in the nationalized sector during this period, however, occurred in agriculture as a result of the Second Agrarian Reform Law of 1963.

As the role of economic planning increased after 1961, the need for agriculture (as the Island’s major economic activity) to become integrated into the planning system also increased. Thus, one of the primary motivations for the Second Agrarian Reform (which brought 70 percent of the agricultural sector under State control) was the fact that agricultural planning would be greatly facilitated by an extension of lands in the State sector.

During this period, the abrupt transition to a centrally-planned economy, coupled with the inexperience of the Cubans in administering a planned economic system, the embargo imposed by the U.S., and a series of setbacks in the sugar harvest, actually contributed to the worst recession of the Revolution. Priority was still given to diversification in agriculture. However, during this period there were no significant increases in non-sugar agricultural goods output. Furthermore, the reduction of the cultivated area of sugar cane begun during the previous phase, combined with the administrative changes of the new state farm structure, led to substantial decreases in the sugar harvest, which reached the lowest level under the Revolution in 1963. An expanding trade deficit resulted from the low harvests which, in addition to provoking the recession, caused Cuban policymakers at JUCEPLAN to curtail plans for financing industrial development through export
In spite of the recession, unemployment was further reduced.\textsuperscript{20} During this period, the emphasis on equalizing distribution of the Island's wealth and social services also continued from the previous phase.

The expanded use of planning in the economic life of the country, though erratic in its initial application, meant that goals and output targets were more sharply delineated than in the previous phase. Priorities in the construction sector became very tightly drawn. From 1961-63, the primary emphasis for new construction was on infrastructure work linked to the agricultural sector—the development of the rural road system, construction of dams and aqueducts for irrigation purposes, and the upgrading of port facilities to facilitate foreign trade.\textsuperscript{21} Plans were also made for construction of new factories and the placement of new production centers in rural areas, although, as noted above, most of these plans for industrial development were not realized. In the field of social services, priority was given to construction of educational facilities, hospitals, and public health clinics, with continued emphasis on locating these facilities in the rural areas. In the State's construction-sector plan for 1961-63, housing was relegated to a decidedly secondary position.

Though statistics for housing construction from 1961-63 are aggregated in the period 1959-63, making them difficult to compare with subsequent annual statistics, it is almost certain that housing construction fell off sharply from 1961-63. In addition to the recession and the low priority given to housing in the construction plan, a building materials shortage beginning in 1961 exacerbated the housing situation.\textsuperscript{22} The trade embargo had seriously affected the availability of materials such as lumber, since the Island possessed a very limited supply of indigenous wood. As a result, Cuban housing planners began to formulate plans for using cement and concrete—for which the country possessed the raw materials—for housing as well as other construction projects. A small cement industry that was already in existence prior to the Revolution was to be expanded. Facilities for prefabricating building components were also planned. Initial efforts were made to use concrete for housing and housing improvements in the rural areas during this period. Yet, these efforts were minimal (though lavish in their limited application), owing to the limited capacity of the cement and construction materials industry at that time. These shortcomings also emphasized the necessity of integrating plans for housing construction with plans for the development of the industrial infrastructure required to produce housing in Cuba such as cement factories, prefabrication plants, and the expansion in energy sources needed for operation of these plants. Such integrated plans, however, had to wait until the 1970s.
1964-1966: The difficulties experienced by the Cubans from 1961-63 in establishing effective planning mechanisms, coupled with the disappointing performance of the economy during those years, provoked an intense debate over, and test of, alternative socialist economic models from 1964-66. One model, influenced by aspects of Chinese planning during the Cultural Revolution and advocated by Ernesto Che Guevara, placed emphasis on the total elimination of market mechanisms in the economy and the abolition of supply-and-demand laws. Organizational features of the economic system proposed by Guevara and his followers included:

- A highly centralized planning apparatus;
- A rigid, hierarchical organization of state enterprises into branches of centrally-planned Ministries;
- Central financing of all state enterprises;
- The transfer of all enterprise profits to the state;
- State allocation of investment funds to enterprises regardless of enterprise profitability;
- The elimination of any mercantile relations between enterprises;
- The substitution of a state-controlled pricing system to replace prices based on costs and supply/demand laws;
- The gradual elimination of money as a means of exchange.

The system advocated by Guevara was, in effect, a more systematic application of centralized planning than had been implemented from 1961-63.

Confronting Guevara was a group of economists led by Carlos Rafael Rodriguez (currently Minister of Foreign Affairs). Known as "Pragmatists", this group drew inspiration from market socialism—the utilization of selected market mechanisms within the framework of a planned economy—that was influencing an economic reform movement in the USSR and was actually being practiced in Yugoslavia. The group in Cuba behind Rodriguez thus endorsed central planning, but coupled it with proposals for more enterprise autonomy and other market-oriented initiatives. The Pragmatists advocated:

- enterprise self-financing instead of state budgetary financing;
- more enterprise control over profits and losses, and hence greater autonomy in making investment decisions;
- mercantile relations between enterprises, with the use of money as a means of exchange between different establishments.

From 1964 until 1966, the two models operated in the two major sectors of the Cuban economy. The Guevarist system was used in the industrial sector; the reform model was utilized in agriculture and trade.
The most significant policy decision taken by Cuban economic planners during this period was the decision to reemphasize sugar production as the driving force of economic development. Plans for the expansion of heavy industry and for industrial and agricultural diversification were abandoned, at least for the short term. Instead, the Cuban leadership adopted the view that industrialization and diversification were possible only through a program that took advantage of the country's historically conditioned comparative advantage in sugar production. Diversification and industrialization had failed, according to Cuban policymakers, because the country had attempted to escape its own historical conditioning too rapidly. Balanced economic development was therefore possible by relying upon the Island's comparative advantage in sugar production, and expanding sugar exports to finance industrial development and diversification efforts. Investment was redirected toward the agricultural sector in order to strengthen the base of the new development strategy.

Table 3

PERCENTAGE DISTRIBUTION OF STATE INVESTMENT BY SECTOR IN CUBA, 1962-66 (based on current prices)

<table>
<thead>
<tr>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>29.4</td>
<td>24.3</td>
<td>30.5</td>
<td>40.5</td>
<td>40.4</td>
</tr>
<tr>
<td>Industry</td>
<td>23.1</td>
<td>31.6</td>
<td>29.1</td>
<td>18.1</td>
<td>16.7</td>
</tr>
<tr>
<td>Construction</td>
<td>4.3</td>
<td>5.8</td>
<td>4.6</td>
<td>3.8</td>
<td>2.2</td>
</tr>
<tr>
<td>Transportation &amp; Communication</td>
<td>9.5</td>
<td>9.6</td>
<td>9.1</td>
<td>11.7</td>
<td>14.3</td>
</tr>
<tr>
<td>Commerce</td>
<td>4.4</td>
<td>3.3</td>
<td>3.5</td>
<td>4.6</td>
<td>3.2</td>
</tr>
<tr>
<td>Housing &amp; Community Services</td>
<td>13.5</td>
<td>11.5</td>
<td>11.4</td>
<td>9.4</td>
<td>9.6</td>
</tr>
<tr>
<td>Education, Culture, Research</td>
<td>8.1</td>
<td>7.0</td>
<td>5.3</td>
<td>5.0</td>
<td>4.4</td>
</tr>
<tr>
<td>Health</td>
<td>2.0</td>
<td>1.6</td>
<td>1.9</td>
<td>1.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Others*</td>
<td>5.7</td>
<td>5.3</td>
<td>4.6</td>
<td>5.3</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

*Includes administration and finance, defense and internal security, and other minor activities in the material and nonmaterial sectors.

Source: Republica de Cuba, Boletin Estadistico 1966, p. 102. Taken from Carmelo Mesa-Lago, The Economy of Socialist Cuba, p. 45.

In addition to investment, employment in the state sector was also dramatically transformed. In 1963 the agricultural sector, the largest employment group, had 305,000 workers. By 1966, 450,000 employees were working in the state agricultural sector. The trend for employment in the sugar cane fields were similar. The figure increased from 122,000 to 222,000 for the same period.23 The shift in the country's development strategy toward an intensification of sugar production was accompanied by a
corresponding change in the nation's housing policy. Investment in housing and social services as a percentage of total state investment fell from 13.5 percent in 1962 to 9.6 percent by 1966, as shown in Table 3. The implication of this decline in housing investment, however, was more important for housing trends after 1966 than during the period from 1964-66. Actual production of housing units from 1964-66 of 15,209 annually, though less than the period from 1959-63, was probably slightly higher than during the recession years of 1961-63. Nevertheless, the adoption of the sugar export strategy and its implications for housing policy signalled the beginning of a trend that became even more pronounced during the final years of the decade.

1966-70: The instability of two competing economic models operating in different sectors of the Cuban economy could not last long. By the summer of 1966, the Cuban leadership took steps to resolve the apparent contradiction by extending the centralized Guevarist model into the agricultural sector. Existing market mechanisms were now dismantled in favor of a highly rigid system of agricultural planning and requisitioning, as was being tried in China.

Underlying this transformation, however, was a more radical version of the plan formulated in 1964-66 to use agricultural exports to finance diversified economic development in the future. Proposals were drafted for a dramatic expansion of the Cuban sugar harvest with the goal of producing an unprecedented 10-ton harvest by 1970. A highly rigid, centralized organizational model was viewed by the country's leaders as necessary to attain this goal.

From 1966-70, lands earmarked for cane cultivation increased by 35 percent. New varieties of cane were also introduced, as well as new techniques such as the use of herbicides and chemical fertilizers. Other important investments were made in further improving the rural road system for transporting cane, and in expanding water control facilities for irrigation. The import of tractors for expanding the mechanization of sugar cutting also increased markedly from a total of 1,950 tractors in 1962, to 8,982 tractors in 1969. In effect, a concerted effort was made during this period to expand the supply of modern agricultural inputs and equipment and to improve the infrastructure linked to the agricultural sector, such as transportation, communications, and irrigation.

Undoubtedly the most significant impact of the sugar policy from 1966-70 was the mobilization of the labor force to achieve output targets. Planned output simply could not be attained without substantial increases in the size of the labor force cutting cane. Workers employed in other occupations were therefore urged to leave their regular jobs for extended periods to assist the cane cutters in the fields. These workers were generally paid their
regular salaries while in the cane fields. In addition to these workers, however, special brigades composed of students, neighborhood groups organized by the Committees for the Defense of the Revolution (CDRs), and women organized by the Federation of Cuban Women (FMC) were enlisted to cut cane for periods ranging from 1-3 years. Workers in these brigades, who formed the majority of cane cutters, received a minimal salary.

From 1967 through 1969, the Cuban Government did not keep statistics on sectoral employment. This makes it difficult to ascertain the exact magnitude of the labor mobilizations in the sugar cane fields during this period. At the start of the "Big Push" in sugar production in 1966, there were 450,000 workers employed in the agricultural sector--already up from 305,000 in 1963. By 1970, the official Cuban Census recorded an astonishing 790,000 agricultural workers, which attests to the agrarian strategy of the period. Unofficial estimates of the labor force in the sugar cane fields for the harvest of 1970 indicated that as many as 1.2 million workers were mobilized to cut sugar cane in that year. All workers, whether paid or unpaid, were encouraged to donate their labor on the basis of political commitment to the Revolution.

In addition to solving, or attempting to solve, the labor shortage in the cane fields, these labor mobilizations were actually tied to a more general program of developing a system of work motivation based upon moral rather than financial incentives. The program was part of Guevara's vision of creating the new socialist human being, motivated by moral ideals and political commitment rather than the motivations of Adam Smith's "economic man".

Although a record 8.5 million tons of sugar was harvested in 1970, this figure fell considerably short of the projected target, as had the harvests from 1966-69. During these years, virtually all of the country's resources--financial, material, and labor--were directed toward the agricultural sector, seriously depleting resources from, and expenditures in, other sectors of the economy.

The impact of this economic development strategy on housing policy can be assessed most clearly in terms of housing production during these years. With resources fully mobilized for the sugar industry, housing production fell precipitously, reaching its lowest point during the Revolution in 1970, with only 4,004 housing units being constructed that year. In the same year, only 4,988 workers were employed in the housing construction sector. Furthermore, the labor mobilizations created an enormous need for new housing in the countryside at a time when housing construction had come to a virtual standstill throughout the Island. Consequently, housing conditions on the sugar cane farms deteriorated badly during this period, while rural housing in general did not improve. Urban housing, especially in Havana, was almost wholly neglected. From 1968-70, only 620 housing units were constructed in the capital city by the state construction
Housing Performance of the 1960s

With a housing deficit estimated at between 200,000 and 700,000 units in 1959, and with development priorities that resulted in the construction of 95,112 to 140,000 units from 1959-1970, the Revolution clearly accomplished very limited objectives in solving the nation's housing crisis during the 1960s. Fidel Castro himself even admitted in 1968 that the Revolution had built only 10,000 units annually "when in fact 100,000 were required." Though efforts were made to construct new housing in rural areas as part of a redistributive development strategy, rural housing conditions continued to be substandard simply because the massive effort required to overcome decades of neglect was not and could not be undertaken. Because of the very low rates of housing construction overall, urban housing was not much better. Estimates of the inadequate housing stock in Havana reached as high as 50 percent of the City's 400,000 housing units.

In terms of housing distribution, the Revolution fared slightly better. From 1959-63, 47 percent of new housing was constructed in the rural areas. This figure represented an extraordinary accomplishment in comparison with the situation in 1958. During the remainder of the decade, however, when priorities for housing diminished with changes in economic development strategy, this percentage of rural housing construction declined somewhat. Nevertheless, by the end of the decade Cuban housing planners had managed to bring expenditures for new housing construction in Havana to levels proportionate to the population of the capital. From 1959-71, the value of housing construction throughout Cuba amounted to 203.6 million pesos, of which 56.9 million were spent in Havana. This figure represented 27.6 percent of the total value of housing construction, which corresponded almost exactly with the percentage of Havana's population compared to the national population. The value of housing construction in Oriente Province, which was the most rural of Cuban provinces, was almost as high (51.3 million) as Havana. Oriente Province had only three-fourths the population of the capital. Yet, this favorable spatial dimension of Cuban housing construction during the 1960s, which reflected the strategy of the 1960s to redistribute wealth to the rural areas, did not diminish the need for greater efforts to solve the nation's acknowledged housing difficulties.
Table 4

EMPLOYMENT BY SECTOR (in 1000s)

<table>
<thead>
<tr>
<th>Year</th>
<th>Agriculture</th>
<th>Industry</th>
<th>Construction</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1962</td>
<td>297.0</td>
<td>267.0</td>
<td>104.0</td>
<td>1,083.3</td>
</tr>
<tr>
<td>1963</td>
<td>305.3</td>
<td>288.5</td>
<td>97.0</td>
<td>1,238.1</td>
</tr>
<tr>
<td>1964</td>
<td>386.2</td>
<td>302.7</td>
<td>108.0</td>
<td>1,368.6</td>
</tr>
<tr>
<td>1965</td>
<td>433.0</td>
<td>308.6</td>
<td>117.0</td>
<td>1,452.1</td>
</tr>
<tr>
<td>1966</td>
<td>449.0</td>
<td>323.4</td>
<td>118.0</td>
<td>1,517.3</td>
</tr>
<tr>
<td>1970</td>
<td>790.3</td>
<td>433.2</td>
<td>127.1</td>
<td>2,633.3</td>
</tr>
<tr>
<td>1971</td>
<td>603.6</td>
<td>440.5</td>
<td>132.7</td>
<td>2,081.9</td>
</tr>
<tr>
<td>1972</td>
<td>636.9</td>
<td>438.5</td>
<td>153.7</td>
<td>2,125.9</td>
</tr>
<tr>
<td>1973</td>
<td>670.3</td>
<td>453.2</td>
<td>176.5</td>
<td>2,245.7</td>
</tr>
<tr>
<td>1974</td>
<td>674.3</td>
<td>467.4</td>
<td>184.1</td>
<td>2,313.0</td>
</tr>
<tr>
<td>1975</td>
<td>685.2</td>
<td>472.8</td>
<td>208.4</td>
<td>2,391.6</td>
</tr>
<tr>
<td>1976</td>
<td>685.7</td>
<td>477.0</td>
<td>243.5</td>
<td>2,669.8</td>
</tr>
<tr>
<td>1977</td>
<td>628.5</td>
<td>578.3</td>
<td>296.4</td>
<td>2,790.1</td>
</tr>
<tr>
<td>1978</td>
<td>641.8</td>
<td>578.3</td>
<td>319.4</td>
<td>2,883.0</td>
</tr>
<tr>
<td>1979</td>
<td>620.0</td>
<td>580.0</td>
<td>319.0</td>
<td>2,919.0</td>
</tr>
<tr>
<td>1980</td>
<td>624.0</td>
<td>576.0</td>
<td>273.0</td>
<td>2,884.0</td>
</tr>
<tr>
<td>1981</td>
<td>619.0</td>
<td>607.0</td>
<td>266.0</td>
<td>2,974.0</td>
</tr>
<tr>
<td>1982</td>
<td>661.0</td>
<td>633.0</td>
<td>261.0</td>
<td>3,032.0</td>
</tr>
</tbody>
</table>

Source: Republica de Cuba, Boletin Estadistico 1968, Table IV.1; Censos de Poblacion Y Viviendas 1970, Table 18; U.S. Government, Directorate of Intelligence, The Cuban Economy: A Statistical Review, Table 43.

NOTE: During the sugar mobilizations of the late 1960s, labor force statistics were not published by the Cuban government.

The Economic Model and Strategy of the 1970s

The dismal economic performance of the late 1960s, marked by output losses and negative GNP growth rates, and the failure to harvest 10 million tons of sugar in 1970 compelled the Cuban leadership to once again reevaluate the direction of economic policy and eventually to dismantle the "moral economy". Shortly after the sugar harvest of 1970, Cuban policymakers acknowledged the extent to which the experiment of 1966-70 had acted as a brake on the development of the nation's productive forces. The new economic development strategy, adopted in August of 1970 at a special meeting of the State Political Bureau, emphasized a pragmatic, rather than idealistic, approach to economic policy-making, and gave top priority to economic efficiency.

In order to implement this basic change in policy toward more efficiency, Cuban planners introduced five crucial changes in the structural organization of the economic system: (1) decentralized planning, with more enterprise autonomy; (2) the use of certain market mechanisms discarded during the radicalism of the late 1960s; (3) greater reliance on material, rather than moral and political, incentives to improve worker productivity; (4) revival of existing organizations and creation of new institutions to increase
worker participation in decision-making at the factory level, which had been almost entirely preempted during the 1960s; and (5) the use of more comprehensive mechanisms for economic planning, with the introduction of five-year plans in 1976-80 and 1981-85.

While centralized planning remained the fundamental organizational feature of the economy, the role of decentralized planning was enlarged during the 1970s. Enterprises were given more autonomy in planning their own output targets, making investment decisions, setting wage levels, and hiring labor. Enterprises were also given responsibility for balancing revenues with expenses for purposes of generating a profit. Finally, enterprises were granted more opportunities to enter into mercantile relations with other enterprises, using money as a means of exchange or credit.

Related to the emphasis on decentralized planning was the expanded use of new financing techniques, including market instruments, for economic development. The centralized budgetary system of finance has been supplemented by a new structure of self-finance: the State provides to its own enterprises and farms, and to private cooperatives and private farms, repayable loans with interest rates that normally range from 4 to 12 percent. Prices of production inputs, as well as some retail prices, are also set within ranges that more accurately reflect both actual costs and the laws of supply and demand.

In effect, market mechanisms rejected during the late 1960s as being the vestiges of the pre-revolutionary economic order--money, credit, prices based on costs and laws of supply and demand, interest-bearing loan financing, profits and losses--have been reintroduced. Yet, these changes have been implemented within the overall context of a centrally-planned economy that establishes guidelines by which these market strategies can be used. A new balance has thus been struck between elements of planning and market forces, between central control and decentralized autonomy.

Material incentives have also reappeared in the economy in order to improve productivity. These incentives include wage differentials that take into account different skill levels, educational preparation and training, bonuses for fulfilling production quotas, overtime pay premiums, and increased vacation time for productivity.

Many of the new incentives have been initiated as a result of consultations with the trade unions. Beginning in 1971, the trade unions have been given a greater role in planning, administering, and implementing provisions of the incentive system. Unions have also been given a greater role in overseeing enterprise planning targets and participating in planning functions. Attempts have also been made to broaden the base of participation in economic planning through the creation in 1976 of a new
In order to facilitate economic planning and avoid the pitfalls of earlier efforts, the Cubans have made a concerted attempt to systematize what is perhaps the most important tool for effective economic planning: statistical data. With a greater use of statistical information and thus a better understanding of the economy, Cuban planners during the 1970s have been able to formulate more meaningful planning targets. Annual macro-plans began to appear in 1973, while 1974-75 witnessed the formulation of the nation's first five-year plan (1976-80). A second five-year plan has been established for 1981-85.

Not only did the organizational forms of economic planning in Cuba change during the 1970s; the policy content of Cuban planning was also transformed. The economic maladies of the late 1960s, caused in large part by the one-sided emphasis on sugar and agriculture, compelled Cuban planners to adopt a more balanced approach to sectoral priorities. The roles of sugar and agriculture were not as heavily emphasized, while industry moved into a position of higher priority (though not in such a manner as to create a new imbalance in that direction). The other significant consequence of the change in both the form and content of planning was a renewed emphasis given to economic development in the urban areas of the country, especially the capital city. In contrast to the 1960s, Havana and other urban centers became viable markets for investment and economic growth.

1971-76--On July 26, 1971, Fidel Castro, in a speech before the nation, admitted that during the previous period there had been economic problems which simply could not be solved through moral will and political commitment. The date marked the formal beginnings of the more pragmatic, urban-oriented economic policies of the 1970s and 80s that emphasized economic efficiency and productivity above all other objectives.

From 1971 through 1975, Cuba exhibited a spectacular rate of economic growth. Global Social Product (GSP)—the measure used in socialist nations to determine national output that is somewhat different from the Western GNP—increased from 8.9 billion pesos in 1971, to 15.8 billion in 1975. In contrast to the 1960s, when the growth that occurred was linked to the fortunes of sugar, the expansion of 1971-75 took place during a relative stagnation of the country’s sugar output. From 1971 through 1975, the industrial sector expanded at a rate of eight percent annually, while the size of the sugar harvests fluctuated between 4 to 6 million tons per year. Consequently, the fundamental difference in the Cuban economy during the early 1970s was the fact that the expansion of the non-agricultural sectors of the economy appears to have become less dependent upon the performance of the agricultural sector.
Cuban Planning, Fields

The differential growth rates of the agricultural and non-agricultural sectors altered the sectoral composition of the economy. In 1970, agriculture (including the sugar industry) accounted for 22.5 percent of GSP. Sugar cane agriculture and the sugar industry represented 15.1 percent of GSP.36 By 1975, total agriculture (including sugar) accounted for 15.5 percent of GSP, while sugar cane agriculture and the sugar industry had dropped to 8.5 percent of GSP.37

While it may be argued that this drop in the share of GSP occupied by agriculture and the sugar industry was due to the relatively poor performance of sugar during these years, it is also evident that decisions were made in 1970 to shift the emphasis of economic development policy toward other economic sectors. Labor, which had been inefficiently mobilized to cut sugar cane in the late 1960s, was returned to other sectors of the economy. By 1971—one year after the 1970 Census had recorded 790,000 workers in the agricultural sector—the labor force in agriculture had shrunk to 603,600.38 During this period, emphasis was placed on finding technological solutions to the still-persistent problems of labor shortages in the cane fields. As a result, mechanization of the sugar harvest increased dramatically. While one percent of the cane cutting was mechanized in 1970, by the 1975 harvest 26 percent of the cane was being cut by modern methods,39 boosted both by imports of tractors and by increases in domestic production of agricultural implements.

The results of this redirection were impressive in several sectors. Steel production increased from 140,000 tons in 1970 to 298,000 tons in 1975.40 Other notable gains during this period were recorded for production of electricity, chemicals, and cotton textiles. In the field of agriculture, successful diversification was evident in the production of citrus fruits and eggs. The most spectacular growth, however, occurred in two sectors directly linked to housing: the construction sector and the production of cement. Housing itself also exhibited a substantial recovery during 1971-75, as compared to the late 1960s.

Housing and construction had been two of the sectors that had suffered most in terms of performance during the late 1960s. Beginning in 1971, however, resources (including labor) that were previously diverted away from sectors such as housing and construction into agriculture were now redirected back into building activity. This reshaping of policy in the housing and construction sectors was actually a reflection of a primary goal of economic development planning for 1971-75—the goal of rebalancing the economy.

The results of this shift in housing and construction policy can be seen most readily in terms of housing and construction output. Exempting 1971, when the transition to the new policy took place, housing output for the period was higher than during any other
period of the Revolution. Gross output value of housing also rose from 51 million pesos in 1971 to slightly over 151 million in 1975.

Table 5
SHARE OF HOUSING IN TOTAL CONSTRUCTION

<table>
<thead>
<tr>
<th>Year</th>
<th>Housing</th>
<th>All Construction</th>
<th>H/AC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>21.9</td>
<td>436.3</td>
<td>5.0%</td>
</tr>
<tr>
<td>1971</td>
<td>51.0</td>
<td>572.9</td>
<td>8.9%</td>
</tr>
<tr>
<td>1972</td>
<td>127.6</td>
<td>803.5</td>
<td>15.9%</td>
</tr>
<tr>
<td>1973</td>
<td>151.9</td>
<td>1,069.0</td>
<td>14.2%</td>
</tr>
<tr>
<td>1974</td>
<td>147.0</td>
<td>1,050.4</td>
<td>14.0%</td>
</tr>
<tr>
<td>1975</td>
<td>151.3</td>
<td>1,250.3</td>
<td>12.1%</td>
</tr>
<tr>
<td>1976</td>
<td>138.9</td>
<td>1,320.1</td>
<td>10.5%</td>
</tr>
<tr>
<td>1977</td>
<td>148.0</td>
<td>1,450.2</td>
<td>10.2%</td>
</tr>
<tr>
<td>1978</td>
<td>138.8</td>
<td>1,557.1</td>
<td>8.9%</td>
</tr>
<tr>
<td>1979</td>
<td>132.6</td>
<td>1,569.1</td>
<td>8.4%</td>
</tr>
<tr>
<td>1980</td>
<td>129.6</td>
<td>1,568.6</td>
<td>8.2%</td>
</tr>
<tr>
<td>1982</td>
<td>129.7</td>
<td>1,801.4</td>
<td>7.2%</td>
</tr>
<tr>
<td>1983</td>
<td>152.6</td>
<td>1,995.0</td>
<td>7.6%</td>
</tr>
</tbody>
</table>


NOTE: Data for 1981 not available to author.

In order to accomplish the new policy objectives for the housing and construction sectors, a new set of priorities had to be established for the production and use of construction materials, since the Cubans were still confronted by a chronic shortage of building material. The solution adopted by the Cubans in 1971 called for the expanded use of concrete--basically a mixture of sand or gravel, water, and cement--as the Island's primary building material in both housing and general construction. Possessing an abundance of sand and gravel, the Cubans decided to increase cement production in order to fulfill plans for utilizing concrete in construction activity. In 1970, Cuba produced 724,000 tons of cement; by 1975, the figure had increased to 2.1 million tons--almost a 300 percent increase. Production of prefabricated concrete elements for housing also increased markedly, going from 88.5 thousand cubic meters in 1971 to 185.1 in 1975. Cement production thus formed a crucial link between economic development planning and housing policy, beginning in the 1970s.

Accompanying the change of direction in housing policy was a change in the method of housing production. In 1971, after the government had decided to place new priorities on the housing
sector, the lack of construction workers represented a major potential bottleneck for fulfillment of new housing policy objectives. This shortage of construction workers was met with an entirely new program for increasing the size of the construction labor force--the formation (in workplaces) of construction brigades called microbrigades, to build housing. The concept of the microbrigade consisted of the following: workers in any production center could request to form a brigade to construct housing to meet the housing needs of their work center. A brigade normally consisted of 30 workers, allowed a leave from their jobs to work on housing construction. They were supervised by experienced construction workers and usually were given leaves lasting from one to two years. Production levels in the work center would be maintained by overtime and weekend work performed by the remaining workers. Housing constructed by the microbrigades would be allocated to workers at the work center based upon a range of factors. These allocations were generally made on a democratic basis; new housing units did not necessarily go to those who had built them. The microbrigades thus offered the possibility of increasing housing output by augmenting the supply of scarce labor in the construction sector. At their peak in 1973, the microbrigades accounted for about 65 percent of all new housing constructed in Cuba.

The microbrigades were also responsible for shifting the location of housing production back toward urban areas, especially Havana. Most of the brigades were formed at production centers in larger cities. By producing housing for members of their work centers, microbrigades thus reestablished an urban spatial pattern to housing production. Roughly 70 percent of the housing output constructed by microbrigades was concentrated in Havana between 1971 and 1975.

The use of microbrigades to construct housing had the indirect effect of increasing the importance of prefabricated housing techniques. Assembly of prefabricated components was perhaps the most efficient way to use the inexperienced skills of the workers comprising the microbrigades. Reliance on prefabrication, in turn, augmented the importance of concrete as a construction material which lent itself most readily to use in prefabricated housing components.

The elements of the country's new housing policy--the use of concrete as a building material, along with prefabricated components; the urban spatial pattern; the reliance on microbrigades; and the commitment to simply increase housing production--were probably best exemplified by the Alamar housing project, begun in 1971. The project, situated on the outskirts of Havana, is still under construction, with plans to eventually house 150,000 upon completion. In 1971, work began on three 12-story apartment blocks and one 18-story building. By 1974, 84 different
microbrigades were involved in construction of the housing units, utilizing various concrete prefabrication forms and techniques.

1976-Present: In December of 1975, the Communist Party of Cuba held its first Congress. The event provided the occasion for the leadership to endorse the policy changes of the early 1970s, and to articulate the direction of Cuban economic development for the period of the country’s first five-year plan, 1976-80.

When the five-year plan for 1976-80 was initially formulated in 1975, Global Social Product was projected to grow by five percent annually. The actual rate of annual growth amounted to four percent, as GSP increased from 14 billion pesos in 1976 to 17.6 billion in 1980.43

The emphasis of the country’s first five-year plan focussed on balanced expansion across all economic sectors, which meant that the relative weights of each sector in the configuration of the GSP remained fairly constant.44 The agricultural sector (including the sugar industry) fluctuated marginally from 15.6 percent of GSP in 1976 to 15.9 percent in 1979, to 15.3 percent in 1980. Industry’s share of GSP for the same period varied from 42 to roughly 46 percent. Construction also fluctuated very little, ranging from 8.9 to 9.9 percent of GSP. These percentages essentially represent a continuation of the new trends begun in 1971.

Because of the very positive rates of growth in the construction sector in general for 1971-75, the rapid expansion of the construction materials industry (including cement production and prefabricated concrete elements for housing), and the positive experience with the microbrigades (which increased housing production dramatically), housing planners involved in formulating housing targets for the 1976-80 economic plan projected housing production levels that were initially much too optimistic. Plans calling for production of an unprecedented 100,000 annual housing units were soon revised to 50,000 and then later to 20,000. Only in 1977, however, did actual housing production exceed 20,000 units.

The reason for the lack of significant improvement in housing production for 1976-80 over the previous five-year period lies in the fact that industrial construction was again heavily favored within the construction sector, while both the absolute and proportional production of housing decreased.45 Related to this was the large increase in expenditures for maintenance of existing housing and other construction projects.46 This increase in maintenance expenditures represented a new commitment by the Cubans to better utilize existing housing stock rather than simply build anew, as is often the case in the United States.

Another major reason for the housing trend of the first five-year plan was the fact that another significant change took place with regard to the construction labor force. In December 1978, the leadership of the Cuban Communist Party strongly criticized the
performance of the housing sector, and linked some of the difficulties to the inefficiency of the microbrigades. Because of the spontaneous and inexperienced character of these brigades, the use of standardized and mechanized building techniques was seriously underutilized in housing construction. Thus, in 1979 microbrigades were gradually phased out (though even today they still exist), replaced by new state construction brigades more experienced in advanced building technology. In 1980, employment in the construction sector dropped to 273,000 from 319,000 the previous year. Because of the increase in the size of the industrial labor force (which increased 31,000) in 1981, it is likely that Cuban planners needed to shift employment out of the microbrigades back into the industrial sector in order to fulfill priorities for the plan of 1981-85.

The new five-year plan (1981-85) projects an annual growth rate of 5.1 percent, and is aimed at guaranteeing the continuity of the industrialization process. This aim has been confirmed by employment trends recorded for the first years of the plan. The size of the industrial labor force increased another 26,000 between 1981-82 to 633,000, making industry the largest employment group, supplanting agriculture for the first time. Corresponding to the expansion of industrial employment was a continuity in the predominance of industrial construction within the category of overall construction.

In the non-productive sphere, housing (for perhaps the first time) was given top priority. The goal established for housing production for this five-year period was 200,000 units, or 40,000 units per year—an unprecedented level of housing construction. Yet, based upon figures released by the Cuban Government, it is doubtful that this goal will be reached (though the levels for 1982 and 1983--22,282 and 26,320 units respectively—are the highest yet recorded for the Revolution). Nevertheless, it is paradoxical that, while housing has been given the highest priority in the non-productive sector for the plan of 1981-85, the share of housing output as a percentage of total construction has actually decreased, from 8.3 percent in 1980 to 7.6 percent in 1983. One can only conclude that housing has not been given the priority initially projected in the 1981-85 plan.

Though preliminary figures for housing output for 1981-85 indicate a certain continuity in the relative importance of housing in the nation’s overall economic development strategy, there have been changes in specific aspects of housing policy itself. One of the most significant changes occurred with the passage in December 1984 of a new housing law, called the General Law on Housing (Ley General de la Vivienda). The intention of the law is to facilitate production and distribution of housing by allowing for the use of certain market mechanisms within the housing market—mechanisms that are designed to relieve bottlenecks in the
housing production and distribution sector. The law permits sale of housing, formerly regulated and controlled by the Government, on a more open market. The new law also provides for public involvement in facilitating various forms of self-built housing. Low-interest loans are available to cover costs of building materials and technical assistance from architects and skilled carpenters. The rationale behind this particular provision of the law lies in the fact that self-built housing had expanded more or less spontaneously in recent years. The housing law is intended to legitimize this activity. More significantly, by utilizing the efforts of individuals in housing construction, the new Housing Law is designed to help increase the housing stock at a time when the Government has fallen short of its housing goals.

The other important provision of the housing law is that it establishes a slightly different rent structure in new housing built by the Government. Since the Urban Reform Law of 1960, rents and mortgages could not exceed 10 percent of income—a provision that made housing extremely expensive for the Government to provide. The new law fixes rents and mortgages in accordance with a formula based on the occupant's ability to pay, and the square footage of the unit. This formula represents an obvious step toward increasing the fairness of housing distribution, and has the potential of raising much-needed revenues for future housing production.

The other major policy shift involves urban housing rehabilitation. A concerted effort is now being made to take advantage of existing housing stock, especially in Havana. Tenants from inner city housing units considered to be deteriorating are temporarily relocated, while rehabilitation takes place. The tenants are then allowed to move back into their units, paying the exact rent or mortgage payment as was paid before rehabilitation. According to Havana's chief planner, Mario Coyula, "housing rehabilitation in Cuba takes place without displacement, in contrast to what is frequently the case in the United States."

Concluding Remarks
This essay has focused on the relationship between economic development strategies pursued by Cuba since 1959, and housing policies. Because the free market was largely abrogated by 1961, and because the economy functioned thereafter on the basis of planning (albeit with mixed results), it has been possible to track shifts in housing sector activity within the context of broader economic development policy trends. Far from representing a unilinear path of development, Cuban economic policy and Cuban housing policy have exhibited abrupt changes in direction, especially after 1970. In each phase covered in the essay, housing policy has been related to the logic of the economic policies pursued,
and to the organizational structure of the economy adopted by Cuban planners during each period.

Planning priorities, both in the 1960s and after 1970, have relegated housing to a relatively secondary position compared to other types of construction. During the 1960s, when agriculture was heavily emphasized, construction was concentrated on projects designed to improve agricultural infrastructure such as roads, dams, irrigation facilities, and ports. Other construction was concentrated on social service infrastructure, such as medical facilities and schools which were located in the rural areas, in an effort to redistribute wealth from urban areas to the countryside. During the 1970s, when industrial development was emphasized, construction outlays were designated primarily for industrial facilities.

It is very likely that housing production in Cuba will expand dramatically during the latter 1980s. Owing to the expanded development of the construction materials industry from 1976-85, the industrial infrastructure necessary for housing production in Cuba--cement capacity, prefabricated housing component plants--is more firmly in place for increasing the output of housing units.

In spite of the limited success the Cubans have had in reducing the overall housing deficit inherited from 1959, the nation can claim several notable achievements in the housing field. In the first place, the Cubans have managed to eliminate slums and shantytowns around Havana. They have accomplished this objective by eliminating the primary causes of migration to urban areas from the countryside--the lack of employment opportunities and social services in rural areas--that have swelled the shantytown populations of virtually all other Latin American capitals. Second, the Cubans have made housing more affordable by imposing a ceiling, generally ten percent of income, on rent or mortgage payments. Third, contrary to popular belief the Cuban Government has succeeded in making home ownership a reality for the majority of Cubans. Roughly 75% of all Cuban families own their own home or apartment.52

The new housing law seeks to ensure the continuity of these gains, as well as to improve the availability of housing. Questions have been raised as to whether provisions in the law allowing for pricing and sale of housing represent a restoration of a classical housing market. The fact that no person can own more than one residence, coupled with the fact that Cuba has no real estate industry, private banks, or developers, dispels the illusion that housing can be produced as a source of profit. Housing in Cuba will continue to be considered a social service and not a means of production or investment, as is often the case in the U.S.
ACKNOWLEDGEMENT

The author would like to thank the UC Berkeley Center for Latin American Studies for providing him a travel grant to Cuba for the purpose of conducting research on housing policy.

NOTES

1. The imbalance was more in living standards than in the classic economic distinction between the industrial activity of the towns and the agricultural activity of the countryside. Cuba's main agricultural product, sugar, and its main industry, sugar refining, were integrated within the same network.


5. Out of a labor force of 2.1 million, 818.7 thousand (41.5 percent) were employed in agriculture. Republica de Cuba, Censos de Poblacion, Viviendas Y Electoral 1953, Table 48 and Table 50, hereafter referred to as 1953 Census.


7. Ibid., p. 15.

8. Unemployment was officially calculated in 1953 at an adjusted 8.4 percent, with another 10 percent underemployed. 1953 Census, p. XL and Table 43. Carmelo Mesa-Lago calculated unemployment in 1959 to be 16 percent, with another 14 percent underemployed. The Economy of Socialist Cuba, pp. 8-9.

9. 1953 Census, Table 40 (literacy rates) and Table 58 (housing conditions).


11. 1953 Census, pp. XLIII-XLIV and Table 58.


13. Claes Brundenius, Economic Growth, Basic Needs and Income Distribution in Revolutionary Cuba (Malmo, Sweden: University of Lund Research Policy Institute, 1981), p. 117, states that from 1953-58, 71-83 percent of Cuban housing was constructed in Havana and that 60-88 percent represented the construction of luxury housing.


16. Ibid., p. 75.

17. Ibid., p. 79.

18. See Table 2.


23 Republica de Cuba, *Boletin Estadistico 1968*, Chapter IV, Table 1.


26 Republica de Cuba, *Censo de Poblacion Y Viviendas 1970*, Table 18.


30 Quoted from Sergio Roca, "Housing in Socialist Cuba", p. 66. This was the estimate of Levi Farah, an administrator for the Havana region. Taken from *Ibid.*, p. 66.


32 Republica de Cuba, *Boletin Estadistico 1971*, Table 1.

33 Popular Power is an institution established in 1975 that extended the participatory role of the Cuban citizenry in the political and economic affairs of the nation. For a particularly favorable, though perhaps exaggerated, view of its effectiveness, see Marta Harnecker, *Cuba: Dictatorship or Democracy?* (Westport, Connecticut: Lawrence Hill & Company, 1979).


40 Ibid.

41 Information on microbrigades supplied by Rodney Mace, "Housing", pp. 126-27.


44 The value of housing production fell from 138.9 million pesos in 1976 to 129.6 million in 1980, while the share of housing as a percentage value of all construction fell from 10.1 percent to 8.8 percent. *Ibid.*, Table VII.1.

45 Ibid.

46 Ibid.


51 Republica de Cuba, *Cuba en Cifras 1983*, Table 38.